Table of Contents

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended March 31, 2008

OR

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

For the transition period from to

Commission file number 000-30171

SANGAMO BIOSCIENCES, INC.

(exact name of registrant as specified in its charter)

Delaware	**68-0359556**
(State or other jurisdiction of incorporation or organization)	**(IRS Employer Identification No.)**

501 Canal Blvd, Suite A100
Richmond, California 94804
(Address of principal executive offices)

(510) 970-6000
(Registrant's telephone number, including area code)

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

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

Large accelerated filer ☐ Accelerated filer ☑ Non-accelerated filer ☐ Smaller reporting company ☐

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

As of April 29, 2008, 40,815,404 shares of the issuer's common stock, par value $0.01 per share, were outstanding.

Table of Contents

INDEX

SANGAMO BIOSCIENCES, INC.

PART I. FINANCIAL INFORMATION

PART II. OTHER INFORMATION

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

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

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

PART 1. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

SANGAMO BIOSCIENCES, INC.

CONDENSED CONSOLIDATED BALANCE SHEETS
(In thousands, except share and per share amounts)

	March 31, 2008 (unaudited)	December 31, 2007 (1)
Assets		
Current assets:		
Cash and cash equivalents	$ 9,942	$ 12,275
Marketable securities	63,468	68,813
Interest receivable	169	324
Accounts receivable	613	209
Prepaid expenses	517	497
Total current assets	74,709	82,118
Property and equipment, net	2,021	1,770
Other assets	12	12
Total assets	$ 76,742	$ 83,900
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable and accrued liabilities	$ 4,112	$ 3,538
Accrued compensation and employee benefits	742	1,199
Deferred revenues	3,730	4,944
Total current liabilities	8,584	9,681
Deferred revenues, non-current portion	1,701	2,097
Total liabilities	10,285	11,778
Stockholders' equity:		
Common stock, $0.01 par value; 80,000,000 shares authorized, 40,793,172 and 40,315,368 shares issued and outstanding at March 31, 2008 and December 31, 2007, respectively	408	403
Additional paid-in capital	223,368	221,176
Accumulated deficit	(157,724)	(149,752)
Accumulated other comprehensive income	405	295
Total stockholders' equity	66,457	72,122
Total liabilities and stockholders' equity	$ 76,742	$ 83,900

(1) Amounts derived from Audited Consolidated Financial Statements dated December 31, 2007 filed as a part of our 2007 Annual Report on Form 10-K.

See accompanying notes.

SANGAMO BIOSCIENCES, INC.

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(In thousands, except per share amounts)
(Unaudited)

	Three months ended March 31,	
	2008	2007
Revenues:		
Collaboration agreements	$ 2,084	$ 1,150
Research grants	681	272
Total revenues	2,765	1,422
Operating expenses:		
Research and development	8,646	5,430
General and administrative	2,927	1,999
Total operating expenses	11,573	7,429
Loss from operations	(8,808)	(6,007)
Interest and other income, net	836	648
Net loss	$ (7,972)	$ (5,359)
Basic and diluted net loss per share	$ (0.20)	$ (0.15)
Shares used in computing basic and diluted net loss per share	40,489	35,057

See accompanying notes.

SANGAMO BIOSCIENCES, INC.

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)
(Unaudited)

	Three months ended March 31,	
	2008	2007
Operating Activities:		
Net loss	$ (7,972)	$ (5,359)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	115	50
Amortization of premium / discount on investments	(492)	(502)
Realized loss on investments	—	(2)
Stock-based compensation	1,718	543
Changes in operating assets and liabilities:		
Interest receivable	155	49
Accounts receivable	(404)	267
Prepaid expenses and other assets	(20)	75
Accounts payable and accrued liabilities	574	(196)
Accrued compensation and employee benefits	(457)	(290)
Deferred revenue	(1,610)	3
Net cash used in operating activities	(8,393)	(5,362)
Investing Activities:		
Purchases of investments	(27,302)	(18,753)
Maturities of investments	29,276	22,501
Proceeds from sales of investments	3,973	—
Purchases of property and equipment	(366)	(126)
Net cash provided by investing activities	5,581	3,622
Financing Activities:		
Proceeds from issuance of common stock	479	68
Net cash provided by financing activities	479	68
Net decrease in cash and cash equivalents	(2,333)	(1,672)
Cash and cash equivalents, beginning of period	12,275	12,702
Cash and cash equivalents, end of period	$ 9,942	$ 11,030

See accompanying notes.

SANGAMO BIOSCIENCES, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

March 31, 2008

(Unaudited)

NOTE 1-BASIS OF PRESENTATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

BASIS OF PRESENTATION

The accompanying unaudited condensed consolidated financial statements of Sangamo Biosciences, Inc. ("Sangamo" or the "Company") have been prepared in accordance with generally accepted accounting principles for interim financial information and pursuant to the rules and regulations of the Securities and Exchange Commission ("SEC"). Accordingly, they do not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements. In the opinion of management, all adjustments (consisting of normal recurring adjustments) considered necessary for a fair presentation have been included. The condensed consolidated financial statements include the accounts of Sangamo and its wholly-owned subsidiary, Gendaq Limited, after elimination of all material intercompany balances and transactions. Operating results for the three months ended March 31, 2008 are not necessarily indicative of the results that may be expected for the year ending December 31, 2008. These financial statements should be read in conjunction with the financial statements and footnotes thereto for the year ended December 31, 2007, included in Sangamo's Form 10-K as filed with the SEC.

USE OF ESTIMATES AND CLASSIFICATIONS

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.

FOREIGN CURRENCY TRANSLATION

The Company records foreign currency transactions at the exchange rate prevailing at the date of the transaction. Monetary assets and liabilities denominated in foreign currency are translated into U.S. dollars at the exchange rates in effect at the balance sheet date. All currency translation adjustments arising from foreign currency transactions are recorded through statements of operations.

REVENUE RECOGNITION

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

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

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

RESEARCH AND DEVELOPMENT EXPENSES

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

STOCK-BASED COMPENSATION

We account for employee stock-based compensation in accordance with FAS 123R. Under the provisions of FAS 123R, employee stock-based compensation is estimated at the date of grant based on the employee stock award's fair value using the Black-Scholes option-pricing model and is recognized as expense ratably over the requisite service period in a manner similar to other forms of compensation paid to employees. The Black-Scholes option-pricing model requires the use of certain subjective assumptions. The most significant of these assumptions are our estimates of the expected volatility of the market price of our stock and the expected term of the award. We primarily base our determination of expected volatility through our assessment of the historical volatility of our Common Stock. When establishing an estimate of the expected term of an award, we consider the vesting period for the award, our recent historical experience of employee stock option exercises (including forfeitures), and a comparison to relevant peer group data. As required under the accounting rules, we review our valuation assumptions at each grant date and, as a result, our valuation assumptions used to value employee stock-based awards granted in future periods may change.

Employee stock-based compensation expenses recognized in the three-month periods ended March 31, 2008 and 2007 were calculated based on awards ultimately expected to vest and have been reduced for estimated forfeitures. FAS 123R requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. As a result, stock-based compensation costs recognized in future periods may differ significantly from what we have recognized in the current period.

During 2007, we issued 100,000 restricted stock units under our 2004 Stock Incentive Plan at a grant date fair value of $14.72. These restricted stock units will vest 25% after completion of one year of service and the balance will vest in equal monthly installments over the following thirty-six months of continued service. In accordance with FAS123R, the fair value of the restricted stock units was estimated based upon the closing sales price of the Company's common stock on the grant date.

The following table shows total stock-based compensation expenses included in the condensed consolidated statement of operations for the three-month periods ended March 31, 2008 and 2007 (in thousands):

	Three months ended March 31,	
	2008	2007
Costs and expenses:		
Research and development	$ 856	$ 347
General and administrative	862	196
Total stock-based compensation expense	$ 1,718	$ 543

As of March 31, 2008, total compensation costs related to nonvested stock options to be recognized in future periods were $13.3 million and are expected to be expensed over a weighted average period of 2.98 years, and total compensation costs related to nonvested restricted stock units to be recognized in future periods were $1.3 million and are expected to be expensed over a weighted average period of 3.67 years.

Valuation Assumptions

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

	Three months ended March 31,	
	2008	2007
Risk-free interest rate	2.46%	4.58%
Expected life of option	5.20 years	6.25 years
Expected dividend yield of stock	0.0%	0.0%
Expected volatility	0.67	0.93

The weighted–average assumptions used for estimating the fair value of the purchase rights under the 2000 Employee Stock Purchase Plan are as follows:

	Three months ended March 31,	
	2008	2007
Risk-free interest rate	3.95-4.95%	3.60-5.1%
Expected life of option	0.5-2 years	0.5-2 yrs
Expected dividend yield of stock	0.0%	0.0%

Stock Option Activity

A summary of stock option activity is as follows:

		Options Outstanding		
	Shares Available for Grant of Options	Number of Shares	Weighted-Average Exercise per Share Price	Weighted Average Remaining Contractual Term (In Years)
Balance at January 1, 2008	3,191,668	4,750,973	$ 8.01	7.15
Additional shares authorized	1,209,461	—	—	—
Options granted	(64,500)	64,500	$ 11.81	—
Options exercised	—	(477,804)	$ 0.99	—
Options canceled	19,480	(19,480)	$ 11.46	—
Balance at March 31, 2008	4,356,109	4,318,189	$ 8.83	7.59
Options exercisable at March 31, 2008		1,972,829	$ 6.74	5.81

In accordance with our 2004 Stock Incentive Plan, the number of shares authorized for issuance automatically increases on the first trading day of the fiscal year by an amount equal to 3.0 percent of the total number of shares of our common stock outstanding on the last trading day of the preceding year, but in no event shall any such increase exceed 1.75 million shares per year.

There were no shares subject to the Company's right of repurchase as of March 31, 2008. The intrinsic value of options exercised was $5.5 million and $81,000 for the three months ended March 31, 2008 and 2007, respectively.

The weighted-average estimated fair value per share of options granted during the three months ended March 31, 2008 and 2007 was $6.87 and $5.45, respectively, based upon the assumptions in the Black-Scholes valuation model described above.

The weighted-average estimated fair value per share of employee purchase rights during the three months ended March 31, 2008 and 2007 was $3.13 and $2.17, respectively, based upon the assumptions in the Black-Scholes valuation model described above.

The following table summarizes information with respect to stock options outstanding at March 31, 2008:

	Options Outstanding	
Range of Exercise Price	Number of Shares	Weighted Average Remaining Contractual Life (In Years)
$ 0.05 – $3.97	467,691	5.71
$ 3.99 – $4.92	507,430	7.13
$ 4.93 – $5.66	432,054	6.70
$ 5.75 – $6.69	204,250	6.12
$ 6.82 – $6.82	450,000	8.70
$ 6.88 – $7.73	474,814	8.51
$ 8.00 – $13.40	285,200	4.75
$13.98 – $13.98	961,250	9.70
$14.00 – $15.03	470,000	7.43
$15.23 – $38.00	65,000	3.17
	4,318,189	7.59

At March 31, 2008, the aggregate intrinsic value of the outstanding and exercisable options was $12.3 million and $8.2 million, respectively.

Sangamo did not grant any stock option to consultants during the three months ended March 31, 2008 and 2007.

RECENT ACCOUNTING PRONOUNCEMENTS

In September 2006, the Financial Accounting Standards Board (“FASB”) issued SFAS No. 157, “Fair-Value Measurements” (“SFAS 157”) which defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles and expands disclosures about fair-value measurements. The Company adopted SFAS 157 effective January 1, 2008 for all financial assets and liabilities and any other assets and liabilities that are recognized or disclosed at fair value on a recurring basis (see NOTE 5 — FAIR VALUE MEASUREMENT). In accordance with FASB Staff Position 157-2, *Effective Date of FASB Statement No. 157* (“FSP 157-2”), for nonfinancial assets and liabilities measured at fair value on a non-recurring basis, SFAS 157 is effective for financial statements issued for fiscal years beginning after November 15, 2008. The Company is currently reviewing the application of SFAS 157 for nonfinancial assets and liabilities measured at fair value on a non-recurring basis and has not yet determined how the adoption of SFAS 157 will impact its condensed consolidated financial statements.

In June 2007, the EITF ratified a consensus on EITF Issue No. 07-3 (EITF 07-3), “Accounting for Non-Refundable Advance Payments for Goods or Services to Be Used in Future Research and Development Activities”, which concluded that non-refundable advance payments for goods or services for use in research and development activities should be deferred and recognized as an expense in the period that the related goods are delivered or services performed. The Company has adopted EITF 07-3 effective January 1, 2008, and the adoption had no material impact on our consolidated financial position, results of operations and cash flows.

In November 2007, the Emerging Issues Task Force (EITF) ratified a consensus on EITF Issue No. 07-1 (EITF 07-1), “Accounting for Collaborative Arrangements”, which requires participants in a collaboration to make separate disclosures regarding the nature and purpose of an arrangement, their rights and obligations under the arrangement, the accounting policy for the arrangement and the income statement classification and amounts arising from the arrangement between participants for each period an income statement is presented. EITF 07-1 is effective for us beginning in the first quarter of fiscal year 2009. We are currently evaluating the impact of the provisions of EITF 07-1 on our financial position, results of operations and cash flows and therefore, the impact of the adoption is unknown at this time.

NOTE 2-BASIC AND DILUTED NET LOSS PER SHARE

Basic earnings (loss) per share is calculated based on the weighted average number of shares of common stock outstanding during the period. There are potential dilutive shares of common stock resulting from the assumed exercise of outstanding stock options and equivalents.

Because Sangamo is in a net loss position, diluted earnings (loss) per share excludes the effects of common stock equivalents consisting of options, which are all antidilutive. Had Sangamo been in a net income position, diluted earnings per share would have included the shares used in the computation of basic net loss per share as well as an additional 1,688,629 shares and 2,387,216 shares for the three months ended 2008 and 2007, respectively, related to outstanding options.

NOTE 3-COMPREHENSIVE LOSS

Comprehensive loss is comprised of net loss and other comprehensive income (loss). Other comprehensive income (loss) includes certain changes in stockholders' equity that are excluded from net loss, which includes unrealized gains and losses on available-for-sale securities. Comprehensive loss and its components are as follows (in thousands):

	Three months ended March 31,	
	2008	2007
Net loss	$(7,972)	$(5,359)
Changes in unrealized gains and losses on securities available-for-sale	110	(2)
Comprehensive loss	$(7,862)	$(5,361)

NOTE 4-MAJOR CUSTOMERS, PARTNERSHIPS AND STRATEGIC ALLIANCES

Agreement with Dow AgroSciences in Plant Agriculture

On October 1, 2005, we entered into a Research License and Commercial Option Agreement with Dow AgroSciences LLC ("DAS"), a wholly owned indirect subsidiary of Dow Chemical Corporation. Under this agreement, we will provide DAS with access to our proprietary ZFP technology and the exclusive right to use our ZFP technology to modify the genomes or alter the nucleic acid or protein expression of plant cells, plants, or plant cell cultures. We have retained rights to use plants or plant-derived products to deliver ZFP TFs or ZFNs into human or animals for diagnostic, therapeutic, or prophylactic purposes. We have achieved several milestones in this collaboration.

Our agreement with DAS provides for an initial three-year research term during which time we are working together to validate and optimize the application of our ZFP technology to plants, plant cells and plant cell cultures. During the three-year research term, DAS has the option to obtain a commercial license to sell products incorporating or derived from plant cells generated using our ZFP technology, including agricultural crops, industrial products and plant-derived biopharmaceuticals. The option expires on September 30, 2008. This commercial license will be exclusive for all such products other than animal and human health products. In the event that DAS exercises this option, DAS may elect to extend the research program beyond the initial three-year term on a year-to-year basis.

Pursuant to the Research License and Commercial Option Agreement, DAS made an initial cash payment to us of $7.5 million. In November 2005, the Company sold approximately 1.0 million shares of common stock to DAS at a price of $3.85 per share, resulting in proceeds of $3.9 million. In addition, DAS will provide $6.0 million in research funding over the initial three-year research term and may make an additional payment of up to $4.0 million in research milestone payments to us during this same period, depending on the success of the research program. In the event that DAS elects to extend the research program beyond the initial three-year term, DAS will provide additional research funding. If DAS exercises its option to obtain a commercial license, we will be entitled to full payment of the $4.0 million in research milestones, a one-time exercise fee of $6.0 million, minimum annual sublicensing payments totaling to up to $25.3 million over 11 years, development and commercialization milestone payments for each product, and royalties on sales of products. Furthermore, DAS will have the right to sublicense our ZFP technology to third parties for use in plant cells, plants, or plant cell cultures, and we will be entitled to 25% of any cash consideration received by DAS under such sublicenses.

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

The Research License and Commercial Option Agreement will terminate automatically if DAS fails to exercise its option for a commercial license by the end of the initial three-year research term or September 30, 2008. Following DAS's exercise of the option and payment of the exercise fee, DAS may terminate the agreement at any time. In addition, each party may terminate the agreement upon an uncured material breach of the other party. In the event of any termination of the agreement, all rights to use our ZFP technology will revert to us, and DAS will no longer be permitted to practice our ZFP technology or to develop or, except in limited circumstances, commercialize any products derived from our ZFP technology. Revenues related to the research license under the DAS agreement are being recognized ratably over the initial three-year research term of the agreement and were $625,000 during both three month periods ended March 31, 2008 and 2007. Revenues attributable to collaborative research and development performed under the agreement were $500,000 during both three month periods ended March 31, 2008 and 2007. Revenues attribute to the achievement of at-risk milestones were $180,000 and $0 during the three months ended March 31, 2008 and 2007, respectively. Related costs and expenses incurred under the agreement were $500,000 during both three month periods ended March 31, 2008 and 2007.

Agreement with Sigma-Aldrich Corporation in Laboratory Research Reagents

In July 2007, we entered into a license agreement with Sigma-Aldrich Corporation ("Sigma"). Under the License Agreement, we are providing Sigma with access to our proprietary ZFP technology and the exclusive right to use the technology to develop and commercialize research reagents products and services in the research field, excluding certain agricultural research uses that Sangamo previously licensed to Dow AgroSciences LLC. Under the agreement, Sangamo and Sigma have agreed to conduct a three-year research program to develop laboratory research reagents using our ZFP technology. In addition, for three years we will assist Sigma in connection with Sigma's efforts to market and sell services employing our technology in the research field. We will transfer the ZFP manufacturing technology to Sigma or to a mutually agreed-upon contract manufacturer upon Sigma's request. Prior to the completion of this transfer, we will be responsible for supplying ZFPs for use by Sigma in performing services in the research field. Under the terms of the agreement, Sigma made an initial payment comprising an upfront license fee and the purchase of one million (1,000,000) shares of Sangamo's common stock under a separate stock purchase agreement, resulting in a total upfront payment to Sangamo of $13.5 million. There were three components to the $13.5 million we received: an equity investment by Sigma in Sangamo common stock valued at $8.55 million, a $3.95 million license fee, and $1.0 million of research funding. Under the License Agreement, we may receive additional research funding of up to $2.0 million, development milestone payments of up to $5.0 million, and commercial milestone payments based on net sales of up to $17.0 million, subject to the continuation of the agreement. During the term of the license agreement Sigma is obligated to pay to Sangamo minimum annual payments, a share of certain revenues received by Sigma from sublicensees, and royalty payments on the sale of licensed products and services. Sigma also has the right to sublicense the ZFP technology for research applications and we will receive 50% of any sublicensing revenues in the first two years and 25% of any sublicensing revenues thereafter. We retain the sole right to use and license our ZFP technology for GMP production purposes, for the production of materials used in or administered to humans, and for any other industrial commercial use. Revenues related to the research license under the Sigma agreement are being recognized ratably over the three-year research term of the agreement and were $329,000 during the three months ended March 31, 2008. Revenues attributable to collaborative research and development performed under the Sigma agreement were $250,000 during the three months ended March 31, 2008. Related costs and expenses incurred under the Sigma agreement were $317,000 during the three months ended March 31, 2008.

Enabling Technology Collaborations in Pharmaceutical Protein Production

We have established several research collaborations in this area. In December 2004, we announced a research collaboration agreement with Pfizer to use our ZFP technology to develop enhanced cell lines for protein pharmaceutical production. The scope of this agreement was expanded in January 2006 and again in January 2007 and provided further research funding from Pfizer to develop additional cell lines for enhanced protein production. Under the terms of the agreement, Pfizer is funding research at Sangamo and Sangamo will provide our proprietary ZFP technology for Pfizer to assess its feasibility for use in mammalian cell-based protein production. We are generating novel cell lines and vector systems for enhanced protein production as well as novel technology for rapid creation of new production cell lines. Revenues attributable to collaborative research and development performed under the Pfizer agreement were $0 and $25,000 during the three months ended March 31, 2008 and 2007, respectively. Related research and development costs and expenses performed under the Pfizer agreement were $36,000 and $134,000 during the three months ended March 31, 2008 and 2007, respectively.

In addition, in April 2007, we established a research and license agreement with Genentech, Inc. ("Genentech"). Under our agreement with Genentech, we are developing, ZFNs capable of making targeted modifications to the genome of Genentech cell lines to generate cell lines with novel characteristics for protein pharmaceutical production purposes. The agreement was expanded to include further ZFNs in February 2008. Genentech paid an upfront fee of $400,000, will pay an ongoing technology access fee, and certain payments upon achievement of specified milestones relating to the research of ZFNs and the development and commercialization of products manufactured using a modified cell line created by our ZFN technology. Revenues attributable to collaborative research and development performed under the Genentech agreement were $50,000 during the three months ended March 31, 2008. Revenues attributable to the achievement of milestones was $150,000 during the three months ended March 31, 2008. Related research and development costs and expenses performed under the Genentech agreement were $31,000 during the three months ended March 31, 2008.

Funding from Research Foundations

The Juvenile Diabetes Research Foundation International

On October 26, 2006, Sangamo announced a partnership with the Juvenile Diabetes Research Foundation International (JDRF) to provide financial support to one of Sangamo's Phase 2 human clinical studies of SB-509 (SB-509-601), a ZFP Therapeutic™ that is in development for the treatment of diabetic neuropathy. Under the agreement with JDRF and subject to its terms and conditions, including the Company's achievement of certain milestones associated with the Company's Phase 2 clinical trial of SB-509 for the treatment of mild to moderate diabetic neuropathy, JDRF will pay the Company an aggregate amount of up to $3.0 million. After the first commercial launch of SB-509 in a major market, JDRF has the right to receive, subject to certain limitations, annual payments from Sangamo, until such time when the total amount paid to JDRF, including payments made on account of certain licensing arrangements, equals three times the amount received by us from JDRF.

Under the agreement, we are obligated to use commercially reasonable efforts to carry out the Phase 2 trial and, thereafter, to develop and commercialize, a product containing SB-509 for the treatment of diabetes and complications of diabetes. We are obligated to cover all costs of the Phase 2 trial that are not covered by JDRF's grant. If we fail to satisfy these obligations, JDRF may have the right, subject to certain limitations, to obtain an exclusive, sublicensable license, to the intellectual property generated by us in the course of the Phase 2 trial, to make and commercialize products containing SB-509 for the treatment of diabetes and complications of diabetes. If JDRF obtains such a license, it is obligated to pay us a percentage of its revenues from product sales and sublicensing arrangements. If JDRF fails to satisfy its obligations to develop and commercialize a product containing SB-509 under the Agreement, then their license rights will terminate and we will receive a non-exclusive, fully paid license, for any intellectual property developed during JDRF's use of the license, to research, develop and commercialize products containing SB-509 for the treatment of diabetes and complications of diabetes.

Through March 31, 2008, we have received $2.5 million. Revenues attributable to research and development performed under the JDRF partnership were $375,000 and $0 during the three months ended March 31, 2008 and 2007, respectively. Related costs and expenses incurred were $1.5 million and $1.2 million during the three months ended March 31, 2008 and 2007, respectively.

The Michael J. Fox Foundation

On January 23, 2007, Sangamo announced a partnership with the Michael J. Fox Foundation (MJFF) to provide financial support of Sangamo's ZFP TFs™ to activate the expression of glial cell line-derived neurotrophic factor (GDNF) that has shown promise in preclinical testing to slow or stop the progression of Parkinson's disease. Under the agreement with MJFF and subject to its terms and conditions, MJFF will pay the Company $950,000 over a period of two years. Through March 31, 2008, we have received $679,000. Revenues attributable to research and development performed under the MJFF partnership were $252,000 and $50,000 during the three months ended March 31, 2008 and 2007, respectively. Related costs and expenses incurred under the MJFF partnership were $253,000 and $50,000 during the three months ended March 31, 2008 and 2007, respectively.

NOTE 5-FAIR VALUE MEASUREMENT

We adopted the measurement and disclosure requirements of FASB Statement No. 157 related to financial assets and liabilities effective January 1, 2008. There was no impact from the adoption of Statement No. 157 on the condensed consolidated financial statements. Statement No. 157 establishes a framework for measuring fair value and expands disclosure about fair value measurements. The statement requires fair value measurement be classified and disclosed in one of the following three categories:

Level 1: Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities;

Level 2: Quoted prices in markets that are not active, or inputs which are observable, either directly or indirectly, for substantially the full term of the asset or liability;

Level 3: Prices or valuation techniques that require inputs that are both significant to the fair value measurement and unobservable (i.e., supported by little or no market activity).

The following table summarizes our financial instruments as of March 31, 2008 (in thousands):

	March 31, 2008 Fair Value Measurements			
	Total	Level 1	Level 2	Level 3
Assets:				
Marketable securities:				
Commercial paper	$35,385	$ —	$35,385	$ —
Government agencies	11,036	—	11,036	—
Asset backed securities	10,033	—	10,033	—
Corporate notes	6,002	—	6,002	—
Bank notes	1,012	1,012	—	—
Total	$63,468	$1,012	$62,456	$ —

NOTE 6-INCOME TAXES

The Company adopted FASB Interpretation 48, Accounting for Uncertainty in Income Taxes (“FIN 48”), on January 1, 2007. As a result of the implementation of FIN 48, the Company did not recognize any adjustment to the liability for uncertain tax positions and therefore did not record any adjustment to the beginning balance of retained earnings on the consolidated balance sheet. As of the date of adoption, the Company recorded a $1.1 million reduction to deferred tax assets and the associated valuation allowance for unrecognized tax benefits. If the unrecognized tax benefits were recognized, there would be no impact on the effective tax rate.

We maintain deferred tax assets that 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. These deferred tax assets include net operating loss carryforwards, research credits and capitalized research and development. The net deferred tax asset has been fully offset by a valuation allowance because of the Company’s history of losses. Utilization of operating losses and credits may be subject to substantial annual limitation due to ownership change provisions of the Internal Revenue Code of 1986, as amended and similar state provisions. The annual limitation may result in the expiration of net operating losses and credits before utilization.

NOTE 7-SUBSEQUENT EVENTS

On April 2, 2008, Sangamo entered into a License Agreement with Open Monoclonal Technology, Inc. (“OMT”), pursuant to which Sangamo will grant a royalty-bearing, non-exclusive, sublicensable worldwide license to OMT for the commercial use of a transgenic animal generated using Sangamo’s ZFP technology.

In consideration of the license and rights granted to OMT, OMT will pay Sangamo an upfront license fee, payments upon the achievement of certain clinical development milestones, a share of payments received by OMT from sublicensees, and royalties on sales of any products developed using Sangamo’s ZFP technology. For any given OMT Product, OMT has the right to buy out its future royalty payment obligations under the agreement by paying a lump sum fee to Sangamo.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The discussion in "Management's Discussion and Analysis of Financial Condition and Results of Operations" contains trend analysis, estimates and other forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These forward-looking statements include, without limitation, statements containing the words "believes," "anticipates," "expects," "continue," and other words of similar import or the negative of those terms or expressions. Such forward-looking statements are subject to known and unknown risks, uncertainties, estimates and other factors that may cause the actual results, performance or achievements of the Company, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Actual results could differ materially from those set forth in such forward-looking statements as a result of, but not limited to, the "Risk Factors" described below. You should read the following discussion and analysis along with the financial statements and notes attached to those statements included elsewhere in this report and in our annual report on Form 10-K for the year ended December 31, 2007 as filed with the Securities and Exchange Commission on March 3, 2008.

Overview

We were incorporated in June 1995. From our inception through March 31, 2008, our activities related primarily to establishing and operating a biotechnology research and development organization and developing relationships with our corporate collaborators. Our scientific and business development endeavors currently focus on the engineering of novel zinc finger DNA-binding proteins (ZFPs) for the regulation and modification of genes. We have incurred net losses since inception and expect to incur losses in the future as we continue our research and development activities. To date, we have funded our operations primarily through the issuance of equity securities, borrowings, payments from research grants and from corporate collaborators and strategic partners. As of March 31, 2008, we had an accumulated deficit of $157.7 million.

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

We have continued to place more emphasis on higher-value therapeutic product development and related strategic partnerships and less emphasis on our Enabling Technology collaborations. We believe this shift in emphasis has the potential to increase the return on investment to our stockholders by allocating capital resources to higher value, therapeutic product development activities. At the same time, it may reduce our revenues over the next several years and subject us to higher financial risk by increasing expenses associated with product development. We filed an Investigational New Drug (IND) application with the U.S. Food and Drug Administration (FDA) and have initiated three Phase 2 clinical trials of a ZFP Therapeutic in patients with diabetic neuropathy. Development of novel therapeutic products is costly and is subject to a lengthy and uncertain regulatory process by the FDA. Our future products are gene-based therapeutics. Adverse events in both our own clinical program and other programs may have a negative impact on regulatory approval, the willingness of potential commercial partners to enter into agreements and the perception of the public.

Research and development expenses consist primarily of salaries and related personnel expenses, pre-clinical and clinical studies, laboratory supplies, stock-based compensation expenses, allocated facilities costs, subcontracted research expenses, and expenses for technology licenses. Research and development costs incurred in connection with collaborator-funded activities are expensed as incurred. Costs to acquire technologies that are utilized in research and development and that have no alternative future use are expensed as incurred. We believe that continued investment in research and development is critical to attaining our strategic objectives. We expect these expenses will increase significantly as we focus increasingly on development of ZFP Therapeutics. Additionally, in order to develop ZFP TFs and ZFNs as commercially relevant therapeutics, we expect to expend additional resources for expertise in the manufacturing, regulatory affairs and clinical research aspects of biotherapeutic development.

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

Critical Accounting Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting

period. Such estimates are described in Note 1, Basis of Presentation and Summary of Significant Accounting Policies to the Unaudited Notes to Condensed Consolidated Financial Statements. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form our basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources, and evaluate our estimates on an ongoing basis. Actual results could differ from those estimates under different assumptions or conditions.

RESULTS OF OPERATIONS

Three months ended March 31, 2008 and 2007

Revenues

	Three months ended March 31, (in thousands, except percentage values)			
	2008	2007	Change	%
Revenues:				
Collaboration agreements	$ 2,084	$ 1,150	$ 934	81%
Research grants	681	272	409	150%
Total revenues	$ 2,765	$ 1,422	$ 1,343	94%

Total revenues consist of revenues from collaboration agreements, strategic partnerships and research grants. Revenues from our corporate collaboration and strategic partnering agreements were $2.1 million for the three months ended March 31, 2008, compared to $1.2 million in the corresponding period in 2007. The increase in collaboration agreements was principally attributable to revenues of $579,000 in connection with our laboratory research reagents license agreement with Sigma-Aldrich Corporation (“Sigma”), revenues of $200,000 in connection with our research and license agreement with Genentech, Inc. (“Genentech”) and increased revenues of $180,000 in connection with our research license and commercial option agreement with Dow AgroSciences LLC (“DAS”), partially offset by decreased revenues of $25,000 from Pfizer. Research grant revenues were $681,000 for the three months ended March 31, 2008, compared to $272,000 in the corresponding period in 2007. The increase in research grant revenues was principally due to revenues of $375,000 in connection with our grant from the Juvenile Diabetes Research Foundation (“JDRF”) and increased revenues of $200,000 related to the Michael J. Fox Foundation (“MJFF”) grant, partially offset by decreased revenues of $200,000 in connection with our Advanced Technical Program grant awarded by the National Institute of Standards and Technology. We anticipate continued revenues from collaboration agreements, and we have applied for, and plan to continue to apply for research grants in the future to support the development of applications of our technology platform. Although we have negotiated collaboration agreements and received research grants in the past, we cannot assure that these efforts will be successful in the future.

Operating Expenses

	Three months ended March 31, (in thousands, except percentage values)			
	2008	2007	Change	%
Operating Expenses:				
Research and development	$ 8,646	$ 5,430	$ 3,216	59%
General and administrative	2,927	1,999	928	46%
Total expenses	$ 11,573	$ 7,429	$ 4,144	56%

Research and development

Research and development expenses consist primarily of salaries and related personnel expenses, stock-based compensation expense, laboratory supplies, pre-clinical and clinical studies, manufacturing costs, allocated facilities costs, subcontracted research expenses and expenses for trademark registration and technology licenses. We expect to continue to devote substantial resources to research and development in the future and expect research and development expenses to increase in the next several years if we are successful in advancing our ZFP Therapeutic product candidates into clinical trials. To the extent we collaborate with others with respect to clinical trials, increases in research and development expenses may be reduced or avoided.

Research and development expenses were $8.6 million for the three months ended March 31, 2008, compared to $5.4 million in the corresponding period in 2007. The increase in research and development expenses was primarily attributable to increased pre-clinical and clinical studies and manufacturing expenses of $1.7 million, primarily associated with our diabetic neuropathy program, and

increased salaries and personnel related expenses of $781,000, including stock-based compensation expenses of $511,000. The increase in stock-based compensation was due to increased grant activity, higher Black-Scholes value per share and a lower estimated forfeiture rate which the Company believes is more representative of its historical experience. Consulting expenses increased by $321,000 primarily in support of our diabetic neuropathy program, facility-related expenses increased by $228,000 primarily due to the Company leasing additional space and increased headcount, and licensing expenses increased by $109,000 primarily due to increased royalty payments.

General and administrative

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

General and administrative expenses were $2.9 million for the three months ended March 31, 2008, compared to $2.0 million in the corresponding period in 2007. This increase is attributable to increased salaries and personnel related expenses of $901,000, including stock-based compensation expenses of $666,000. The increase in stock-based compensation was due to increased grant activity, higher Black-Scholes value per share and a lower estimated forfeiture rate as noted above.

Interest and Other Income, net

	Three months ended March 31, (in thousands, except percentage values)			
	2008	2007	Change	%
Interest and other income, net	$ 836	$ 648	$ 188	29%

Interest and other income, net, was $836,000 for the three months ended March 31, 2008, compared to $648,000 in the corresponding period in 2007. The increase was primarily related to higher average investment balances during the quarter ended March 31, 2008.

Liquidity and Capital Resources

Since inception, we have financed our operations primarily through the sale of equity securities, payments from corporate collaborators, research grants and financing activities such as a bank line of credit. As of March 31, 2008, we had cash, cash equivalents, short-term investments and interest receivable totaling $73.6 million.

Net cash used in operating activities was $8.4 million for the three months ended March 31, 2008. Net cash used in operating activities consisted of the net loss for the three-month period of $8.0 million, a net change of $1.8 million in operating assets and liabilities, partially offset by non-cash charges of $1.3 million. The net decrease in operating liabilities of $1.5 million was principally comprised of decreases in deferred revenues of $1.6 million and accrued compensation and employee benefits of $457,000, partially offset by an increase of $574,000 in accounts payable and accrued liabilities. The net increase in operating assets of $269,000 was principally comprised of increased accounts receivable balances of $404,000, partially offset by decreased interest receivable balances of $155,000. The non-cash charges included $1.7 million related to stock-based compensation and $115,000 related to depreciation and amortization, partially offset by amortization of premium / discount on investments of $492,000. Net cash used in operating activities was $5.4 million for the three months ended March 31, 2007. Net cash used in operating activities consisted primarily of the net loss for the three month period of $5.4 million and a net change of $92,000 in operating assets and liabilities, partially offset by non-cash charges of $89,000. The net decrease in operating liabilities of $483,000 was principally comprised of decreases in accrued compensation and employee benefits of $290,000 and accounts payable and accrued liabilities of $196,000. The net decrease in operating assets of $391,000 was principally comprised of decreased accounts receivable balances of $267,000, prepaid expenses and other assets of $75,000 and interest receivable of $49,000. The non-cash charges included $543,000 related to stock-based compensation and $50,000 related to depreciation and amortization, partially offset by amortization of premium / discount on investments of $502,000.

Net cash provided by investing activities was $5.6 million for the three months ended March 31, 2008 and was comprised of cash proceeds associated with maturities of investments of $29.3 million and proceeds from sales of investments of $4.0 million, partially offset by cash used to purchase investments and fixed assets of $27.3 million and $366,000, respectively. Net cash provided by investing activities was $3.6 million for the three months ended March 31, 2007 and was comprised of cash proceeds associated with maturities of investments of $22.5 million, partially offset by cash used to purchase investments and fixed assets of $18.8 million and $126,000, respectively.

Net cash provided by financing activities for the three-month periods ended March 31, 2008 and 2007 was $479,000 and $68,000, respectively. Proceeds from both years were solely related to proceeds from the issuance of common stock related to stock option exercises.

While we expect our rate of cash usage to increase in the future, in particular to support our product development endeavors, we believe that the available cash resources, funds received from corporate collaborators, strategic partners and research grants will be sufficient to finance our operations through 2009. We may need to raise additional capital to fund our ZFP Therapeutic development activities. Additional capital may not be available in terms acceptable to us, or at all. If adequate funds are not available, our business, and our ability to develop our technology and our ZFP Therapeutic products, would be harmed.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Our exposure to market risk for changes in interest rates relates primarily to our cash equivalents and investments. The investments are available-for-sale. We do not use derivative financial instruments in our investment portfolio. We attempt to ensure the safety and preservation of our invested funds by limiting default and market risks. Our cash and investments policy emphasizes liquidity and preservation of principal over other portfolio considerations. We select investments that maximize interest income to the extent possible within these guidelines. We satisfy liquidity requirements by investing excess cash in securities with different maturities to match projected cash needs and limit concentration of credit risk by diversifying our investments among a variety of high credit-quality issuers. We mitigate default risk by investing in only investment-grade securities. The portfolio includes marketable securities with active secondary or resale markets to ensure portfolio liquidity. All investments have a fixed interest rate and are carried at market value, which approximates cost.

Our market risks at March 31, 2008 have not changed materially from those discussed in Item 7A of our Form 10-K for the year ended December 31, 2007 on file with the Securities and Exchange Commission.

ITEM 4. CONTROLS AND PROCEDURES

(a) Evaluation of Disclosure Controls and Procedures

The Company’s management, with the participation of the Company’s Chief Executive Officer and Principal Financial Officer, evaluated the effectiveness of the Company’s disclosure controls and procedures (as defined in Exchange Act Rule 13a-15(e) and 15d-15(e)) as of the end of the period covered by this report. Based on that evaluation, the Chief Executive Officer and Principal Financial Officer concluded that the Company’s disclosure controls and procedures as of the end of the period covered by this report were functioning effectively to provide reasonable assurance that the information required to be disclosed by the Company in reports filed under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms, and that such information is accumulated and communicated to management, including our Chief Executive Officer and Principal Financial Officer, or persons performing similar functions, as appropriate, to allow timely decisions regarding required disclosure.

(b) Change in Internal Control over Financial Reporting

No change in the Company’s internal control over financial reporting occurred during the Company’s most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the Company’s internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

We are not party to any material pending legal proceedings, other than routine litigation incidental to our business.

ITEM 1A. RISKS FACTORS

This Form 10-Q contains forward-looking information based on our current expectations. Because our actual results may differ materially from any forward-looking statements made by or on behalf of Sangamo, this section includes a discussion of important factors that could affect our actual future results, including, but not limited to, our revenues, expenses, net loss and loss per share.

ZFP Therapeutics have undergone limited testing in humans and our ZFP Therapeutics may fail safety studies in clinical trials.

We have initiated and completed a Phase 1 study and initiated several Phase 2 clinical trial in our lead ZFP Therapeutic program. We have completed enrollment and treatment of the patients in the first of these trials of SB-509 for diabetic neuropathy and thus far have not observed any serious drug-related adverse events. However if our lead ZFP Therapeutic fails one of its initial safety studies, it could reduce our ability to attract new investors and corporate partners. In January 2005, we filed an IND with the FDA for SB-509, a ZFP TF activator of VEGF-A, for the treatment of mild to moderate diabetic neuropathy. We have completed enrollment and treatment of a Phase 1, single blind, single dose, dose-escalation trial to measure the laboratory and clinical safety of SB-509. We have completed enrollment of a repeat-dosing Phase 2 clinical trial (SB-509-601) and have 2 other related Phase 2 trials ongoing for this indication (SB-509-701 and SB-509-703). Some trial subjects have received more than one dose of SB-509 during the course of these Phase 2 studies. In addition, Phase 1 clinical trials of an identical ZFP TF has been carried out in subjects with peripheral artery disease. These early studies of a ZFP Therapeutic are a highly visible test of our ZFP Therapeutic approach. Since we have increased our focus on ZFP Therapeutic research and development, investors will increasingly assess the value of our technology based on the continued progress of ZFP Therapeutic products into and through clinical trials. If the initial safety study of our lead therapeutic was halted due to safety concerns, this would negatively affect our operations and the value of our stock.

The results of early Phase 1 trials are based on a small number of patients over a short period of time, and our progress may not be indicative of results in a large number of patients or of long-term efficacy.

The results in early phases of clinical testing are based upon limited numbers of patients and a limited follow-up period. Typically, our Phase 1 clinical trials for indications of safety enroll less than 50 patients. The initial results from the Phase 1 clinical trial of our ZFP Therapeutic, SB-509 product, became available in the first half of 2006 and more were presented in June and November of 2007. The primary end point of the trial was clinical and laboratory safety, however we collected some preliminary efficacy data that showed trends of clinical improvement in some subjects. Our first Phase 2 clinical trial (SB-509-601) for safety and efficacy has enrolled 110 patients. Actual results with more data points may not confirm favorable results from earlier stage trials. A number of companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in late stage clinical trials even after achieving promising results in earlier stage clinical trials. If a larger population of patients does not experience positive results, or if these results are reproducible, our products may not receive approval from the FDA. Failure to demonstrate the safety and effectiveness of our ZFP Therapeutic products in larger patient populations could have a material adverse effect on our business that would cause our stock price to decline significantly.

We have limited experience in conducting clinical trials.

Our ZFP Therapeutics may fail to show the desired safety and efficacy in initial clinical trials. We have completed a Phase 1 trial and initiated several Phase 2 clinical trials, completing enrollment on one of these studies. However, the FDA will require additional clinical testing which involves significantly greater resources, commitments and expertise that may require us to enter into a collaborative relationship with a pharmaceutical company that could assume responsibility for late-stage development and commercialization.

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

We may be competing for suitable patients with other clinical trials. We or the FDA may suspend our clinical trials at any time if either believes that we are exposing the subjects participating in these trials to unacceptable health risks. The FDA or institutional review boards and/or institutional biosafety committees at the medical institutions and healthcare facilities where we sponsor clinical trials may suspend any trial indefinitely if they find deficiencies in the conduct of these trials. The FDA and institutional review boards may also require large numbers of patients, and the FDA may require that we repeat a clinical trial.

Our potential therapeutic products are subject to a lengthy and uncertain regulatory process, and we may encounter unanticipated toxicity or adverse events or fail to demonstrate efficacy, causing us to delay, suspend or terminate the development of a ZFP Therapeutic. If these potential products are not approved, we will not be able to commercialize those products.

The FDA must approve any human therapeutic product before it can be marketed in the United States. The process for receiving regulatory approval is long and uncertain, and a potential product may not withstand the rigors of testing under the regulatory approval processes.

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

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

Clinical trials:

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

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

As we cannot predict whether or when we will obtain regulatory approval to commercialize our product candidates, we cannot predict the timing of any future revenue from these product candidates.

We cannot commercialize any of our ZFP Therapeutics to generate revenue until the appropriate regulatory authorities have reviewed and approved the applications for the product candidates. We cannot assure that the regulatory agencies will complete their review processes in a timely manner or that we will obtain regulatory approval for any product candidate that we or our collaborators develop.

Satisfaction of regulatory requirements typically takes many years, is dependent upon the type, complexity and novelty of the product and requires the expenditure of substantial resources. Regulatory approval processes outside the United States include all of the risks associated with the FDA approval process. In addition, we may experience delays or rejections based upon additional government regulation from future legislation or administrative action or changes in FDA policy during the period of product development, clinical trials and FDA regulatory review.

If we establish drug development collaborations, our collaborators may control aspects of our clinical trials, which could result in delays and other obstacles in the commercialization of our proposed products.

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

We have increased the focus of our research and development programs on human therapeutics, which will increase operating expenditures and the uncertainty of our business.

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

We are conducting proprietary research to discover ZFP Therapeutic product candidates. These programs increase our financial risk of product failure, may significantly increase our research expenditures, and may involve conflicts with future collaborators and strategic partners.

Our proprietary research programs consist of research which is funded solely by the Company and where the Company retains exclusive rights to therapeutic products generated by the research. This is in contrast to certain of our research programs that may be funded by corporate partners and in which we may share rights to any resulting products. We have conducted proprietary research since inception. However, in the past several years, our strategy has shifted toward placing greater emphasis on proprietary research and therapeutic development and we expect this trend will continue in 2008 as we continue to prosecute our Phase 2 clinical trials and bring new ZFP Therapeutics into clinical trials. Conducting proprietary research programs may not generate corresponding revenue and may create conflicts with our collaborators or strategic partners 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 collaborations 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. The implementation of this strategy will involve substantially greater business risks, the expenditure of significantly greater funds than our historic research activities and will require substantial commitments of time from our management and staff.

Commercialization of our technologies will depend, in part, on strategic partnering with other companies. If we are not able to find strategic partners in the future or our strategic partners do not diligently pursue product development efforts, we may not be able to develop our technologies or products, which could slow our growth and decrease the value of our stock.

We expect to rely, to some extent, on our strategic partners to provide funding in support of our research and to perform independent research and preclinical and clinical testing. Our technology is broad based, and we do not currently possess the resources necessary to fully develop and commercialize potential products that may result from our technologies or the resources or capabilities to complete the lengthy marketing approval processes that may be required for the products. Therefore, we plan to rely on strategic partnerships to help us develop and commercialize ZFP Therapeutic products. If we are unable to find strategic partners or if the partners we find are unable or unwilling to advance our programs, or if they do not diligently pursue product approval, this may slow our progress and defer our revenues. Our partners may sublicense or abandon development programs or we may have disagreements with our partners, which would cause associated product development to slow or cease. There can be no assurance that we will be able to establish strategic collaborations for ZFP Therapeutic product development. We may require significant time to secure collaborations or

strategic partners because we need to effectively market the benefits of our technology to these future collaborators and strategic partners, which use the time and efforts of research and development personnel and our management. Further, each collaboration or strategic partnering arrangement will involve the negotiation of terms that may be unique to each collaborator or strategic partner. These business development efforts may not result in a collaboration or strategic partnership.

The loss of any future strategic partnering agreements would not only delay or terminate the potential development or commercialization of products we may derive from our technologies, but it may also delay or terminate our ability to test ZFP therapeutic candidates 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.

Under typical strategic partnering agreements we would expect to receive revenue for the research and development of a ZFP Therapeutic product and based on achievement of specific milestones. Achieving these milestones will depend, in part, on the efforts of our strategic partner as well as our own. If we, or any strategic partner, fail to meet specific milestones, then the strategic partnership may be terminated, which could decrease our revenues.

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

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

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

We may be unable to license gene transfer technologies that we may need to commercialize our ZFP TF technology.

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

We do not currently have the infrastructure or capability to manufacture therapeutic products on a commercial scale.

In order for us to commercialize these products directly, we would need to develop, or obtain through outsourcing arrangements, the capability to execute all of these functions. If we are unable to develop or otherwise obtain the requisite preclinical, clinical,

regulatory, manufacturing, marketing, and sales capabilities, we would be unable to directly commercialize our therapeutics products which would limit our future growth.

Even if our technology proves to be effective, it still may not lead to commercially viable products.

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

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

A number of additional factors may limit the market acceptance of products including the following:

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

Adverse events in the field of gene therapy may negatively impact regulatory approval or public perception of our potential products.

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

Our stock price is also influenced by public perception of gene therapy and government regulation of potential products.

Reports of serious adverse events in a retroviral gene transfer trial for infants with X-linked severe combined immunodeficiency (X-linked SCID) in France and subsequent FDA actions putting related trials on hold in the United States had a significant negative impact on the public perception and stock price of certain companies involved in gene therapy. Stock prices of these companies declined whether or not the specific company was involved with retroviral gene transfer for the treatment of infants with X-linked SCID, or whether the specific company's clinical trials were placed on hold in connection with these events. Other potential adverse events in the field of gene therapy may occur in the future that could result in greater governmental regulation of our potential products and potential regulatory delays relating to the testing or approval of our potential products

We are at the development phase of operations and may not succeed or become profitable.

We began operations in 1995 and are in the early phases of ZFP Therapeutic product development. We have incurred significant losses and our net losses for the past three fiscal years ended 2007, 2006 and 2005 were $21.5 million, $17.9 million and $13.3 million, respectively. To date, our revenues have been generated from strategic partners, Enabling Technology collaborations, and federal government and research foundation grants. Since 2005, we have placed significant emphasis on higher-value therapeutic product development and related strategic partnerships. This shift in emphasis has the potential to increase the return on investment to our stockholders by allocating capital resources to higher value, therapeutic product development activities. At the same time, it increases our financial risk by increasing expenses associated with product development. In addition, the preclinical or clinical failure of any single product, such as our Phase 2 clinical trials of SB-509, may have a significant effect on the actual or perceived value of our shares. Our business is subject to all of the risks inherent in the development of a new technology, which included the need to:

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

If our competitors develop, acquire, or market technologies or products that are more effective than ours, this would reduce or eliminate our commercial opportunity.

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

- For ZFP Therapeutics:
  - small molecule drugs;
  - monoclonal antibodies;
  - recombinant proteins;
  - gene therapy/cDNAs;
  - antisense; and
  - siRNA approaches
- For our Enabling Technology Applications:
  - For protein production: gene amplification, meganucleases, insulator technology, mini-chromosomes
  - For target validation: antisense, siRNA; and
  - For plant agriculture: recombination approaches, mutagenesis approaches, meganucleases, mini-chromosomes;
- In addition to possessing competing technologies, our competitors include pharmaceutical and biotechnology companies with:
  - substantially greater capital resources than ours;
  - larger research and development staffs and facilities than ours; and

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

- These organizations also compete with us to:
  - attract qualified personnel;
  - attract parties for acquisitions, joint ventures or other collaborations; and
  - license the proprietary technologies of academic and research institutions that are competitive with our technology, which may preclude us from pursuing similar opportunities.

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

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

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

We anticipate continuing to incur operating losses for the next several years. If material losses continue for a significant period, we may be unable to continue our operations.

We have generated operating losses since we began operations in 1995. The extent of our future losses and the timing of profitability are uncertain, and we expect to incur losses for the foreseeable future. We have been engaged in developing our ZFP TF technology since inception, which has and will continue to require significant research and development expenditures. In July 2007, we completed a registered direct offering to institutional investors for a total of 3,278,689 shares of common stock, at a price of $9.15 per share, resulting in net proceeds to us of $28.0 million. Also in July 2007, we entered into a license agreement and a related stock purchase agreement with Sigma-Aldrich Corporation (“Sigma”) under which we sold to Sigma 1.0 million shares of Sangamo’s common stock valued at $8.55 million. In June 2006, in an underwritten public offering and pursuant to an effective registration statement, we sold 3,100,000 shares of common stock at a public offering price of $6.75 per share, resulting in net proceeds of approximately $20.2 million. In November 2005, we completed a registered direct offering to institutional and strategic investors for a total of 5,080,000 shares of common stock at a price of $3.85 per share to the investors, resulting in net proceeds to Sangamo of approximately $18.2 million. To date, we have generated all other revenue from strategic partnering agreements, Enabling Technology collaborations, federal government research grants and grants awarded by research foundations. As of March 31, 2008, we had an accumulated deficit of approximately $157.7 million. We expect to incur losses for the foreseeable future. These losses will increase as we expand and extend our research and development activities into human therapeutic product development. If the time required to generate significant product revenues and achieve profitability is longer than we currently anticipate or if we are unable to generate liquidity through equity financing, we may not be able to sustain our operations.

We may be unable to raise additional capital, which would harm our ability to develop our technology and products.

We have incurred significant operating losses and negative operating cash flows since inception and have not achieved profitability. We expect capital outlays and operating expenditures to increase over the next several years as we expand our infrastructure and research and ZFP Therapeutic product development activities. While we believe our financial resources will be adequate to sustain our current operations at least through 2009, we may seek additional sources of capital through equity or debt financing. In addition, as we focus our efforts on proprietary human therapeutics, we will need to seek FDA approval of potential products, a process that could cost in excess of $100 million per product. We cannot be certain that we will be able to obtain financing on terms acceptable to us, or at all. If adequate funds are not available, our business and our ability to develop our technology and ZFP Therapeutic products would be harmed.

Our stock price has been volatile and may continue to be volatile, which could result in substantial losses for investors.

During the quarter ended March 31, 2008, our common stock price ranged from a low of $8.83 to high of $13.37. During the past two years, our common stock price has fluctuated significantly, ranging from a low of $6.22 to a high of $19.08 during the year ended December 31, 2007, and a low of $4.10 to a high of $8.00 during the year ended December 31, 2006. Volatility in our common stock could cause stockholders to incur substantial losses. An active public market for our common stock may not be sustained, and the market price of our common stock may continue to be highly volatile. The market price of our common stock has fluctuated significantly in response to the following factors, some of which are beyond our control:

- announcements by us or future partners providing updates on the progress or development status of ZFP Therapeutics;
- data from clinical trials;
- changes in market valuations of similar companies;
- deviations in our results of operations from the guidance given by us or estimates of securities analysts;
- announcements by us or our competitors of new or enhanced products, technologies or services or significant contracts, acquisitions, strategic relationships, joint ventures or capital commitments;
- regulatory developments;
- additions or departures of key personnel;
- future sales of our common stock or other securities by the Company, management or directors, liquidation of institutional funds that comprised large holdings of Sangamo stock; and
- decreases in our cash balances.

Our common stock is relatively thinly traded, which means large transactions in our common stock may be difficult to conduct in a short time frame.

We have a relatively low volume of daily trades in our common stock on the Nasdaq Global Market. For example, the average daily trading volume in our common stock on the Nasdaq Global Market over the ten-day trading period prior to May 2, 2008 was approximately 361,930 shares per day. Any large transactions in our common stock may be difficult to conduct and may cause significant fluctuations in the price of our common stock.

Because it is difficult and costly to protect our proprietary rights, and third parties have filed patent applications that are similar to ours, we cannot ensure the proprietary protection of our technologies and products.

Our commercial success will depend in part on obtaining patent protection of our technology and successfully defending any of our patents that may be challenged. The patent positions of pharmaceutical and biotechnology companies can be highly uncertain and can involve complex legal and factual questions. No consistent policy regarding the breadth of claims allowed in biotechnology patents has emerged to date. Accordingly, we cannot predict the breadth of claims allowed in patents we own or license.

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

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

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

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

- we or our licensors were the first to make the inventions covered by each of our pending patent applications;
- we or our licensors were the first to file patent applications for these inventions;
- the patents of others will not have an adverse effect on our ability to do business;

- others will not independently develop similar or alternative technologies or reverse engineer any of our products, processes or technologies;
- any of our pending patent applications will result in issued patents;
- any patents issued or licensed to us or our collaborators or strategic partners will provide a basis for commercially viable products or will provide us with any competitive advantages;
- any patents issued or licensed to us will not be challenged and invalidated by third parties; or
- we will develop additional products, processes or technologies that are patentable.

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

We cannot guarantee that third parties will not challenge our intellectual property. One of our in-licensed foreign patents, licensed to Sangamo from Johns Hopkins University which forms the basis for five European Regional Phase patents, has been revoked as a result of an opposition by a third party. Our licensor, The Johns Hopkins University, appealed the revocation but in April 2007, the European Technical Board of Appeal released its decision dismissing the appeal. This outcome may limit our ability to exclude potential competitors in the field of targeted recombination and gene correction in Europe but does not affect our ability to practice our targeted recombination and gene correction programs in Europe. Moreover, we also hold licenses to six US patents to the technology covered by the opposed European patent, and hold licenses to related applications pending in Canada and Japan. As of January 25, 2008, US patent numbers US5,792,640 and US6,265,196, licensed to Sangamo from The Johns Hopkins University, were undergoing re-examination, and we do not know what the outcome of the process will be.

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

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

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 81 full-time employees as of May 1, 2008 and our success depends on our continued ability to attract, retain, and motivate highly qualified management and scientific personnel and our ability to develop and maintain important relationships with leading research and academic institutions and scientists. Competition for personnel and academic and other research collaborations is intense. The success of our technology development programs depends on our ability to attract and retain highly trained personnel. We have experienced a rate of employee turnover that we believe is typical of emerging biotechnology companies. If we lose the services of personnel with the necessary skills, it could significantly impede the achievement of our research and development objectives. We are not presently aware of any plans of specific employees to retire or otherwise leave the company. If we fail to negotiate additional acceptable collaborations with academic and other research institutions and scientists, or if our existing collaborations are unsuccessful, our ZFP Therapeutic development programs may be delayed or may not succeed.

If conflicts arise between us and our collaborators, strategic partners, scientific advisors, or directors, these parties may act in their self-interest, which may limit our ability to implement our strategies.

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

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

If we do not successfully commercialize ZFP based research reagents under our license agreement with Sigma-Aldrich Corporation, or if Sigma terminates our agreement, our ability to generate revenue under the license agreement may be limited.

On July 10, 2007, we entered into a license agreement with Sigma to collaborate in the application and development of ZFP-based products for use in the laboratory research reagents markets. The license agreement provides Sigma with access to Sangamo's ZFP technology and the exclusive right to use Sangamo's ZFP technology to develop and commercialize products for use as research reagents and to offer services in related research fields. In addition to an upfront payment of $13.5 million, Sangamo may also receive additional license fees, shared sublicensing revenues, royalty payments and milestone payments depending on the success of the development and commercialization of the licensed products and services. The commercial milestones and royalties are based upon net sales of licensed products. We believe that the last commercial milestone payment may not be received before 2011. Our right to receive royalty payments from Sigma will continue until the later of (i) the expiration of the last to expire valid claim of such licensed product and (ii) the 15th anniversary of the effective date of the License Agreement. We cannot be certain that Sigma and Sangamo will succeed in the development of commercially viable products in these fields of use, and there is no guarantee that Sangamo and Sigma will achieve the milestones set forth in the license agreement. To the extent Sangamo and Sigma do not succeed in developing and commercializing products or if Sangamo and Sigma fail to achieve such milestones, our revenues and benefits under the license agreement will be limited. In addition, the license agreement may be terminated by Sigma at any time by providing us with a 90-day notice. In the event Sigma decides to terminate the license agreement, our ability to generate revenue under the license agreement will cease.

If we do not successfully commercialize certain ZFP Therapeutic programs relating to diabetic neuropathy under our agreement with JDRF, JDRF may have the right to continue to advance the program and we may lose control of the intellectual property generated in the collaboration and development of the product and may only receive a portion of the revenue generated if commercialization by JDRF is successful.

On October 24, 2006, we entered into a Research, Development and Commercialization Agreement with JDRF. Under the agreement and subject to its terms and conditions, including our achievement of certain milestones associated with our Phase 2 clinical trial of SB-509 (SB-509-601) for the treatment of diabetic neuropathy, JDRF has paid us a total of $2.5 million through December 31, 2007. We are obligated to cover the costs of the Phase 2 trial that are not covered by JDRF's grant.

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

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

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

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

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

Our collaborations with outside scientists may be subject to change, which could limit our access to their expertise.

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

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

Genetically modified products are currently subject to public debate and heightened regulatory scrutiny, either of which could prevent or delay production of agricultural products. Effective as of October 1, 2005, we entered into a Research License and Commercial Option Agreement with DAS. Under this agreement, we will provide DAS with access to our proprietary ZFP technology and the exclusive right to use our ZFP technology to modify the genomes or alter the nucleic acid or protein expression of plant cells, plants, or plant cell cultures. The field-testing, production, and marketing of genetically modified plants and plant products are subject to federal, state, local, and foreign governmental regulation. Regulatory agencies administering existing or future regulations or legislation may not allow production and marketing of our genetically modified products in a timely manner or under technically or commercially feasible conditions. In addition, regulatory action or private litigation could result in expenses, delays, or other impediments to our product development programs or the commercialization of resulting products.

The FDA currently applies the same regulatory standards to foods developed through genetic engineering as those applied to foods developed through traditional plant breeding. Genetically engineered food products, however, will be subject to pre-market review if these products raise safety questions or are deemed to be food additives. Governmental authorities could also, for social or other purposes, limit the use of genetically modified products created with our gene regulation technology.

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

If we use biological and hazardous materials in a manner that causes injury or violates laws, we may be liable for damages.

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

Anti-takeover provisions in our certificate of incorporation and Delaware law could make an acquisition of the Company more difficult and could prevent attempts by our stockholders to remove or replace current management.

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

In addition, our bylaws:

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

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

Insiders have control over Sangamo and could delay or prevent a change in corporate control.

The interest of management could conflict with the interest of our other stockholders. Our executive officers and directors beneficially own, in the aggregate, approximately 13% of our outstanding common stock as of March 17, 2008. As a result, these stockholders, if they choose to act together, may have a material impact on all matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions. This could have the effect of delaying or preventing a change of control of Sangamo, which in turn could reduce the market price of our stock.

ITEM 6. EXHIBITS

(a) Exhibits:

10.1 (+)	Second Research and License Agreement dated as of February 27, 2008 between Genentech, Inc., and Sangamo BioSciences, Inc.
10.2 (+)	Letter Agreement dated February 25, 2008 between Sigma-Aldrich Corporation and Sangamo BioSciences, Inc.
31.1	Rule 13a — 14(a) Certification by President and Chief Executive Officer
31.2	Rule 13a — 14(a) Certification by Principal Financial and Accounting Officer
32.1	Certification Pursuant to 18 U.S.C. Section 1350.
(+)	Confidential treatment has been requested for certain information contained in this document. Such information has been omitted and filed separately with the Securities and Exchange Commission.

Table of Contents

SIGNATURES

Pursuant to the requirements of the Securities and Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

SANGAMO BIOSCIENCES, INC. Dated: May 9, 2008

/s/ H. Ward Wolff
H. Ward Wolff
Executive Vice President and Chief Financial Officer
(Principal Financial and Accounting Officer)

Exhibit 10.1

NOTE: Portions of this Exhibit are the subject of a Confidential Treatment Request by the Registrant to the Securities and Exchange Commission (the "Commission"). Such portions have been redacted and are marked with a "[***]" in place of the redacted language. The redacted information has been filed separately with the Commission.

SECOND RESEARCH AND LICENSE AGREEMENT

BETWEEN

GENENTECH, INC.

AND

SANGAMO BIOSCIENCES, INC.

TABLE OF CONTENTS

***** CONFIDENTIAL PORTIONS OMITTED AND FILED SEPARATELY WITH THE COMMISSION**

***** CONFIDENTIAL PORTIONS OMITTED AND FILED SEPARATELY WITH THE COMMISSION**

Exhibits

***** CONFIDENTIAL PORTIONS OMITTED AND FILED SEPARATELY WITH THE COMMISSION**

SECOND RESEARCH AND LICENSE AGREEMENT

THIS SECOND RESEARCH AND LICENSE AGREEMENT ("Agreement") is made and entered into, effective as of February 25, 2008 ("Effective Date"), by and between Genentech, Inc., having a principal place of business at 1 DNA Way, South San Francisco, California 94080, ("Genentech") and Sangamo BioSciences, Inc., having a principal place of business at Point Richmond Tech Center, 501 Canal Boulevard, Suite A100, Richmond, California 94804 ("Sangamo"), (collectively, the "Parties" or individually, a "Party").

RECITALS

WHEREAS, Genentech discovers, develops, manufactures, markets and sells human pharmaceuticals on a worldwide basis;

WHEREAS, Sangamo has certain proprietary technology for modifying genes, which is of interest to Genentech;

WHEREAS, Genentech and Sangamo are parties to the First Agreement (defined below) pursuant to which Sangamo is modifying certain genes in one of Genentech's proprietary cell lines using Sangamo's proprietary technology, in accordance with a research plan under the First Agreement; and

WHEREAS, the Parties desire to extend their relationship to include Sangamo's performance of additional research and/or other services for Genentech under this Agreement.

AGREEMENT

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Genentech and Sangamo agree as follows:

Article 1. Definitions

Capitalized terms used in this Agreement, whether used in the singular or plural, shall have the meanings set forth below, unless otherwise specifically indicated herein. This Agreement and the First Agreement use many of the same defined terms. Unless the First Agreement is expressly referenced, the use of a given term in this Agreement only refers to this Agreement.

1.1 "Accept the [***] Evidence" (and grammatical variations thereof) shall be defined in the Research Plan for a given Designated Gene if Sangamo has an obligation under such Research Plan to attempt to generate one or more Modified Genentech CHO Cell Lines with respect to such Designated Gene. "Accept the **[***]** Evidence" includes those cases in which Genentech is deemed to Accept the **[***]** Evidence (including, without limitation, under Section 2.4).

1.2 "Affiliate" means, with respect to a particular Party, a person, corporation, partnership, or other entity that controls, is controlled by or is under common control with such Party. For the purposes of this definition, the word "control" (including, with correlative meaning, the terms "controlled by" or "under the common control with") means (a) the direct or indirect ownership of fifty percent (50%) or more of the stock having the right to vote for directors thereof; or (b) the actual power, either directly or indirectly through one or more intermediaries, to direct the management and policies of such entity, whether by the ownership of at least fifty percent (50%) of the voting stock of such entity, or by contract or otherwise.

1.3 "[***] Evidence" shall be defined in the Research Plan for a given Designated Gene if Sangamo has an obligation under such Research Plan to attempt to generate one or more Modified Genentech CHO Cell Lines with respect to such Designated Gene.

1.4 "Approval of the Research Plan" is defined in Section 2.1(d).

1.5 "Assumption Agreement" means a written agreement, executed by Genentech, Sangamo and **[***]**, under which **[***]**. An Assumption Agreement may include reasonable modifications to this Agreement and/or the **[***]** Agreement, as necessary to reflect the **[***]**; provided, however, unless otherwise agreed to by Genentech, Sangamo and **[***]**, the **[***]** obligations under this Agreement that may be delegated to **[***]** under an Assumption Agreement shall be limited to those related to the performance of a **[***]**. Further, in no event, shall an Assumption Agreement in any way increase Genentech's financial or other obligations under this Agreement or adversely affect the Genentech License or other licenses and rights granted to Genentech under this Agreement.

1.6 "BLA" means a Biologics License Application or other such application (other than a supplemental application) filed with the U.S. Food and Drug Administration (or any successor entity thereto performing similar functions) for the purpose of obtaining Marketing Approval for a Licensed Product in the United States.

1.7 "Caltech Agreement" means the Third Party License between Sangamo and the California Institute of Technology, dated November 1, 2003, as amended as of the Effective Date, and prior to any amendments after the Effective Date.

1.8 "CHO" means Chinese hamster ovary.

1.9 "Collaboration Partner" means, with respect to a given Licensed Product, a Third Party to which Genentech has granted a license to use, sell, offer for sale and/or import such Licensed Product, whether or not such license includes the right to make such Licensed Product.

1.10 "Commercially Diligent Efforts" means, (a) with respect to Sangamo, efforts and resources comparable to those expended by Sangamo on its projects for a Third Party of a similar nature (*i.e.*, protein production projects) and (b) with respect to Genentech, efforts and resources comparable to those expended by Genentech on its internal process development projects of comparable value to Genentech.

1.11 "Confidential Information" means a Party's nonpublic information that is disclosed to the other Party in connection with this Agreement (including, without limitation, information regarding such Party's research, technology, assays, protocols, methods, processes, data, products and business information or objectives), provided that any such information disclosed in written, electronic or other tangible form is marked as "confidential" or with a similar legend. For clarity, Sangamo may disclose to Genentech certain nonpublic information that was originally disclosed to Sangamo by **[***]**, and such nonpublic information shall be deemed to be the nonpublic information of Sangamo for the purpose of this definition. Nonpublic information of a Party that is disclosed other than in tangible form (*e.g.*, disclosed orally or by observation of the other Party) shall be considered Confidential Information of such Party only if so identified in writing to the other Party within thirty (30) days after initial disclosure and such writing identifies such Confidential Information with particularity. Notwithstanding the foregoing marking requirement, Genentech's Confidential Information shall include (a) the Maximum Number of Genes and the actual number of Designated Genes; (b) the identity of the Requested Genes and the Designated Genes (as the focus of this Agreement) and the Functional **[***]** thereof; (c) Genentech's interest in the Requested Genes and the Designated Genes as potential targets for modification to improve production cell lines; (d) the Research Plan and Draft Research Plans; (e) the Research Results; and (f) all information in the Genentech Deliverables, whether or not any of the foregoing information in (a) through (f) is so marked. The terms and conditions of this Agreement (including, without limitation, the financial terms) shall be the Confidential Information of both Parties.

1.12 "Controlled by" means the rightful possession by a Party of the ability to grant a license, sublicense or other right to exploit, as provided in this Agreement, without violating the terms of any agreement with any Third Party.

1.13 "Covering" (and grammatical variations thereof) means that, with respect to a given Licensed Product, a protein contained in such Licensed Product was expressed by a Modified Cell Line and (a) the making or use of such Modified Cell Line fell within the scope of a Valid Claim (in the country of such making or use) at the time of such making or use; and/or (b) if such Modified Cell Line is a ZFN Modified Cell Line, the making or use of a ZFN Reagent used to create such Modified Cell Line fell within the scope of a Valid Claim (in the country of such making or use) at the time of such making or use.

1.14 "Delegated Obligations" is defined in Section 14.2(d).

1.15 "Designated Gene" means a Requested Gene that is included as a Designated Gene under Section 2.1(e) and which is further defined by the Designated Gene Sequence for such Designated Gene.

1.16 "Designated Gene Sequence" means the partial or full cDNA coding sequence from a CHO cell line for a given Designated Gene, as specified under Section 2.1(e)(i) (in the case of a Request for Existing ZFN Reagents) or Section 2.1(e)(ii) (in the case of an Approval of the Research Plan), as applicable.

1.17 "Donor Sequence" means, with respect to a given Designated Gene, a DNA sequence sharing homology with sequences upstream and downstream of a ZFN cutting site in such Designated Gene, where such sequences are of sufficient length **[***]** to allow homologous recombination to occur at an efficiency of **[***]** . The Donor Sequence for a given Designated Gene shall also contain a DNA sequence for insertion into such Designated Gene via homologous recombination, and such DNA sequence may contain **[***]** as agreed to by the Liaisons.

1.18 "Draft Research Plan" means a draft of a research plan for the research activities to be performed by the Parties under this Agreement, which shall be based on the Research Plan Template to the extent applicable, prior to approval by Genentech under Section 2.1(d).

1.19 "Excluded ZFN Reagents Know-How" is defined in Section 2.1(b)(ii).

1.20 "Executive" means, in the case of Sangamo, its Chief Executive Officer and, in the case of Genentech, a Senior Vice President, or their respective designees. Notwithstanding the foregoing, in the event of a dispute arising under Section 2.4(c), "Executive" means, in the case of Sangamo, its Chief Scientific Officer and, in the case of Genentech, its Vice President of Process Development.

1.21 "Existing [***] Evidence" means, with respect to given Existing ZFN Reagents, a data package and summary for such Existing ZFN Reagents (that Sangamo has the right to provide to Genentech), including evidence that the Requested Gene/Designated Gene has been Functionally **[***]** in a CHO cell line as specified in the Genentech Request Notice for such Requested Gene.

1.22 "Existing Third Party Licenses" means the Caltech Agreement, the JHU Agreement, the MIT Agreement, the Scripps Agreement, the Sigma Agreement and the Utah Agreement.

1.23 "Existing ZFN Reagents" is defined in Section 2.1(b)(ii).

1.24 "Existing ZFN Reagents Know-How" means, with respect to given Existing ZFN Reagents, at the time Sangamo offers to provide such Existing ZFN Reagents to Genentech, any then-existing tangible manifestations of Sangamo Know-How, to the extent reasonably accessible to Sangamo personnel and reasonably ascertainable as relevant to such Existing ZFN Reagents, but in all cases including (i.e., whether or not then-existing as tangible manifestations, reasonably accessible, etc.) the following "required" information: (a) written protocols for the methods and assays used to generate all of the Existing **[***]** Evidence and (b) written protocols for the use of such Existing ZFN Reagents to generate ZFN Modified Cell Lines.

1.25 "Expression Plasmid" means an appropriate expression plasmid in the form of **[***]** of purified plasmid DNA for each ZFN Reagent in TE buffer.

1.26 "First Agreement" means the Research and License Agreement between Genentech and Sangamo, dated April 27, 2007, including any amendments thereafter.

1.27 "First Commercial Sale" means the first bona fide commercial sale of a product in a country following Marketing Approval for such product in such country by or under authority of Genentech or its sublicensees.

1.28 "FTE" means the equivalent of the work of one Sangamo employee full-time for a twelve (12) month period (consisting of at least a total of **[***]** hours) of work directly related to activities under the Research Plan or training requested by Genentech (e.g., under Section 2.6(c) or Section 2.1(e)(i)), including experimental laboratory work, recording and writing up results, reviewing literature and references and participating in scientific discussions with the Genentech Liaison. For any payment under this Agreement made on the basis of an FTE, no additional payment shall be made with respect to any individual who works more than **[***]** hours in any twelve (12) month period, and any person who devotes less than **[***]** hours in any twelve (12) month period shall be treated as an FTE on a pro-rata basis based upon the actual number of hours worked divided by **[***]**.

1.29 "FTE Rate" means a fully-loaded rate of **[***]** per FTE per year, and incorporates all Sangamo internal and external costs for performing its obligations under the Research Plan and any other activities for which the FTE Rate applies.

1.30 "Functional [***]" (and grammatical variations thereof) means the targeted **[***]** of DNA sequences in **[***]** of a given Requested Gene/Designated Gene, where such **[***]**

1.31 "[***] Gene" is defined in Section 2.1(e)(i).

1.32 "Genentech CHO Cell Line" means a CHO cell line provided to Sangamo in the Genentech Deliverables or used by Genentech to perform its obligations under this Agreement including, without limitation, under Section 3.5(a), Section 3.5(b) or a Research Plan. References to "the" or "a" Genentech CHO Cell Line (or other similar references) shall refer to each Genentech CHO Cell Line (individually) or all Genentech CHO Cell Lines (collectively), as determined by the context.

1.33 "Genentech CHO DNA Extract" means the extract of purified genomic DNA from the Genentech CHO Cell Line.

1.34 "Genentech Deliverables" means those materials, information, reports and other items that Genentech provides to Sangamo under this Agreement including, without limitation, those identified under the heading "Genentech Deliverables" in the various Research Stages of the Research Plan.

1.35 "Genentech License" is defined in Section 5.1(a).

1.36 "Genentech Materials" means tangible materials included in the Genentech Deliverables including, without limitation, the Genentech CHO Cell Line and the Genentech CHO DNA Extract. Genentech Materials also include tangible biological materials derived physically from Genentech Materials including, without limitation, ZFN Modified Cell Lines derived from the Genentech CHO Cell Line or from another Genentech proprietary cell line.

1.37 "Genentech Request Notice" is defined in Section 2.1(b).

1.38 "Genentech Response Notice" is defined in Section 2.1(c).

1.39 "Identified Patents" means those patents and patent applications identified on Exhibit C (including those owned and those in-licensed by Sangamo).

1.40 "Improved ZFN Reagent" means a ZFN Reagent that incorporates or is made using an Improvement.

1.41 "Improvement" means any improvement made by (including on behalf of) Sangamo or **[***]** during the term of the Agreement (whether or not such improvement is patentable) to ZFNs and associated reagents (including, without limitation, expression plasmids and Donor Sequences) and/or Sangamo Know-How (including methodologies/protocols for creating ZFN Modified Cell Lines), where such improvement would improve by **[***]** the (a) efficiency of creating ZFN Modified Cell Lines; (b) time taken to create ZFN Modified Cell Lines; and/or (c) activity of any ZFN Reagent. For purposes of this definition, "efficiency" refers to: (i) transfer efficiency, in terms of percent of cells that uptake ZFN Reagents by transfection or comparable procedure; or (ii) frequency of targeted **[***]** in a Designated Gene within a population of cells, after delivery of ZFN Reagent(s) to such population. For purposes of this definition, "time taken" refers to the time taken from delivery of a ZFN Reagent(s) to a cell line to the identification of a clone in which a Designated Gene has been Functionally **[***]**. For purposes of this definition, "activity" refers to: (i) DNA binding activity or strength of the DNA binding domain of a ZFN; (ii) DNA cleavage activity of the nuclease domain of a ZFN Reagent; (iii) *in vivo* activity in terms of percent of cells in which a Designated Gene has been Functionally **[***]**, after delivery of ZFN Reagent(s) to such cells; or (iv) frequency of homologous recombination with Donor Sequences.

1.42 "Invention" is defined in Section 4.1.

1.43 "JHU Agreement" means the Third Party License between Sangamo and Johns Hopkins University, dated June 29, 1995, as amended as of the Effective Date, and prior to any amendments after the Effective Date.

1.44 "Joint Patents" is defined in Section 4.3(b).

1.45 "Know-How" means information or materials including, without limitation, sequence information, data, assays, protocols, methods, processes, techniques, models, designs, libraries and trade secrets.

1.46 "Liaison" is defined in Section 2.2. References in the Agreement to the Liaison(s) shall refer to the Liaison(s) for the applicable Requested Gene/Designated Gene, as determined by the context.

1.47 "Licensed Product" means a product that contains a protein expressed by a Modified Cell Line.

1.48 "Marketing Approval" means all approvals, licenses, registrations or authorizations of any federal, state or local regulatory agency, department, bureau or other governmental entity, necessary for the manufacturing, use, storage, import, transport and sale of a product in a regulatory jurisdiction. For countries where governmental approval is required for pricing or reimbursement for such product to be reimbursed by national health insurance, "Marketing Approval" shall not be deemed to occur until such pricing or reimbursement approval is obtained.

1.49 "Maximum Number of Genes" is defined in Section 2.1(a).

1.50 "Milestone Event" means a milestone event identified in the table in Section 3.6(b).

1.51 "Milestone Payment" means a milestone payment identified in the table in Section 3.6(b), subject to the other provisions in Section 3.6.

1.52 "MIT Agreement" means the Third Party License between Sangamo and the Massachusetts Institute of Technology, dated May 9, 1996, as amended as of the Effective Date, and prior to any amendments after the Effective Date.

1.53 "Modified Cell Line" means a ZFN Modified Cell Line or an Other Modified Cell Line.

1.54 "Modified Genentech CHO Cell Line" means a ZFN Modified Cell Line derived from the Genentech CHO Cell Line.

1.55 "Notice of Completed Research Plan" is defined in Section 3.4(a).

1.56 "Other Modified Cell Line" means a cell line that contains one or more targeted **[***]** in the genomic DNA (when compared with the parental cell line from which it was derived) of at least one (1) Designated Gene, where no **[***]** in the genomic DNA of such cell line are the result of using ZFN Reagents.

1.57 "Patents" means all United States and foreign patents and patent applications and any patents issuing therefrom, and any reissues, extensions, registrations, continuations, divisions, continuations-in-part, reexaminations, substitutions or renewals thereof, and supplementary protection certificates based thereon.

1.58 "Phase I Clinical Trial" means a human clinical trial, the principal purpose of which is preliminary determination of safety in healthy individuals or patients as described in 21 C.F.R. §312.21, or a similar clinical study in a country other than the United States.

1.59 "Phase III Clinical Trial" means a human clinical trial that is prospectively designed to demonstrate statistically whether a product is safe and effective for use in humans in a manner sufficient to obtain regulatory approval to market such product in patients having the disease or condition being studied as described in 21 C.F.R. §312.21, or a similar clinical study in a country other than the United States.

1.60 "Requested Gene" is defined in Section 2.1(b).

1.61 "Requested Gene Sequence" means the partial or full cDNA coding sequence from a CHO cell line for a given Requested Gene.

1.62 "Request for Existing ZFN Reagents" is defined in Section 2.1(c)(i).

1.63 "Required Information" means all of the information specified under the heading "Required Information" or in "Notes" identifying "Required Information," in each case, in the Research Plan Template.

1.64 "Research" means the research activities set forth in the Research Plan.

1.65 "Research Milestone Payment" means a research milestone payment under Section 3.4(a) or Section 3.4(b).

1.66 "Research Period" means the period(s) during which research activities under any Research Plan are ongoing.

1.67 "Research Plan" means a Draft Research Plan that is executed by both Parties, as provided under Section 2.1(d), and which shall thereafter be automatically incorporated in this Agreement by reference. The specific Research Plan for a given Designated Gene shall be determined in accordance with Section 2.1(d). References to "the" or "a" Research Plan (or other similar references) shall refer to each Research Plan (individually) or all Research Plans (collectively), as determined by the context.

1.68 "Research Plan Template" means the template for a research plan, as outlined in Exhibit A.

1.69 "Research Results" means all (a) data (including, without limitation, the underlying data, summarized data and reports); and (b) Know-How related specifically to the Genentech Materials, in each case, generated in the course of and/or drawn from the Research by either Party.

1.70 "Research Stage" means a particular stage of the Research, as identified in the Research Plan.

1.71 "Sangamo Deliverables" means those materials, information, reports and other items that Sangamo provides to Genentech under this Agreement including, without limitation, those identified under the heading of "Sangamo Deliverables" in the various Research Stages of the Research Plan.

1.72 "Sangamo IP Rights" means Sangamo's intellectual property rights in the Sangamo Know-How and the Sangamo Patents.

1.73 "Sangamo Know-How" means Know-How that is Controlled by Sangamo, existing as of the Effective Date or thereafter, to the extent necessary or reasonably useful to make or use (including for validation purposes) ZFN Reagents and/or ZFN Modified Cell Lines.

1.74 "Sangamo Patents" means Patents that are Controlled by Sangamo, existing as of the Effective Date or thereafter, having one or more claims that encompass (a) ZFN Reagents and/or ZFN Modified Cell Lines; and/or (b) the making and/or use of ZFN Reagents and/or ZFN Modified Cell Lines. Sangamo Patents include, without limitation, the Identified Patents.

1.75 "Sangamo Response Notice" is defined in Section 2.1(b).

1.76 "Scripps Agreement" means the Third Party License between Sangamo and the Scripps Research Institute, dated March 14, 2000, prior to any amendments after the Effective Date.

1.77 "Selection Period" means the **[***]** year period commencing on the Effective Date.

1.78 "Select Sangamo Licensors" means the Massachusetts Institute of Technology and its trustees, directors, officers, employees and affiliates; Johns Hopkins University and its trustees, officers, employees, students and affiliates; and Sigma and its directors, officers and employees.

1.79 "Sigma" means Sigma-Aldrich Co.

1.80 "Sigma Agreement" means, collectively, (a) the Research and License Agreement between Sangamo and Sigma, dated July 10, 2007, as amended as of the Effective Date, and prior to any amendments after the Effective Date and (b) the letter agreement between Sangamo and Sigma regarding "License Agreement—Genentech Custom Project," dated February 25, 2008.

1.81 "Sublicense Agreement" is defined in Section 5.1(c).

1.82 "Substituted Designated Gene" is defined in Section 8.3.

1.83 "Success Milestone Payment" is defined in Section 3.5(c).

1.84 "Success Notice 1" is defined in Section 3.5(a).

1.85 "Success Notice 2" is defined in Section 3.5(b).

1.86 "Technology Access Fee" is defined in Section 3.3.

1.87 "Third Party" means any entity other than Sangamo or Genentech.

1.88 "Third Party License" is defined in Section 5.4(a).

1.89 "Up-Front Fee" is defined in Section 3.2.

1.90 "Utah Agreement" means the Third Party License between Sangamo and the University of Utah Research Foundation, dated September 8, 2004, as amended as of the Effective Date, and prior to any amendments after the Effective Date.

1.91 "Valid Claim" means a claim of an issued and unexpired patent that (a) is within the Sangamo Patents, *excluding* any patents that are jointly owned by the Parties; and (b) has not been found to be unpatentable, invalid or unenforceable by a decision of a court or other authority in the country of the patent, from which decision no appeal is taken or can be taken.

1.92 "ZFN" means a (a) zinc-finger nuclease protein or (b) nucleic acid coding sequence that encodes such a nuclease.

1.93 "ZFN Modified Cell Line" means a cell line that contains one or more targeted **[***]** in the genomic DNA (when compared with the parental cell line from which it was derived) of at least one (1) Designated Gene, where at least one (1) of such **[***]** in such Designated Genes is the result of using ZFN Reagents.

1.94 "ZFN Reagent" means, with respect to a given Designated Gene, (a) a ZFN that specifically targets such Designated Gene; and/or (b) any Donor Sequence for such Designated Gene, in each case, where such ZFN and/or Donor Sequence is one that is provided (at any point in time) by Sangamo to Genentech under this Agreement. ZFN Reagents also include Improved ZFN Reagents and copies of ZFN Reagents, whether made by Sangamo, Genentech or a Third Party.

Article 2. Selection of Designated Genes and Research Program

2.1 Selection of Designated Genes.

(a) Maximum Number of Genes. At any given time, the sum of (i) the number of Requested Genes that are the subject of a pending Genentech Request Notice and (ii) the number of Designated Genes within the scope of the Genentech License (i.e., not counting any Designated Genes that were excluded from the scope of the Genentech License under Section 8.3) shall not exceed [***] genes (**"Maximum Number of Genes"**).

(b) Requests for Designated Genes. During the Selection Period, Genentech may send a written notice to the attention of Sangamo's Vice President of Business Development requesting that a particular gene (**"Requested Gene"**) be included as a Designated Gene under this Agreement (**"Genentech Request Notice"**). Each Genentech Request Notice shall include: (1) the name of the Requested Gene and, *optionally*, the Requested Gene Sequence or the partial or full cDNA coding sequence of a vertebrate homologue of such Requested Gene; (2) a description of the specific Functional [***] desired (e.g., a [***] of the protein encoded by such Requested Gene); and (3) the name and contact information for the Genentech Liaison for such Requested Gene. Within [***] business days of Sangamo's receipt of a Genentech Request Notice for a given Requested Gene, Sangamo shall send a notice to the Genentech Liaison,

which shall include: (1) the name and contact information for the Sangamo Liaison for such Requested Gene (unless Sangamo is precluded from including such Requested Gene as a Designated Gene) and (2) an indication of one of the following responses with respect to such Requested Gene **("Sangamo Response Notice"):**

(i) Sangamo has an agreement with a Third Party that precludes Sangamo from including such Requested Gene as a Designated Gene;

(ii) Sangamo has existing ZFN reagents (i.e., ZFNs and, possibly, donor sequences) for such Requested Gene that it has the right to provide to Genentech, and Sangamo offers to provide such ZFN reagents to Genentech (such ZFN reagents that Sangamo offers to provide, "**Existing ZFN Reagents**"), in which case Sangamo shall provide, with the Sangamo Response Notice, the following associated information for such Requested Gene: (A) the Existing **[***]** Evidence; (B) the Requested Gene Sequence; and (C) a description of any required Existing ZFN Reagents Know-How that Sangamo does *not* have the right to provide to Genentech ("**Excluded ZFN Reagents Know-How**"); or

(iii) Sangamo offers to create ZFN Reagents for such Requested Gene, in which case Sangamo shall provide, with the Sangamo Response Notice, a Draft Research Plan for such Requested Gene, in accordance with Section 2.1(d).

(c) Sangamo Offers to Provide Existing ZFN Reagents. In the event the Sangamo Response Notice for a given Requested Gene indicates the response under Section 2.1(b)(ii), within thirty (30) days of Genentech's receipt of such Sangamo Response Notice and all of the associated information, Genentech shall send a written notice to the Sangamo Liaison that indicates one of the following responses with respect to such Requested Gene (**"Genentech Response Notice"):**

(i) Genentech requests that Sangamo provide the Existing ZFN Reagents for such Requested Gene ("**Request for Existing ZFN Reagents**");

(ii) Genentech requests that Sangamo provide a Draft Research Plan for such Requested Gene (and the Genentech Response Notice shall include an explanation of the desired scope of such Draft Research Plan including, without limitation, whether Sangamo is to use the Existing ZFN Reagents to create one or more stable Modified Genentech CHO Cell Lines or must create new ZFN reagents for such Requested Gene), in which case Sangamo shall provide, within **[***]** business days of Sangamo's receipt of Genentech's Response Notice, such Draft Research Plan, in accordance with Section 2.1(d); or

(iii) Genentech does *not* want to pursue such Requested Gene as a Designated Gene.

(d) Content, Finalization and Approval of a Draft Research Plan. In those cases when Sangamo provides a Draft Research Plan for a Requested Gene (i.e., under Section 2.1(b)(iii) and Section 2.1(c)(ii)), the provisions of this Section 2.1(d) shall apply. It is understood that such Draft Research Plan will be only preliminary in nature and therefore may not fully conform to the Research Plan Template and may not include all Required Information even to the extent ultimately applicable. Notwithstanding the foregoing, Sangamo shall use

Commercially Diligent Efforts to ensure that such Draft Research Plan is as complete and accurate as reasonably practicable under the circumstances. Such Draft Research Plan will be finalized (if at all) in accordance with this Section 2.1(d). After Genentech's receipt of a Draft Research Plan, the Parties' Liaisons shall promptly discuss and finalize such Draft Research Plan, ensuring that it (i) conforms to the Research Plan Template; (ii) includes all Required Information to the extent applicable for the activities to be performed thereunder; and (iii) includes provisions related to Delegated Obligations (if any) in accordance with Section 14.2(d). As a part of finalizing such Draft Research Plan, if Genentech has not previously done so, it will provide the Requested Gene Sequence for such Requested Gene (unless otherwise agreed by the Parties). If Genentech and Sangamo each approves such Draft Research Plan (which each may approve or not, at its sole discretion), the final version shall be executed by authorized representatives of both Parties (**"Approval of the Research Plan"**); after such execution, the provisions of Section 2.1(e)(ii) shall apply and such Draft Research Plan shall be the Research Plan for such Requested Gene/Designated Gene.

(e) Inclusion of Requested Genes as Designated Genes. A particular Requested Gene shall be included as a Designated Gene in accordance with this Section 2.1(e).

(i) **Request for Existing ZFN Reagents.** Upon Sangamo's receipt of a Request for Existing ZFN Reagents for a given Requested Gene, the provisions of this Section 2.1(e)(i) shall apply. Such Requested Gene shall automatically be included as a Designated Gene, and with respect to such Designated Gene (except with respect to the **[***]** Gene) (A) its Designated Gene Sequence shall be the Requested Gene Sequence provided with the related Sangamo Response Notice and (B) its Functional **[***]** shall be the one specified in the related Genentech Request Notice. Within **[***]** business days after Sangamo's receipt of such Request for Existing ZFN Reagents, Sangamo shall transfer to Genentech the Existing ZFN Reagents (inserted into an Expression Plasmid) and the Existing ZFN Reagents Know-How (other than any Excluded ZFN Reagents Know-How described in the related Sangamo Response Notice) for such Designated Gene. Notwithstanding the foregoing, Genentech acknowledges and agrees that delivery of given Existing ZFN Reagents may require more than **[***]** business days if such Existing ZFN Reagents must be subcloned into an Expression Plasmid or if other manipulations of such Existing ZFN Reagents are necessary prior to delivery to Genentech; provided, however, Sangamo agrees that in no event shall such delivery require more than **[***]** days. If requested by Genentech, Sangamo shall also provide sufficient training, at the FTE Rate, (at Sangamo's research site in Richmond, CA or at Genentech's research site in South San Francisco, CA, as requested by Genentech) to one or more Genentech researchers (at the same time) to facilitate the successful generation of a Modified Genentech CHO Cell Line by Genentech in which such Designated Gene is Functionally **[***]**. The Parties hereby agree that (A) the **[***]** gene is deemed to be a Requested Gene; (B) Sangamo is deemed to have received a Request for Existing ZFN Reagents for the **[***]** gene on the Effective Date (and, therefore, the **[***]** gene is automatically included as a Designated Gene as of the Effective Date); (C) its Designated Gene Sequence shall be the gene sequence specified in Exhibit B; and (D) its Functional **[***]** shall be the one specified in Exhibit B (the **[***]** gene, as defined in the foregoing, shall be referred to as the "**[***] Gene**").

(ii) **Approval of a Research Plan.** Upon the Approval of the Research Plan for a given Requested Gene, (A) such Requested Gene shall automatically be included as a Designated Gene; (B) its Designated Gene Sequence shall be the one specified in such Research Plan; and (C) its Functional **[***]** shall be the one specified in such Research Plan.

2.2 Liaisons. Each Party shall designate an individual to act as the primary contact for such Party for matters related to a given Requested Gene/Designated Gene (referred to in this Agreement as such Party's "**Liaison**" (for such Requested Gene/Designated Gene), unless another contact is expressly provided herein. The designation of a Liaison for a given Requested Gene shall be made by Genentech and Sangamo in the applicable Genentech Request Notice and Sangamo Response Notice, respectively. A particular individual may be (but need not be) the Liaison for more than one Requested Gene/Designated Gene. Each Party may change its Liaison for a given Requested Gene/Designated Gene at any time upon written notice (including by email) to the other Party's Liaison. Until the completion of the activities in the Research Plan (if any), the Liaisons shall schedule teleconferences or meetings at least every four (4) weeks or as otherwise agreed. In addition, upon Genentech's reasonable request, the Parties shall discuss (by telephone or as otherwise agreed) the results of activities under the Research Plan thus far obtained. Notwithstanding the addresses set forth in the notice provisions in Article 13, any notices sent under Section 2.4, Section 2.6 or the Research Plan shall be sent to the attention of the notice recipient's Liaison for the applicable Requested Gene/Designated Gene.

2.3 Diligence; Decision Making; Research Plan. Each Party shall perform its respective obligations under the Research Plan using Commercially Diligent Efforts. Sangamo's Liaison shall have final decision making authority with respect to **[***]**; Genentech's Liaison shall have final decision making authority with respect to **[***]** No change in the Research Plan or funding shall be permitted without the prior written agreement of the Parties. In the event of any conflict or inconsistency between the main body of the Agreement and the Research Plan, the terms and conditions of the main body shall prevail. Notwithstanding the foregoing, the Parties may, in a particular Research Plan, agree to modify the terms and conditions of the Agreement (solely with respect to such Research Plan) by setting forth such modifications in such Research Plan and expressly referencing the terms and conditions in the main body of the Agreement being modified.

2.4 [***] Evidence. If **[***]** Evidence is generated under the Research Plan for a given Designated Gene, Genentech shall review the **[***]** Evidence for such Designated Gene in accordance with the Research Plan, and the provisions of this Section 2.4 shall apply.

(a) Review and Notice. Within three (3) weeks after receipt of such [***] Evidence (for purposes of this Section 2.4, the **"Review Period")**, Genentech shall notify Sangamo as to whether or not Genentech Accepts such [***] Evidence. If Genentech does not notify Sangamo as to whether or not it Accepts such [***] Evidence by the end of such Review Period, Sangamo shall send a reminder notice to Genentech that a response is due, and the initial Review Period shall be automatically extended until the date that is one (1) week from the date Sangamo's reminder notice is received by Genentech. If Genentech does not notify Sangamo as to whether or not it Accepts such [***] Evidence by the end of such *extended* Review Period, Genentech shall be deemed to Accept such [***] Evidence.

(b) Rejection of [***] Evidence. If Genentech notifies Sangamo under Section 2.4(a) that Genentech does *not* Accept such [***] Evidence, Genentech's notice shall specifically identify the reason(s) for the rejection. If such rejection is because Sangamo did not provide *all* of the required [***] Evidence, and Sangamo does not dispute such rejection, Sangamo shall provide the missing [***] Evidence and the initial Review Period (and review procedures under Section 2.4(a)) shall begin again upon Genentech's receipt of such additional [***] Evidence. After Sangamo provides *all* of the required [***] Evidence (including if so deemed under Section 2.4(c)), if Genentech still rejects such [***] Evidence (i.e., such rejection is for another reason), Genentech shall, at its sole discretion, within sixty (60) days of such rejection, either (i) discuss with Sangamo changing the Research Plan (to continue the Research), in accordance with Section 2.3; or (ii) terminate the Research Plan under Section 8.3 or Section 8.4.

(c) Disputed Rejection of [***] Evidence. In the event that Sangamo disputes Genentech's rejection of given [***] Evidence (because Genentech claims Sangamo did not provide *all* of the required [***] Evidence), the Parties shall attempt to resolve such dispute through amicable discussions between the Parties' respective Liaisons. In the event that the Liaisons are unable to resolve such dispute within [***] weeks after Genentech's notice of rejection, [***]

2.5 Non-Exclusive Relationship.

(a) ZFN Reagents and ZFN Modified Cell Lines. Excluding Modified Genentech CHO Cell Lines, and subject to this Section 2.5 and other provisions of this Agreement, Sangamo retains the right to (i) make and use ZFN Reagents and ZFN Modified Cell Lines for itself and others; (ii) sell or otherwise transfer ZFN Reagents and ZFN Modified Cell Lines to Third Parties; and (iii) grant licenses to Third Parties with respect to ZFN Reagents and ZFN Modified Cell Lines.

(b) Limitations on Providing ZFN Reagents to Third Parties. The provisions of this Section 2.5(b) shall apply to any ZFN Reagents created under the Research Plan (i.e., ZFN Reagents *other than* Improved ZFN Reagents and Existing ZFN Reagents). Sangamo shall not market or otherwise approach any Third Party regarding the existence of such ZFN Reagents. In the event that Sangamo, without breaching the preceding obligation, does provide such ZFN Reagents to a Third Party, Sangamo shall not provide such ZFN Reagents for a given Designated Gene to such Third Party [***]. In the event that Genentech terminates the Genentech License under Section 8.3 with respect to a given Designated Gene, this Section 2.5(b) shall place no restriction on Sangamo's or Sigma's ability to provide ZFN Reagents (including ZFN Reagents created under the Research Plan) for such Designated Gene to Third Parties. Sangamo shall ensure that Sigma is contractually obligated to comply with the provisions of this Section 2.5(b) as if Sigma were Sangamo.

2.6 Improvements.

(a) Notices; Payments to Third Parties. During the Selection Period and the Research Period (if it continues after the Selection Period), Sangamo shall notify Genentech of any Improvements at least on a [***] basis; otherwise, such notice shall be at least on a [***] basis. Such notice for a given Improvement shall (i) identify the [***] and (ii) include, if applicable, the same notice that Sangamo would provide under Section 2.6(d). Thereafter, Genentech may request that Sangamo provide Improvements to Genentech by notifying Sangamo of the particular Improvement(s) being requested. [***] Nothing in this Section 2.6 shall be interpreted as obligating Sangamo to take any action that would constitute a breach of any agreement with any Third Party.

(b) Provision of Improvements. If Sangamo makes an Improvement to a ZFN Reagent for a Designated Gene, Sangamo shall provide the applicable Improved ZFN Reagent (inserted into an [***]) to Genentech. If Sangamo makes an Improvement that is not to a ZFN Reagent for a Designated Gene, [***] If Sangamo makes an Improvement to methodologies/protocols for using ZFN Reagents, Sangamo shall provide such methodologies/protocols to Genentech. Sangamo shall also provide to Genentech any and all Sangamo Know-How that is necessary to enable Genentech to use Improved ZFN Reagents to create ZFN Modified Cell Lines. Other than the [***] agreed to by Genentech under Section 2.6(a), any Improved ZFN Reagents, materials or Sangamo Know-How provided to Genentech under this Section 2.6(b) shall be [***] to Genentech and shall be provided promptly after Genentech's request for a particular Improvement under Section 2.6(a).

(c) Training. If requested by Genentech, for each Improvement, Sangamo shall provide to Genentech researcher(s) (at Sangamo's research site in Richmond, CA) up to [***] of training in the making and use of Improved ZFN Reagents at the FTE Rate.

(d) Notice of Third Party IP. Sangamo shall promptly notify Genentech if Sangamo learns of any Third Party intellectual property that, in Sangamo's reasonable opinion, could potentially be infringed by the making or use of an Improvement or an Improved ZFN Reagent provided to Genentech under Section 2.6(b).

(e) Improvements Made by Sigma. [***]

2.7 FTEs; Costs. Except as otherwise expressly provided herein, or agreed to by the Parties in writing, each Party shall be responsible for any and all costs it incurs in performing its obligations under the Research Plan, or otherwise under this Agreement, including, without limitation, the costs of work performed by contractors on behalf of a Party (e.g., a Third Party contractor performing activities on behalf of Sangamo under the Research Plan).

Article 3. Fees and Milestone Payments

3.1 Payments Generally. Each payment due under this Article 3 (including, without limitation, Milestone Payments) shall be paid to Sangamo within **[***]** days of receipt of an invoice from Sangamo to be sent to Genentech following the achievement of the event triggering

such payment. All invoices shall identify the event triggering the payment being invoiced and, unless otherwise requested by Genentech in writing, shall be sent to Genentech at the address in the preamble of this Agreement, to the attention of Group Controller, [***] All payments due under this Agreement shall be paid in U.S. dollars in immediately available funds by wire transfer to an account to be identified by the payee and shall be non-refundable and non-creditable against any other payment due Sangamo under this Agreement.

3.2 Up-Front Fees. Except as provided in Section 8.3 with respect to a Substituted Designated Gene, Genentech shall pay to Sangamo an up-front fee of **[***]** ("**Up-Front Fee**") **for** *each* Designated Gene [***]

3.3 Technology Access Fees. The provisions of this Section 3.3 shall apply for *each* Designated Gene included within the scope of the Genentech License. Beginning on the anniversary of the Effective Date that is at least **[***]** months after the inclusion of such Designated Gene under Section 2.1(e), and on each anniversary of the Effective Date thereafter, Genentech shall pay to Sangamo an annual technology access fee of **[***]** ("**Technology Access Fee**") for such Designated Gene; provided, however, the Technology Access Fee for such Designated Gene shall no longer be due after **[***]**. For clarity, Genentech shall not have any obligation to pay a Technology Access Fee for any Designated Gene for which the Genentech License was terminated under Section 8.3.

3.4 Research Milestone Payments.

(a) Completed Research Plans. For *each* Research Plan, if Genentech (i) Accepts the [***] Evidence for the Designated Gene(s) in such Research Plan (provided that this clause (i) only applies to the extent that Sangamo has an obligation to generate [***] Evidence under such Research Plan for a given Designated Gene) and (ii) receives all Sangamo Deliverables identified in such Research Plan, Genentech shall notify Sangamo (within [***] days of the achievement of all of such events) ("Notice of Completed Research Plan") and pay to Sangamo a Research Milestone Payment equal to [***]. Notwithstanding the payment provisions of Section 3.1, if the ZFN Reagents received by Genentech under such Research Plan are defective, such payment shall not be due until [***] days after Genentech's receipt of replacement ZFN Reagents that are not defective.

(b) Terminated Research Plans. In the event that Genentech terminates the Research Plan under Section 8.3 or Section 8.4, Genentech shall pay to Sangamo a Research Milestone Payment equal to [***].

(c) Budget Limitations. In no event shall Genentech be obligated to make any payment under this Section 3.4 for FTEs that exceed the budgeted number of FTEs in the Research Plan for a given Designated Gene.

(d) Documentation and Audits. Sangamo shall keep full, true and accurate books of account containing all particulars that may be necessary for the purpose of tracking the actual number of FTEs that performed activities funded by Genentech under this Agreement (including, without limitation, the employee names and number of hours worked and which Designated Gene is the subject of particular activities), and such books of account shall be made available to Genentech, upon request.

3.5 Success Milestone Payment.

(a) Genentech's Obligations if Request for Existing ZFN Reagents or Terminated Research Plan. The provisions of this Section 3.5(a) shall apply in each of the following events: (i) Sangamo receives a Request for Existing ZFN Reagents for a given Designated Gene under Section 2.1(c)(i); or (ii) Genentech terminates the Research Plan for a given Designated Gene under Section 8.4 and, under the provisions of Section 8.4, the provisions of this Section 3.5(a) apply. After Sangamo transfers to Genentech (under Section 2.1(e)(i) or Section 8.4, as applicable) the ZFN Reagents and Sangamo Know-How, and provides any requested training described in Section 2.1(e)(i), using Commercially Diligent Efforts, Genentech shall [***]. Genentech shall notify Sangamo within [***] days of successfully achieving the foregoing results (**"Success Notice 1"**).

(b) Genentech's Obligations if Completed Research Plan. After Genentech sends a Notice of Completed Research Plan for a given Designated Gene under Section 3.4(a), using Commercially Diligent Efforts, Genentech shall attempt to either [***]. Genentech shall notify Sangamo within [***] days of successfully achieving the applicable foregoing results (**"Success Notice 2"**).

(c) Payments. For *each* Designated Gene, Genentech shall pay to Sangamo a success milestone payment of [***] **("Success Milestone Payment")** in either (but not both) of the following events: (i) Sangamo receives a Success Notice 1 for such Designated Gene; or (ii) Sangamo receives a Success Notice 2 for such Designated Gene. If Genentech, despite using Commercially Diligent Efforts, is not successful in achieving the results required for a Success Notice 1 or Success Notice 2 for a given Designated Gene, no Success Milestone Payment shall be due for such Designated Gene.

3.6 Development and Commercial Milestone Payments.

(a) Payments Generally. Upon the *first* achievement of each Milestone Event with respect to a *given* Licensed Product by or on behalf of Genentech (or a Collaboration Partner), Genentech shall notify Sangamo (within [***] days of when Genentech becomes aware of the achievement of such event) and pay (or cause to be paid) to Sangamo the corresponding Milestone Payment, subject to the other provisions of this Section 3.6. For purposes of this Agreement, a *given* Licensed Product shall be treated as different from another Licensed Product if the marketing of each of such Licensed Products in the United States would require separate BLA submissions. Notwithstanding the foregoing, if Genentech pays [***]

(b) Milestone Events and Milestone Payments.

Milestone Event	Milestone Payment
(#1) [***]	**[***]**
(#2) [***]	**[***]**
(#3) [***]	**[***]**
(#4) [***]	**[***]**
(#5) [***]	**[***]**
(#6) [***]	**[***]**

In the event **[***]** proteins contained in a given Licensed Product were expressed by a Modified Cell Line that contains **[***]** targeted **[***]** in the genomic DNA of **[***]** Designated Gene, the Milestone Payments due for such Licensed Product shall be **[***]** of the amounts set forth in the above table.

(c) Term of Milestone Payment Obligation. Genentech's obligation to make Milestone Payments for a given Licensed Product under this Section 3.6 shall be in accordance with the following:

(i) **[***]** or

(ii) [***]

(d) Retroactive Payments. [***]

(e) Single Milestone Payment Under this Agreement. In no event shall a particular Milestone Payment under this Agreement be due to Sangamo more than once with respect to a given Licensed Product, even if such Licensed Product contains more than one (1) protein expressed by a Modified Cell Line or is Covered by more than one Valid Claim.

(f) Multiple Milestone Payments Under this Agreement and First Agreement. In the event that a given Licensed Product under this Agreement [***]

3.7 Taxes. Each Party shall comply with applicable laws and regulations regarding filing and reporting for income tax purposes. Neither Party shall treat their relationship under this Agreement as a pass through entity for tax purposes. All payments made under this Agreement shall be free and clear of any and all taxes, duties, levies, fees or other charges, except for withholding taxes. Each Party shall be entitled to deduct from its payments to the other Party under this Agreement the amount of any withholding taxes required to be withheld, to the extent paid to the appropriate governmental authority on behalf of the other Party (and not refunded or reimbursed). Each Party shall deliver to the other Party, upon request, proof of payment of all such withholding taxes. Each Party shall provide reasonable assistance to the other Party in seeking any benefits available to such Party with respect to government tax withholdings by any relevant law, regulation or double tax treaty.

3.8 Third Party Beneficiary. Sangamo and Genentech agree that Sigma is an express third party beneficiary of (with the right to enforce) the provisions of Sections 3.2, 3.3, 3.4 and 3.5.

Article 4. Intellectual Property

4.1 Disclosure of Inventions. "Invention" means any invention or discovery (including any Know-How), whether or not patentable, that is discovered, conceived or reduced to practice in the course of performing activities under the Research Plan. Sangamo shall promptly disclose to Genentech Inventions that are discovered, conceived or reduced to practice by or on behalf of Sangamo (whether solely or jointly with another party).

4.2 Ownership of Inventions; Cooperation. Except as otherwise expressly provided in this Agreement, ownership of Inventions will follow inventorship, as determined by the respective patent counsel of the Parties in accordance with United States patent law. Each Party shall reasonably cooperate with and assist the other Party, at such other Party's request, in connection with the filing and prosecution of patent applications for Inventions owned by such other Party including, without limitation, by making scientists and scientific records reasonably available to such other Party. The Parties agree to reasonably cooperate with each other to effectuate the ownership of patent applications and patents as set forth in this Agreement including, but not limited to, by executing and recording documents.

4.3 Obtaining Patents for Certain Subject Matter.

(a) Discussion; Certain Subject Matter by Sangamo. No later than [***] months after (i) Sangamo receives a Request for Existing ZFN Reagents, (ii) Genentech Accepts the [***] Evidence or (iii) Genentech receives ZFN Reagents under Section 8.4, as applicable, Sangamo and Genentech shall discuss [***] to obtain patent protection covering (A) the ZFN Reagents (other than Improved ZFN Reagents); (B) the use of such ZFN Reagents in CHO cell lines to create ZFN Modified Cell Lines; and (C) ZFN Modified Cell Lines, in each case, with respect to each Designated Gene, as applicable (for purposes of this Section 4.3 the foregoing subject matter, collectively, the **"Subject Matter"**). If Sangamo decides to attempt [***] Notwithstanding the foregoing, Genentech shall [***]

(b) Certain Subject Matter by Genentech. If Sangamo decides *not* to attempt to obtain patent protection covering the Subject Matter, the provisions of this Section 4.3(b) shall apply (except as otherwise provided in Section 4.4(a)). Except to the extent the Subject Matter pertains to Existing ZFN Reagents, Genentech may, at its sole discretion and expense, file and prosecute patent applications covering such Subject Matter, using outside counsel agreed to by the Parties and managed by Genentech. In the event Genentech decides to do so, Genentech shall (i) instruct such outside counsel to provide to Sangamo copies of (A) documents intended for submission to a patent office, in sufficient time for Sangamo to review and comment thereon and (B) documents filed with or received from a patent office, in a timely manner; and (ii) consult with Sangamo regarding such patent application(s) and consider any comments from Sangamo, taking into account Sangamo's business and intellectual property objectives regarding ZFNs. Genentech shall have final decision making authority with respect to

matters under this Section 4.3(b) including, without limitation, prosecution strategy and the possibility of filing patent application(s) for publication and then abandoning such patent application(s). Notwithstanding anything to the contrary (including, without limitation, Section 4.2), the Parties shall jointly own any patent applications filed pursuant to this Section 4.3(b) and any patents issued therefrom (collectively, **"Joint Patents"**).

4.4 Genentech Owned Inventions. Notwithstanding anything to the contrary (including, without limitation, Section 4.2 or Section 4.3), the provisions of this Section 4.4 shall apply.

(a) Specific Claims. Genentech may, at its sole discretion and expense, file and prosecute a patent application that specifically claims [***]. In the event Genentech decides to do so, Genentech shall consult with Sangamo regarding such patent application and consider any comments from Sangamo, taking into account Sangamo's business and intellectual property objectives regarding ZFNs. Notwithstanding anything to the contrary (including, without limitation, Section 4.2), Genentech shall solely own any patent applications filed pursuant to this Section 4.4(a) and any patents issued therefrom.

(b) Genentech CHO Cell Line. If Sangamo files any patent application that claims an invention that is specifically related to the Genentech CHO Cell Line provided to Sangamo in the Genentech Deliverables or the Genentech CHO DNA Extract provided to Sangamo in the Genentech Deliverables (including sequence information derived therefrom), and such invention is not generally applicable to CHO cells or CHO DNA, Sangamo shall (i) cancel any claims to such invention in such patent application; (ii) file such claims in a subsequent divisional or continuation application; (iii) assign such subsequent application to Genentech; and (iv) transfer control of prosecution of such subsequent application to Genentech. If the Parties disagree, Genentech shall bear the burden of demonstrating that such invention is specifically related to the Genentech CHO Cell Line provided to Sangamo in the Genentech Deliverables or the Genentech CHO DNA Extract provided to Sangamo in the Genentech Deliverables and is not generally applicable to CHO cells or CHO DNA.

(c) Genentech Improvements. Genentech may, at its sole discretion and expense, file and prosecute patent applications covering inventions that are either (i) improvements to Modified Cell Lines (other than Improvements) that are (as between the Parties) solely invented by Genentech or (ii) Modified Cell Lines incorporating such improvements. Provided that such inventions are the only inventions covered thereby, Genentech shall solely own any patent applications filed pursuant to this Section 4.4(c) and any patents issued therefrom. Genentech's rights to such improvements and to Modified Cell Lines incorporating such improvements shall be subject to any underlying rights Sangamo may have in Modified Cell Lines that do not incorporate such improvements.

4.5 Enforcement of Sangamo Patents. If either Party learns of any alleged infringement of any Sangamo Patents by a Third Party's making of Licensed Products for commercial purposes, that Party shall promptly notify the other Party of such alleged infringement. Except as otherwise expressly provided in the Agreement, Sangamo shall retain the sole right, at its sole discretion, to enforce the Sangamo Patents against such alleged Third

Party infringers. However, if Sangamo fails to abate any such alleged infringement of the Sangamo Patents involving modification of the genomic DNA of any of the Designated Genes in a manufacturing cell line within **[***]** after receipt of notice (by either Party) under this Section 4.5, Genentech shall be entitled to reduce the Milestone Payments by **[***]** of the payments that would otherwise be due until such time as Sangamo abates such infringement or until a final determination regarding such alleged infringement has been reached (*i.e.*, a final non-appealable court action or settlement).

4.6 Enforcement of Joint Patents. If either Party learns of any alleged infringement of any Joint Patents by a Third Party, such Party shall promptly notify the other Party of such alleged infringement. Genentech shall have the first right, but not the obligation, to enforce the Joint Patents against such alleged Third Party infringers, in its own name and, unless otherwise agreed in writing by the Parties, at its sole expense. In the event that Genentech does not either bring suit against such alleged Third Party infringer(s) or abate any such alleged infringement of the Joint Patents within **[***]** days after receipt of notice (by either Party) under this Section 4.6, Sangamo shall have the right, but not the obligation, to enforce the Joint Patents against such alleged Third Party infringers, in its own name and, unless otherwise agreed in writing by the Parties, at its sole expense. For any action or proceeding brought by a Party under this Section 4.6 (for purposes of this Section 4.6, the "**Initiating Party**"), regardless of which Party brings such action or proceeding, the other Party (for purposes of this Section 4.6, the "**Non-Initiating Party**") hereby agrees to cooperate reasonably in any such effort, all at the Initiating Party's expense, and the Parties shall reasonably cooperate to address new facts or circumstances that come to light during the course of any such action or proceeding that may affect the need for one Party or the other to participate in such action. The Non-Initiating Party agrees to be joined as a party plaintiff, at the Initiating Party's expense, in any such action if needed for the Initiating Party to bring or continue an infringement action hereunder. The Non-Initiating Party shall, at its own expense and with its own counsel, have the right to advise and provide comments with respect to any action brought by the Initiating Party under this Section 4.6. Neither Party may settle any action or proceeding brought under this Section 4.6 in a manner that, or take any other action in the course thereof that, to the knowledge of the Party taking the action, materially adversely affects the other Party's interest in the Joint Patents, without first discussing the matter with such other Party; provided, however, in no event shall the Party taking the action admit to the invalidity or unenforceability of any Joint Patent or agree to a settlement that results in the invalidity, cancellation, revocation or unenforceability of any Joint Patent, without the written consent of such other Party, such consent not to be unreasonably withheld. Except as otherwise agreed to by the Parties as part of a cost-sharing arrangement, any recovery realized as a result of any litigation under this Section 4.6, after reimbursement of any litigation expenses incurred by the Parties, shall be retained by the Initiating Party.

Article 5. Licenses

5.1 License to Genentech.

(a) Genentech License. Sangamo hereby grants to Genentech a non-exclusive, worldwide, sublicensable (in accordance with Section 5.1(b)) license, under the Sangamo IP Rights, (i) to make, use and import ZFN Reagents (and any associated expression plasmids provided by Sangamo to Genentech under this Agreement) solely for the purpose of altering the genomic DNA of any of the Designated Genes in a cell line to create ZFN Modified Cell Lines; (ii) to alter the genomic DNA of any of the Designated Genes in a cell line to create Modified Cell Lines; and (iii) to make, use and import Modified Cell Lines created under clauses (i) and (ii) solely for the purpose of making Licensed Products. The foregoing license is referred to in this Agreement as the "Genentech License." Notwithstanding anything to the contrary in this Agreement, the Genentech License does not include a license to alter any genomic DNA other than the genomic DNA of a Designated Gene. The Genentech License is subject to the provisions of Section 5.4(a).

(b) Right to Grant Sublicenses. Subject to Section 5.1(d), Genentech has the right to grant sublicenses under the Genentech License to a Third Party(ies) if (i) such sublicense is related to particular Licensed Product(s) that were the subject of Genentech's research and/or development or were in-licensed by Genentech (and not related to Licensed Products in general); and (ii) Genentech has previously granted or concurrently grants (*i.e.*, together with the grant of such sublicense) to such Third Party a license, under intellectual property rights *other than* the Genentech License, related to such particular Licensed Product(s) or to product(s) that contain the same protein(s) as such particular Licensed Product(s). Subject to Section 5.1(d), any such sublicense may be further sublicensed by a sublicensee to multiple tiers of sublicensees, subject to the same requirement regarding a previously or concurrently granted license by such sublicensee. In addition, Genentech has the right to grant sublicenses under the Genentech License to a Third Party(ies) if Genentech receives the prior written consent of Sangamo, which shall not be unreasonably withheld. For purposes of clause (ii) in the first sentence of this Section 5.1(b), the assignment of given intellectual property rights to a Third Party shall be deemed to be the grant of a license under such intellectual property rights.

(c) Requirements for Sublicense Agreements. Each agreement granting a sublicense under the Genentech License (each such agreement, a "Sublicense Agreement") shall require that the relevant sublicensee agrees in writing that the sublicense granted in such Sublicense Agreement is subject to those terms and conditions of the Third Party Licenses that are set forth in Exhibit E *mutatis mutandis* (*e.g.*, as if applicable references to Genentech, "this Agreement" and the "Genentech License" were, respectively, references to such sublicensee, such Sublicense Agreement and such sublicense) with respect to each Third Party License sublicensed thereunder. Genentech shall provide to Sangamo copies of any Sublicense Agreements (which shall be deemed to be the Confidential Information of Genentech, whether or not so marked) promptly after execution thereof; provided, however, Genentech may redact such copies to delete any provisions that are not relevant to this Agreement or a Third Party License. Sangamo may disclose such copies of Sublicense Agreements (or summaries of their terms) to the applicable Third Party licensor, in accordance with Section 6.4.

(d) Caltech and Scripps IP. Sangamo hereby notifies Genentech that, pursuant to Section 2.3 of the Caltech Agreement and Section 2.7 of the Scripps Agreement, Genentech does not have the right to grant sublicenses under the intellectual property licensed to Sangamo pursuant to the Caltech Agreement and the Scripps Agreement, respectively. Upon Genentech's written request, Sangamo shall promptly grant (not subject to any additional terms

and conditions including, without limitation, any additional payments or other consideration) a non-exclusive license, under the intellectual property licensed to Sangamo pursuant the Caltech Agreement and/or the Scripps Agreement, to any Third Party to which Genentech is permitted under Section 5.1(b) of this Agreement to grant a sublicense. The scope of such license shall satisfy the requirement set forth in Section 5.1(b)(i) and shall in no event be greater than the scope of the Genentech License. Further, any such license granted by Sangamo to a given Third Party shall be effective as of the effective date of the sublicense under the Genentech License granted by Genentech to such Third Party in the applicable Sublicense Agreement and shall continue during the term of such sublicense.

(e) Exercise of License Rights by a Third Party. Third Parties may exercise the "make" and/or "use" license rights granted to Genentech (or a sublicensee) under the Genentech License on Genentech's (or such sublicensee's) behalf without the grant of a sublicense of such rights.

(f) Materials. Genentech shall not modify the ZFN Reagents in any way or create any derivatives or sequence variants thereof (other than for the purpose of creating Improved ZFN Reagents); provided, however, Genentech may transfer the ZFNs from ZFN Reagents into different expression plasmids. As between Genentech and Sangamo, Genentech shall own any ZFN Reagents and ZFN Modified Cell Lines made by Genentech, a sublicensee under the Genentech License or a Third Party on behalf of Genentech or such sublicensee; provided, however, such ownership is with respect to the tangible materials and does not imply ownership of intellectual property pertaining to or embodied in such tangible materials, which shall be in accordance with the other provisions of this Agreement.

(g) Fully Paid. Upon the expiration of Genentech's obligation to make Milestone Payments for a given Licensed Product, the Genentech License (including any sublicenses granted thereunder) with respect to such Licensed Product shall be fully-paid and irrevocable.

(h) No Non-Permitted Use. Genentech hereby covenants that it shall not willfully, nor shall it expressly cause or permit any Third Party, to make, use, import, modify or reverse engineer ZFN Reagents and any associated expression plasmids for any purpose other than creating ZFN Modified Cell Lines.

5.2 License to Sangamo. Genentech hereby grants to Sangamo a non-exclusive, non-sublicensable license, under intellectual property rights Controlled by Genentech, solely for the purpose of performing Sangamo's activities under the Research Plan.

5.3 No Implied Licenses. Except to the limited extent necessary for a Party to perform its obligations under this Agreement, or as otherwise expressly provided herein, this Agreement does not grant any right or license under any intellectual property rights of a Party, or otherwise, and no other right or license is to be inferred from any provision of this Agreement or by the conduct of the Parties.

5.4 Third Party Licenses.

(a) Performance Under Third Party Licenses. The Genentech License includes sublicenses under Sangamo IP Rights licensed (as of the Effective Date or thereafter) to

Sangamo pursuant to agreements with Third Parties (each such agreement, a **"Third Party License"**). As a result, this Agreement and the Genentech License are subject to those terms and conditions of the Third Party Licenses that are set forth in Exhibit E. Except to the extent set forth in Exhibit E, Sangamo shall be responsible for performing all obligations under the Third Party Licenses including, without limitation, any payment obligations, even if such payment arises as a result of Genentech's (or its sublicensees') activities under this Agreement.

(b) Maintenance. With respect to each Third Party License, Sangamo shall not (i) commit any acts or omissions that reasonably could cause a breach of such Third Party License; (ii) amend or terminate such Third Party License; or (iii) exercise or waive any rights it may have under such Third Party License, in each of the foregoing cases, in any way that reasonably could adversely affect the Genentech License (including any sublicenses granted thereunder) or impose additional obligations on Genentech. In the event that Sangamo receives a notice of a breach of a Third Party License that reasonably could adversely affect the Genentech License, Genentech shall reasonably cooperate with Sangamo to cure such breach.

(c) Notices. With respect to each Third Party License, Sangamo shall notify Genentech within ten (10) business days after Sangamo first obtains knowledge or any information regarding any events or circumstances relating to such Third Party License that reasonably could adversely affect the Genentech License including, without limitation, (i) any notice of breach or termination, or any threat of breach or termination, of such Third Party License; and (ii) any communication regarding the scope of the rights granted in such Third Party License.

Article 6. Confidential Information

6.1 Obligations. Each Party agrees (a) to use the other Party's Confidential Information solely for the purposes of, and in accordance with, this Agreement; and (b) except as otherwise expressly permitted in this Agreement (including as specified in a Research Plan (as provided under Section 14.2(d)) for the performance of Delegated Obligations by a Third Party), to not disclose the other Party's Confidential Information to any Third Party without the other Party's prior written consent. Sangamo hereby consents that Sangamo's Confidential Information may be disclosed to Third Parties to which a sublicense (under the Genentech License) is granted under Section 5.1(b) or Third Parties that may exercise license rights (under the Genentech License) under Section 5.1(e). Genentech hereby consents that Genentech's Confidential Information that is necessary for Sigma to comply with provisions of this Agreement (as if Sigma were Sangamo) and/or to comply with the Sigma Agreement (for the benefit of Genentech) may be disclosed to Sigma solely for the benefit of Genentech (such necessary Confidential Information including, without limitation, the identity of the Designated Genes). For clarity, the foregoing consent does not permit Sangamo to disclose to Sigma any of Genentech's Confidential Information that relates specifically to the development or commercialization of Licensed Products including, without limitation, the provisions of Section 3.6. Each Party agrees that any consent by the other Party to the disclosure of such other Party's Confidential Information to a Third Party (including consent under Section 14.2(d)) is given provided that such Third Party has a need to know such Confidential Information and is subject to obligations of confidentiality and limitations on use to substantially the same extent as required by the provisions of this Article 6.

6.2 General Exceptions. The obligations under Section 6.1 do not pertain to any Confidential Information that a Party establishes by documentary evidence (a) was already known to such Party, other than under an obligation of confidentiality, at the time of disclosure by the other Party; (b) was generally available to the public or otherwise part of the public domain at the time of its disclosure to such Party; (c) became generally available to the public or otherwise part of the public domain after its disclosure and other than through any act or omission of such Party in breach of this Agreement; (d) was disclosed to such Party, other than under an obligation of confidentiality, by a Third Party who had no obligation to the other Party not to disclose such information to others; or (e) was independently developed by or on behalf of such Party without use of the other Party's Confidential Information.

6.3 Disclosures Required by Law. Notwithstanding any other provision of this Agreement, a Party may disclose Confidential Information of the other Party if such disclosure is required by law, rule or regulation (including, without limitation, to comply with any court order or governmental regulation, including the duty to disclose Confidential Information material to patentability under 37 CFR §1.56), provided that the Party making such disclosure shall give reasonable advance written notice to the other Party of such requirement and, at such other Party's request, shall cooperate with such other Party's efforts to limit such disclosure or to secure confidential treatment of such Confidential Information through protective orders or otherwise.

6.4 Disclosures to Third Party Licensors. Notwithstanding any other provision of this Agreement, Sangamo may disclose this Agreement or a Sublicense Agreement (or a summary of their terms) to a Third Party licensor with respect to a given Third Party License, provided that (a) such disclosure is limited to the extent required by such Third Party License (*e.g.*, financial provisions are redacted to the extent possible); (b) the identity of the Requested Genes and Designated Genes, the Research Plan and information about the intellectual property licensed under this Agreement or a Sublicense Agreement (other than the intellectual property licensed under such Third Party License) are not disclosed; and (c) such Third Party licensor is subject to obligations of confidentiality and limitations on use to substantially the same extent as required by the provisions of this Article 6. Prior to making any disclosure under this Section 6.4, Sangamo shall notify Genentech of its intent to make such disclosure and provide to Genentech a copy of any summary of terms provided to such Third Party licensor.

6.5 Disclosures Prior to the Effective Date. Prior to the Effective Date, the Parties discussed amending the First Agreement to include the subject matter hereof (rather than entering into a second agreement). The Parties agree that as of the Effective Date, any nonpublic information that the Parties disclosed to each other during the course of such discussions (including, without limitation, the Existing **[***]** Evidence for the **[***]** Gene disclosed by Sangamo to Genentech) shall be Confidential Information under and governed by this Agreement (and shall no longer be Confidential Information under and governed by the First Agreement). Further, prior to the Effective Date, with Genentech's consent, Sangamo provided copies of this Agreement to Sigma (including drafts and the final version); Sangamo hereby

confirms that with respect to all such copies of this Agreement provided to Sigma, Sigma was (at the time such copies were provided) and remains subject to obligations of confidentiality and limitations on use to substantially the same extent as required by the provisions of this Article 6.

6.6 Continuing Obligation. The provisions of this Article 6 shall continue for a period of fifteen (15) years after termination or expiration of this Agreement.

Article 7. Genentech Materials and Related Information

7.1 Ownership. Genentech shall own the Genentech Materials and all tangible materials included in the Sangamo Deliverables. The ownership of any tangible materials (including, without limitation, ZFN Modified Cell Lines derived from the Genentech CHO Cell Line) is with respect to such tangible materials and does not imply ownership of intellectual property pertaining to or embodied in such tangible materials, which shall be in accordance with the other provisions of this Agreement.

7.2 Use. Sangamo agrees that it shall use the Genentech Materials solely for the purpose of performing activities under the Research Plan and it shall not transfer any Genentech Materials to any Third Party, except as specified in a Research Plan (as provided under Section 14.2(d)) for the performance of Delegated Obligations by a Third Party, without Genentech's prior written consent. Genentech hereby consents that Sangamo may transfer the Genentech CHO DNA Extract to a Third Party solely to enable such Third Party to perform **[***]** on Sangamo's behalf, for the benefit of Genentech. Sangamo agrees that any Third Party for which Genentech consents to the transfer of Genentech Materials (including consent under Section 14.2(d)) shall be contractually bound in writing (a) to limitations on the use of such Genentech Materials at least as restrictive as those set forth in this Section 7.2; (b) to not further transfer such Genentech Materials; and (c) to confidentiality and limitation on use obligations at least as restrictive as those set forth in Article 6 with respect to any information generated or otherwise acquired by such Third Party as a result of its possession or use of such Genentech Materials (and any such information shall be included in the Research Results). Sangamo shall be jointly and severally liable for any misuse by a Third Party of Genentech Materials received from Sangamo.

7.3 Return or Destruction. Within thirty (30) days of a request from Genentech (which request(s) may be made at any time), Sangamo shall return or destroy, as instructed by Genentech, all (as specified in such request) (a) Genentech Materials remaining in Sangamo's possession or the possession of any Third Party that received such Genentech Materials from Sangamo hereunder; and (b) Know-How and other information provided to Sangamo in the Genentech Deliverables and any other information related to the Genentech Materials provided by Genentech to Sangamo; provided, however, Sangamo shall not return or destroy any such Genentech Materials, Know-How or other information that the Parties agree are necessary for ongoing activities under the Research Plan until such activities are completed. After such return or destruction, Sangamo shall provide written certification to Genentech that all such remaining Genentech Materials and all such information have been returned or destroyed (as applicable).

Article 8. Term and Termination

8.1 Term. This Agreement shall be effective as of the Effective Date. Unless sooner terminated as provided in this Article 8, this Agreement shall remain in effect until Sangamo is no longer entitled (in fact or potentially) to receive Milestone Payments from Genentech pursuant to Section 3.6.

8.2 Termination of the Agreement by Either Party for Cause. Either Party may terminate this Agreement for a material breach by the other Party of the provisions hereof. Any such termination shall be effective sixty (60) days after written notice to such other Party specifying such breach if the specified breach is not cured before the effective date of termination. Sangamo agrees that any breach of this Agreement that materially adversely affects the Genentech License (including, without limitation, a material breach of Section 5.4(b)) is a material breach of this Agreement.

8.3 Termination of the Genentech License/Research Plan for a Designated Gene. Genentech may terminate the Genentech License with respect to a given Designated Gene for its own convenience (at any time), by providing written notice to Sangamo that specifically references this Section 8.3. Such termination shall be effective upon Sangamo's receipt of such notice, and the provisions of this Section 8.3 shall apply. If such Designated Gene is the subject of the Research Plan and Genentech has not yet sent a Notice of Completed Research Plan for such Designated Gene, the Research Plan shall automatically be terminated with respect to such Designated Gene, and Genentech shall pay a Research Milestone Payment under Section 3.4(b). Such Designated Gene shall automatically be excluded from the scope of the Genentech License, and Genentech shall have the right to substitute another gene (as a Designated Gene) for such terminated Designated Gene at any time during the Selection Period, in accordance with Section 2.1(b) ("**Substituted Designated Gene**"). Notwithstanding anything to the contrary, Genentech shall not have any obligation to pay an Up-Front Fee for a Designated Gene that is a Substituted Designated Gene. Upon termination of the Genentech License with respect to a given Designated Gene under this Section 8.3, except to the extent the following activities are within the scope of Genentech's rights, including licenses in effect following such termination (including, without limitation, under Section 8.5(a)), Genentech shall [***]

8.4 Termination of Only the Research Plan for a Designated Gene. Genentech may terminate the Research Plan with respect to a given Designated Gene for its own convenience (at any time prior to sending a Notice of Completed Research Plan for such Designated Gene), by providing written notice to Sangamo that specifically references this Section 8.4. Such termination shall be effective upon Sangamo's receipt of such termination notice, and the provisions of this Section 8.4 shall apply. The Research Plan shall automatically be terminated with respect to such Designated Gene, and Genentech shall pay a Research Milestone Payment under Section 3.4(b). Such Designated Gene shall continue to be included in the scope of the Genentech License (subject to Genentech's termination rights under Section 8.3). If (and only if) Sangamo previously generated the ZFN Reagents for such Designated Gene prior to receiving such termination notice (either under the Research Plan or if there are Existing ZFN Reagents), (a) within **[***]** business days after Sangamo's receipt of such termination

notice, Sangamo shall transfer to Genentech (i) such previously generated ZFN Reagents (inserted into an Expression Plasmid), (ii) any other previously generated Sangamo Deliverables identified in the Research Plan (if any) (including, without limitation, any Modified Genentech CHO Cell Lines) and (iii) all Sangamo Know-How, in all cases, for such Designated Gene; (b) if requested by Genentech, Sangamo shall provide sufficient training, as described in Section 2.1(e)(i); and (c) the provisions of Section 3.5(a) shall apply.

8.5 Licenses.

(a) Research Results License. Sangamo agrees to grant and hereby grants Genentech a non-exclusive, worldwide, sublicensable, fully-paid, perpetual, irrevocable license, under Research Results Patents, to make, use, sell, offer for sale and import Other Modified Cell Lines solely for the purpose of making, using, offering for sale, selling and importing Licensed Products; provided, however, the foregoing license shall only be effective (i) upon the expiration or termination of this Agreement for any reason, with respect to all Designated Genes within the scope of the Genentech License at the time of such expiration or termination and (ii) upon the termination of the Genentech License with respect to a given Designated Gene under Section 8.3, with respect to such Designated Gene. For purposes of this Section 8.5(a), a patent shall be considered a **"Research Results Patent"** only if Sangamo reproduced any of the Research Results in the specification of a patent application for such patent or if Sangamo submitted any of the Research Results to the applicable patent authority in connection with the filing or prosecution of patent applications for such patent.

(b) Retention of Rights. In the event Sangamo seeks or is involuntarily placed under the protection of the **"Bankruptcy Code"** (*i.e.*, Title 11, U.S. Code), and the trustee in bankruptcy, or Sangamo as a debtor-in-possession, rejects this Agreement, Genentech hereby elects, pursuant to Section 365(n) of the Bankruptcy Code, to retain all licenses of rights to "intellectual property" (as defined under the Bankruptcy Code) granted to it under this Agreement to the extent permitted by law.

(c) Survival of Sublicenses. Upon the termination of this Agreement by either Party under Section 8.2, a given existing sublicense granted to a sublicensee under the Genentech License, if any, shall continue, provided that such sublicensee is in good standing at the time of such termination and such sublicensee agrees in writing to pay directly to Sangamo (i) in the case of a Collaboration Partner, all Milestone Payments due from such Collaboration Partner related to such sublicense; and (ii) in all cases, any annual Technology Access Fees due under Section 3.3 with respect to those Designated Genes within the scope of such sublicense, if such fees have not previously been paid by Genentech or another sublicensee.

(d) Fully-Paid Genentech License. In the event that Genentech terminates this Agreement under Section 8.2 due to a Materially Adverse Breach (as defined in the next sentence), the Genentech License (including any sublicenses granted thereunder) with respect to all Licensed Products shall be fully-paid and irrevocable. For purposes of this Section 8.5(d), a **"Materially Adverse Breach"** means (i) a material breach by Sangamo of Sections [***]; or (ii) a breach of Sangamo's representations and warranties under Section [***] in each case of (i) or (ii), that results or is reasonably likely to result in a material adverse effect upon the Genentech

License (unless Genentech is fully compensated for such material adverse effect by Sangamo, under Section 9.1(c) or otherwise). In the event that Genentech is awarded economic damages pursuant to an action against Sangamo for a material breach of this Agreement that is a Materially Adverse Breach, Genentech shall be required to either (A) accept such damage award, in which event the milestones due under in this Agreement shall be reinstated, the Genentech License shall cease to be fully-paid and irrevocable, and Genentech shall pay Sangamo any past due milestones or (B) forgo such damage award, in which event the Genentech License shall continue to be fully-paid and irrevocable. Genentech shall choose between the remedies described in clauses (A) and (B) of the preceding sentence, and provide Sangamo with written notice of such choice along with any payments that may be due under clause (A), no later than one hundred and eighty (180) days after such damages are awarded.

8.6 Effects of Termination.

(a) Generally. Except as otherwise expressly provided herein, termination of this Agreement shall not affect the rights and obligations of the Parties that accrued prior to the effective date of such termination.

(b) ZFN Reagents and Licensed Products. Upon termination of this Agreement by Sangamo under Section 8.2, except to the extent the following activities are within the scope of Genentech's rights, including licenses in effect following such termination (including, without limitation, under Sections 5.1(g), 8.5(a) and/or 8.5(c)), Genentech shall [***]

(c) Inventory at Termination. Upon termination of this Agreement by either Party for any reason (or if Genentech terminates the Genentech License with respect to a given Designated Gene under Section 8.3), notwithstanding the provisions of Section 8.6(b) (or Section 8.3) to the contrary, Genentech and its Affiliates, licensees, and sublicensees shall have the right to sell or otherwise dispose of Licensed Products then in stock, subject to Milestone Payments and any other applicable provisions of this Agreement, and Sangamo covenants that Genentech and its Affiliates, licensees, and sublicensees shall not be sued for infringement of the Sangamo IP Rights, or otherwise, with respect to activities conducted pursuant to this Section 8.6(c).

8.7 Survival. The provisions of Sections 4.2, 4.3(b), 4.4 and 4.6; Article 6; Article 7; Sections 8.3, 8.5, 8.6 and 8.7; Article 9; Article 10 (except for Section 10.4); Article 11; Section 12.2; Article 13 and Article 14 (as applicable) shall survive any termination or expiration of this Agreement.

Article 9. Indemnification; Limitation on Liability

9.1 Indemnification.

(a) Claims Defined. For purposes of this Section 9.1, the term "Claims" means any and all liabilities, obligations, penalties, claims, judgments, demands, actions, disbursements of any kind and nature, suits, losses, damages, costs and expenses (including, without limitation, reasonable attorney's fees).

(b) Indemnification by Genentech. Genentech shall indemnify, defend and hold harmless Sangamo and its directors, officers and employees, and the Select Sangamo Licensors, from and against any Third Party Claims (i) arising from any injury or damage arising out of or in connection with the negligence or willful misconduct of Genentech or its consultants, subcontractors or agents related to the performance of this Agreement or the breach by Genentech of its obligations under this Agreement, except to the extent that such Claims arise from the negligence or willful misconduct of the foregoing indemnified parties or the breach by Sangamo of its obligations under this Agreement; (ii) [***]; (iii) arising from the manufacture, use, handling, storage, importation, exportation, or other transportation of Modified Cell Line(s) by Genentech or its sublicensees, subcontractors or agents, except to the extent that such Claims arise from Sangamo's breach of its representations and warranties under Article 12; (iv) arising from the manufacture, use, handling, storage, importation, exportation, offer for sale, sale, or other disposition of Licensed Product(s) by Genentech or its sublicensees, subcontractors or agents, except to the extent that such Claims arise from Sangamo's breach of its representations and warranties under Article 12; or (v) arising from the use by a Third Party of any Licensed Product sold or otherwise provided by Genentech or its sublicensees, subcontractors or agents.

(c) Indemnification by Sangamo. Sangamo shall indemnify, defend and hold harmless Genentech and its directors, officers and employees from and against any Third Party Claims (i) arising from any injury or damage arising out of or in connection with the negligence or willful misconduct of Sangamo or its consultants, subcontractors or agents related to the performance of this Agreement or the breach by Sangamo of its obligations under this Agreement, except to the extent that such Claims arise from the negligence or willful misconduct of the foregoing indemnified parties or the breach by Genentech of its obligations under this Agreement; (ii) that the technology and materials (other than the Genentech Deliverables) used by Sangamo in performing activities under the Research Plan or the use of such technology and materials (other than the Genentech Deliverables) in performing such activities infringes or misappropriates the intellectual property rights of such Third Party; or (iii) that ZFN Reagents or their use by Genentech or its sublicensees, subcontractors or agents under the Genentech License infringes or misappropriates the intellectual property rights of such Third Party, except to the extent that such infringement or misappropriation is due to the identity, sequence or other characteristics of any Designated Gene or is due to an Improvement that is incorporated in or used to make an Improved ZFN Reagent.

(d) Indemnification Procedures. In the event that a Party seeks indemnification under this Section 9.1, such Party shall (i) promptly notify the other Party as soon as it becomes aware of a claim or suit for which indemnification may be sought pursuant hereto, (ii) cooperate as reasonably requested (at the expense of the indemnifying Party) with the indemnifying Party in the defense of such claim or suit; and (iii) permit the indemnifying Party to control the defense of such claim or suit with counsel mutually satisfactory to the Parties. In no event, however, may the indemnifying Party compromise or settle any claim or suit in a manner that admits fault or negligence on the part of the indemnified Party without the prior written consent of the indemnified Party. The indemnifying Party shall have no liability under this Section 9.1 with respect to claims or suits settled or compromised without its prior written consent, which consent shall not be unreasonably withheld.

9.2 Limitation on Liability. IN NO EVENT SHALL EITHER PARTY BE LIABLE FOR LOSS OF PROFITS, LOSS OF GOODWILL OR ANY CONSEQUENTIAL, INCIDENTAL OR INDIRECT DAMAGES OF ANY KIND, EXCEPT TO THE EXTENT THAT SUCH DAMAGES (A) ARE AN ELEMENT OF THE DAMAGES AWARDED BY A COURT OF COMPETENT JURISDICTION TO A THIRD PARTY IN CONNECTION WITH A CLAIM WITH RESPECT TO WHICH A PARTY IS ENTITLED TO INDEMNIFICATION PURSUANT TO SECTION 9.1; OR (B) ARISE FROM THE MISUSE OR MISAPPROPRIATION OF THE OTHER PARTY'S CONFIDENTIAL INFORMATION OR THE GENENTECH MATERIALS.

Article 10. Dispute Resolution

10.1 Internal Resolution. Except as otherwise expressly provided in this Agreement, in the event of any controversy, claim or other dispute arising out of or relating to any provision of this Agreement or the interpretation, enforceability, performance, breach, termination or validity hereof, such dispute shall be first referred to the Executives of each Party for resolution, prior to proceeding under the following provisions of this Article 10. A dispute shall be referred to the Executives upon one Party providing the other Party with written notice that such dispute exists, and the Executives shall attempt to resolve such dispute through good faith discussions. In the event that the Executives cannot resolve such dispute within thirty (30) days of such other Party's receipt of such written notice, either Party may initiate the dispute resolution procedures set forth in Section 10.2.

10.2 Arbitration. Except as otherwise expressly provided in this Agreement, the Parties agree that any dispute not resolved internally by the Parties pursuant to Section 10.1, shall be resolved through binding arbitration in accordance with the then prevailing Commercial Arbitration Rules of the American Arbitration Association, except as modified in this Agreement, applying the substantive law specified in Section 14.1. A Party may initiate an arbitration by written notice to the other Party of its intention to arbitrate, and such demand notice shall specify in reasonable detail the nature of the dispute. Each Party shall select one (1) arbitrator, and the two (2) arbitrators so selected shall choose a third arbitrator, and all three (3) shall serve as neutrals. If a Party fails to nominate its arbitrator, or if the Parties' arbitrators cannot agree on the third arbitrator, the necessary appointments shall be made in accordance with the then prevailing Commercial Arbitration Rules. Within three (3) months of the conclusion of an arbitration proceeding, the arbitration decision shall be rendered in writing and shall specify the basis on which the decision was made. The award of the arbitration tribunal shall be final and judgment upon such an award may be entered in any competent court or application may be made to any competent court for judicial acceptance of such an award and order of enforcement. Unless otherwise agreed upon by the Parties, the arbitration proceedings shall be conducted in San Francisco, California. The Parties agree that they shall share equally the cost of the arbitration filing and hearing fees, and the cost of the three (3) arbitrators. Each Party shall bear its own attorneys' fees and associated costs and expenses.

10.3 Patent Disputes. Notwithstanding the other provisions of this Article 10, any dispute that involves the validity, infringement or claim interpretation of a patent (a) that is

issued in the United States shall be subject to actions before the United States Patent and Trademark Office and/or submitted exclusively to a federal court having jurisdiction; and (b) that is issued in any other country shall be brought before an appropriate regulatory or administrative body or court in that country, and the Parties hereby consent to the jurisdiction and venue of such courts and bodies. For the sake of clarity, such patent disputes shall not be subject to the provisions of Section 10.2.

10.4 Continued Performance. Provided the Agreement has not terminated, the Parties agree to continue performing under the Agreement in accordance with its provisions, pending the final resolution of any dispute.

Article 11. Public Disclosures; Use of Names

11.1 Publicity and Other Public Disclosures.

(a) Generally. Subject to the other provisions of this Section 11.1, neither Party shall issue press releases or make any other public disclosures relating to this Agreement for any purpose whatsoever without the other Party's prior written approval. Each Party agrees that the other Party shall have no less than five (5) business days to review and provide comments regarding any such proposed public disclosure (even if such disclosure is required by law, rule or regulation), unless a shorter review time is agreed to by both Parties. If the disclosing Party requests a shorter review time, the other Party shall agree to such requested shorter review time if (i) such shorter review time is necessitated by an applicable disclosure law, rule or regulation; and (ii) the disclosing Party made such request and provided such proposed public disclosure for review as soon as reasonably practicable after the disclosing Party knew of the event necessitating such shorter review time. The provisions of this Section 11.1 are in addition to the provisions of Article 6.

(b) Approved Public Disclosures. Genentech hereby approves of the following public disclosures by Sangamo: (i) issuing the press release set forth in Exhibit D, following the signing of this Agreement by both Parties; (ii) including Genentech on a list of Sangamo's (or Sigma's) partners or licensees/licensors, without identifying any subject matter of this Agreement; and (iii) including the text set forth in Exhibit D in Sangamo's Form 8-K filings. Sangamo hereby approves of the following public disclosures by Genentech (i) including Sangamo on a list of Genentech's partners or licensees/licensors and (ii) disclosing that Sangamo is providing technology to Genentech for the improvement of protein production.

(c) Public Disclosures Required by Law. In the event that one Party reasonably concludes that a public disclosure relating to this Agreement is required by law, rule or regulation (including, without limitation, the disclosure requirements of the Securities and Exchange Commission or the securities exchange or other stock market on which such Party's securities are traded (for purposes of this Section 11.1, collectively, an "Exchange")) and the other Party would prefer not to make such disclosure, the Party seeking such disclosure shall either (i) limit such disclosure to address the concerns of the other Party or (ii) provide a written explanation from counsel stating why such limited disclosure is not sufficient to comply with the applicable law, rule or regulation. Provided that the Party seeking such disclosure complies with

the preceding sentence, such Party shall be permitted to make such disclosure. Each Party agrees that it shall obtain its own legal advice with regard to its compliance with securities laws, rules and regulations, and will not rely on any statements made by the other Party relating to such securities laws, rules and regulations.

(d) Filing of Agreement. With respect to complying with the disclosure requirements of an Exchange, in connection with any required filing of this Agreement with such Exchange, the filing Party shall, at the request of the other Party, seek confidential treatment of portions of this Agreement from such Exchange and shall provide the other Party with the opportunity, for at least fifteen (15) days, to review and comment on any such proposed filing, and shall thereafter provide reasonable advance notice and opportunity for comment on any subsequent changes to such filing. Sangamo shall, whether or not requested by Genentech, redact and request confidential treatment for (i) the Maximum Number of Genes and the actual number of Designated Genes; (ii) all references to the identity of the Requested Genes and the Designated Genes and the Functional [***] thereof; (iii) any Requested Gene Sequences and Designated Gene Sequences; and (iv) any financial terms, other than those disclosed in accordance with Section 11.1(c).

11.2 Use of Names. Except as expressly provided herein, no right, express or implied, is granted by the Agreement to use in any manner the name of "Sangamo," "Genentech," "Sigma" or any other trade name or trademark of the other Party in connection with the performance of this Agreement.

Article 12. Warranties

12.1 Mutual Warranties. Each Party represents and warrants to the other Party that: (a) it has full corporate authority to execute this Agreement and to perform its obligations under this Agreement; (b) in performing hereunder it will not violate any other agreement to which it is a party or subject; (c) in performing hereunder it will not violate any federal, state or local laws, requirements or regulations; and (d) it shall provide personnel, as necessary, to perform its obligations hereunder.

12.2 Sangamo Warranties. Sangamo represents and warrants to Genentech that:

(a) as of the Effective Date, all Patents owned by Sangamo that have one or more claims that encompass (i) ZFN Reagents and/or ZFN Modified Cell Lines and/or (ii) the making and/or use of ZFN Reagents and/or ZFN Modified Cell Lines are, in all cases, Controlled by Sangamo;

(b) as of the Effective Date, all of the Identified Patents (other than those Identified Patents with a status of "Revoked" on Exhibit C) are Controlled by Sangamo, and Sangamo will not, during the term of this Agreement, grant (or purport to grant) any rights or take any other actions that are inconsistent with the Genentech License;

(c) all Sangamo employees and any Third Parties working on its behalf that perform activities under the Research Plan are obligated (or will be obligated, prior to commencing such activities) to assign any Inventions to Sangamo and to cooperate with Sangamo in connection with obtaining patent protection therefor;

(d) Genentech has the right to grant sublicenses under the Genentech License to one or more Third Parties, subject to Sections 5.1(b), 5.1(c) and 5.1(d);

(e) with respect to rights sublicensed to Genentech by Sangamo under each of the Existing Third Party Licenses (other than the Scripps Agreement), Genentech's sublicense to such rights (including any further sublicenses thereunder) shall survive (as a direct license from the applicable Third Party licensor or otherwise) in the event that the applicable Third Party licensor terminates Sangamo's license to such rights for any reason, subject to any provisions related to such direct license that are set forth in Exhibit E; and

(f) without limiting the generality of any other representations or warranties under this Agreement, (i) Sangamo has all the necessary licenses, rights, consents and commitments from Sigma under the Sigma Agreement to perform Sangamo's obligations hereunder including, without limitation, performing its obligations under Article 2; and (ii) the Sigma Agreement does not narrow the scope of the intellectual property rights that would otherwise be included (but for the Sigma Agreement) in the Sangamo IP Rights or, to the knowledge of Sangamo, otherwise adversely affect the Genentech License in any way (it being understood that the fact that certain intellectual property rights in the Sangamo IP Rights are, as a result of the Sigma Agreement, licensed to Sigma and licensed back to Sangamo shall not, by itself, be treated as having an adverse effect on the Genentech License).

12.3 Disclaimers. EXCEPT AS OTHERWISE EXPRESSLY STATED IN THE AGREEMENT, NEITHER PARTY MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND AND EXPRESSLY DISCLAIMS ALL IMPLIED OR STATUTORY WARRANTIES INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT.

Article 13. Notices

Except as otherwise expressly provided in the Agreement, any notice required under this Agreement shall be in writing and shall specifically refer to this Agreement. Notices shall be sent via one of the following means and will be effective (a) on the date of delivery, if delivered in person; (b) on the date of receipt, if sent by a facsimile (with delivery confirmed); or (c) on the date of receipt, if sent by private express courier or by first class certified mail, return receipt requested (or its equivalent). Any notice sent via facsimile shall be followed by a copy of such notice by private express courier or by first class mail. Notices shall be sent to the other Party at the addresses set forth below. Either Party may change its addresses for purposes of this Article 13 by sending written notice to the other Party.

To Sangamo:

Sangamo BioSciences, Inc.
Point Richmond Tech Center II
501 Canal Blvd, Suite A100
Richmond, CA 94804
Attn: Chief Executive Officer
Telephone: (510) 970-6000
Facsimile: (510) 236-8951

To Genentech:

Genentech, Inc.
1 DNA Way
South San Francisco, CA 94080
Attn: Corporate Secretary
Telephone: (650) 225-1000
Facsimile: (650) 467-9146

with a required copy to:

Genentech, Inc.
1 DNA Way
South San Francisco, CA 94080
Attn: VP, Alliance Management and Pipeline Strategy Support
Telephone: (650) 225-1000
Facsimile: (650) 467-3294

Article 14. General Provisions

14.1 Governing Law. This Agreement shall be governed by and construed under the laws of the State of California and the United States without regard to the conflict of laws provisions thereof.

14.2 Assignment; Delegation.

(a) Generally. Except as provided in this Section 14.2, neither Party shall assign or delegate any of its rights or obligations under this Agreement without the prior written consent of the other Party. Any attempt to assign or delegate any portion of this Agreement in violation of this Section 14.2 shall be void. Subject to the other provisions of this Section 14.2, this Agreement shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns.

(b) Assignment of this Agreement. Notwithstanding Section 14.2(a), either Party may, without the other Party's consent, assign this Agreement and its rights and obligations hereunder to (i) any successor in interest by way of merger, acquisition or sale of all or substantially all of its assets to which this Agreement relates; or (ii) an Affiliate of such Party. Notwithstanding the preceding sentence, [***]

(c) Delegation (and/or Assignment) Under an Assumption Agreement. Notwithstanding Section 14.2(a), if reasonably requested by [***]

(d) Delegation Under a Research Plan. Notwithstanding Section 14.2(a), with respect to specific Sangamo obligations under a given Research Plan, the Parties may agree that a Third Party contractor (whether Sigma or another Third Party(ies)) shall (or shall be permitted to) perform such obligations on behalf of Sangamo, by expressly providing for (or permitting) the delegation of such obligations ("Delegated Obligations") to such Third Party in such Research Plan (e.g., see the provision in Research Stage 1, step 1 of the Research Plan Template that expressly permits a Third Party contractor to perform genomic DNA sequencing). Such Research Plan shall also specify which (if any) of Genentech's Confidential Information and/or the Genentech Materials are necessary for the performance of Delegated Obligations by a given Third Party, and Genentech hereby consents that Sangamo may provide to such Third Party such specified Confidential Information and/or Genentech Materials solely to the extent necessary to enable the performance of such Delegated Obligations on Sangamo's behalf, for the benefit of Genentech.

14.3 Entire Agreement. This Agreement, including all Exhibits attached hereto, which are hereby incorporated by reference, contains the entire understanding between the Parties hereto with respect to the subject matter hereof and supersedes and terminates all prior agreements, understandings and arrangements between the Parties (including any prior representations or warranties made by either Party), whether written or oral with respect to such subject matter. For clarity, the First Agreement shall remain in full force and effect with respect to "Designated Genes" thereunder and other subject matter thereof.

14.4 Amendment; Waiver. Except as otherwise expressly provided herein, no alteration of or modification to this Agreement shall be effective unless made in writing and executed by an authorized representative of each Party. No course of dealing or failure of either Party to strictly enforce any term, right or condition of this Agreement in any instance shall be construed as a general waiver or relinquishment of such term, right or condition. The observance of any provision of this Agreement may be waived (either generally or any given instance and either retroactively or prospectively) only with the written consent of the Party granting such waiver.

14.5 Severability. The Parties do not intend to violate any rule, law or regulation. If any of the provisions of this Agreement are held to be void or unenforceable, then such void or unenforceable provisions shall be replaced by valid and enforceable provisions that will achieve as far as possible the economic business intentions of the Parties.

14.6 Construction. The Parties mutually acknowledge that they and their attorneys have participated in the negotiation and preparation of this Agreement. Ambiguities, if any, in this Agreement shall not be construed against any Party, irrespective of which Party may be deemed to have drafted the Agreement or authorized the ambiguous provision.

14.7 Captions. Titles, headings and other captions are for convenience only and are not to be used for interpreting this Agreement.

14.8 Relationship of the Parties. The Parties hereto are independent contractors and nothing contained in this Agreement shall be deemed or construed to create a partnership, joint venture, employment, franchise, agency or fiduciary relationship between the Parties.

14.9 Force Majeure. Failure of either Party to perform under this Agreement shall not subject such Party to any liability to the other if such failure is caused by acts of God, acts of terrorism, earthquake, fire, explosion, flood, drought, war, riot, sabotage, embargo, compliance with any order or regulation of any government entity, or by any cause beyond the reasonable control of the affected Party, whether or not foreseeable, provided that written notice of such event is promptly given to the other Party.

14.10 Counterparts; Facsimiles. This Agreement may be executed in two (2) or more counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument. For purposes hereof, a facsimile copy of this Agreement, including the signature pages hereto, will be deemed to be an original. Notwithstanding the foregoing, the Parties shall deliver original execution copies of this Agreement to one another as soon as practicable following execution thereof.

IN AGREEMENT WITH THE FOREGOING, the Parties have caused this Agreement to be signed by their respective duly authorized representatives as set forth below.

Genentech, Inc.		**Sangamo BioSciences, Inc.**	
By:	/s/ Susan Desmond-Hellman	By:	/s/ Edward Lanphier II
Name:	Susan Desmond-Hellman	Name:	Edward O. Lanphier
Title:	President of Product Development	Title:	President and Chief Executive Officer

EXHIBIT A

Research Plan Template

This Research Plan, governed by the Second Research and License Agreement by and between Genentech, Inc. and Sangamo BioSciences, Inc, effective February 25, 2008 ("Agreement"), is hereby agreed to by the Parties. The effective date of this Research Plan is [_____].

Notwithstanding that this Research Plan is governed by the terms and conditions in the main body of the Agreement, as provided in Section 2.3 of the Agreement, the Parties hereby agree to modify the following terms and conditions of the Agreement (solely with respect to this Research Plan): [_____]. All other terms and conditions of the Agreement shall remain in full force and effect. ***[NOTE: Include a provision such as this if any of the terms and conditions of the Agreement are to be modified for this Research Plan.]***

Genentech, Inc.	**Sangamo BioSciences, Inc.**
By: _____	By: _____
Name: _____	Name: _____
Title: _____	Title: _____

REQUIRED INFORMATION

[***]

***** CONFIDENTIAL PORTIONS OMITTED AND FILED SEPARATELY WITH THE COMMISSION**

***** CONFIDENTIAL PORTIONS OMITTED AND FILED SEPARATELY WITH THE COMMISSION**

***** CONFIDENTIAL PORTIONS OMITTED AND FILED SEPARATELY WITH THE COMMISSION**

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***** CONFIDENTIAL PORTIONS OMITTED AND FILED SEPARATELY WITH THE COMMISSION**

***** CONFIDENTIAL PORTIONS OMITTED AND FILED SEPARATELY WITH THE COMMISSION**

EXHIBIT B

[***] Gene

Functional [***]: [***]

Gene Sequence:

[***]

***** CONFIDENTIAL PORTIONS OMITTED AND FILED SEPARATELY WITH THE COMMISSION**

***** CONFIDENTIAL PORTIONS OMITTED AND FILED SEPARATELY WITH THE COMMISSION**

***** CONFIDENTIAL PORTIONS OMITTED AND FILED SEPARATELY WITH THE COMMISSION**

***** CONFIDENTIAL PORTIONS OMITTED AND FILED SEPARATELY WITH THE COMMISSION**

EXHIBIT C

Identified Patents
(Sangamo Owned and In-Licensed)

SANGAMO OWNED

Serial No.	Filing date	Title	Status
AU 32291/95	Aug. 17, 1995	Improvements in binding proteins for recognition of DNA	AU Pat. No. 698152 (2/4/99)
AU 10037/99	Jan. 6, 1999	Improvements in binding proteins for recognition of DNA	AU Pat. No. 726759 (3/8/01)
CA 2,196,419	Aug. 17, 1995	Improvements in binding proteins for recognition of DNA	CA Pat. No. 2,196,419 (8/17/07)
EP 95928576.8	Aug. 17, 1995	Improvements in binding proteins for recognition of DNA	Pending
JP 507857/1996	Aug. 17, 1995	Improvements in binding proteins for recognition of DNA	Pending
US 09/139,762	Aug. 25, 1998	Binding proteins for recognition of DNA	US Pat. No. 6,013,453 (1/11/00)
US 10/033,129	Dec. 27, 2001	Relating to Binding proteins for recognition of DNA	US Pat. No. RE 39,229 (8/8/06)
US 10/309,578	Dec. 3, 2002	Design of binding proteins for recognition of DNA	Pending
US 10/397,930	Mar. 25, 2003	Relating to Binding proteins for recognition of DNA	Pending
US 10/400,017	Mar. 25, 2003	Relating to Binding proteins for recognition of DNA	Pending
AU 2001 226935	Jan. 19, 2001	Nucleic Acid Binding Polypeptides (2-finger modules)	AU Pat. No. 2001 226935 (10/5/06)

Serial No.	Filing date	Title	Status
CA 2,398,155	Jan. 19, 2001	Nucleic Acid Binding Polypeptides (2-finger modules)	Pending
EP 01 901 276.4	Jan. 19, 2001	Nucleic Acid Binding Polypeptides (2-finger modules)	EP Pat. No. 1 250 424 (2/28/07)
US 10/198,677	Jan. 19, 2001	Nucleic Acid Binding Polypeptides (2-finger modules)	Pending
US 10/222,614	Aug. 15, 2002	Cells comprising zinc finger nucleases	US Pat. No. 7,163,824 (1/16/07)
US 10/395,816	Mar. 20, 2003	Methods and compositions for using zinc finger endonucleases to enhance homologous recombination	Pending
AU 2003 218382	Mar. 20, 2003	Methods and compositions for using zinc finger endonucleases to enhance homologous recombination	Pending
CA 2,479,858	Mar. 20, 2003	Methods and compositions for using zinc finger endonucleases to enhance homologous recombination	Pending
EP 03 714 379.9	Mar. 20, 2003	Methods and compositions for using zinc finger endonucleases to enhance homologous recombination	Pending
US 10/912,932	Aug. 6, 2004	Methods and compositions for targeted cleavage and recombination	Pending
US 11/304,981	Dec. 15, 2005	Targeted deletion of cellular DNA Sequences	Pending

Serial No.	Filing date	Title	Status
AU 2004 263865	Aug. 6, 2004	Methods and compositions for targeted cleavage and recombination	AU Pat. No. 2004 263865 (8/30/07)
CA 2,534,296	Aug. 6, 2004	Methods and compositions for targeted cleavage and recombination	Pending
EP 04 780 272.3	Aug. 6, 2004	Methods and compositions for targeted cleavage and recombination	Pending
IL 173460	Aug. 6, 2004	Methods and compositions for targeted cleavage and recombination	Pending
JP 2006-523239	Aug. 6, 2004	Methods and compositions for targeted cleavage and recombination	Pending
KR 2006-7002703	Aug. 6, 2004	Methods and compositions for targeted cleavage and recombination	Pending
SG 2006 00748-8	Aug. 6, 2004	Methods and compositions for targeted cleavage and recombination	Pending
AU 2005 220148	Feb. 3, 2005	Methods and compositions for targeted cleavage and recombination	Pending
CA 2,534,296	Feb. 3, 2005	Methods and compositions for targeted cleavage and recombination	Pending
EP 05 756 438.7	Feb. 3, 2005	Methods and compositions for targeted cleavage and recombination	Pending
US 10/587,723	Feb. 3, 2005	Methods and compositions for targeted cleavage and recombination	Pending

Serial No.	Filing date	Title	Status
US 11/221,683	Sept. 8, 2005	Compositions and methods for protein production	Pending
PCT US05/32157	Sept. 8, 2005	Compositions and methods for protein production	WO 06/033859 (3/30/06)
US 11/493,423	July 26, 2006	Targeted integration and expression of exogenous nucleic acid sequences	Pending
PCT US06/29027	July 26, 2006	Targeted integration and expression of exogenous nucleic acid sequences	Pending
[***]	[***]	[***]	[***]

IN-LICENSED*

Caltech = in-licensed under the Caltech Agreement

JHU = in-licensed under the JHU Agreement

MIT = in-licensed under the MIT Agreement

Scripps = in-licensed under the Scripps Agreement

Utah = in-licensed under the Utah Agreement

Serial No. (*Third Party License)	Filing date	Title	Status
US 07/862,831 (JHU)	Apr. 3, 1992	Functional domains in FokI restriction endonuclease	US Pat. No. 5,356,802 (10/18/94)
US 08/126,564 (JHU)	Sept. 27, 1993	Functional domains in FokI restriction endonuclease	US Pat. No. 5,436,150 (7/25/95)
US 08/346,293 (JHU)	Nov. 23, 1994	Insertion & Deletion Mutants of FokI restriction endonuclease	US Pat. No. 5,487,994 (1/30/96)
CA 2,154,581 (JHU)	Feb. 10, 1994	Functional domains in FokI restriction endonuclease	Pending
EP 94 909 526.9 (JHU)	Feb. 10, 1994	Functional domains in FokI restriction endonuclease	Europ. Pat. No. 0 682 699 (5/7/03) Revoked
CH (JHU)		Functional domains in FokI restriction endonuclease	Europ. Pat. No. 0 682 699 (5/7/03) Revoked
DE (JHU)		Functional domains in FokI restriction endonuclease	Europ. Pat. No. 0 682 699 (5/7/03) Revoked
FR (JHU)		Functional domains in FokI restriction endonuclease	Europ. Pat. No. 0 682 699 (5/7/03) Revoked
GB (JHU)		Functional domains in FokI restriction endonuclease	Europ. Pat. No. 0 682 699 (5/7/03) Revoked
IE (JHU)		Functional domains in FokI restriction endonuclease	Europ. Pat. No. 0 682 699 (5/7/03) Revoked

Serial No. (*Third Party License)	Filing date	Title	Status
EP 03 010009.3 (JHU)	Feb. 10, 1994	Functional domains in FokI restriction endonuclease	Pending
JP 7-510290 (JHU)	Aug. 23, 1994	Functional domains in FokI restriction endonuclease	Pending
JP 2006-143294 (JHU)	Aug. 23, 1994	Functional domains in FokI restriction endonuclease	Pending
US 08/575,361 (JHU)	Dec. 20, 1995	General method to clone hybrid restriction endonucleases using *lig* gene	US Pat. No. 5,792,640 (8/11/98) Reexamination Requested
US 08/647,449 (JHU)	May 7, 1996	Methods for inactivating target DNA and for detecting conformational change in a nucleic acid	US Patent No. 5,916,794 (Jun. 29, 1999)
US 09/281,792 (JHU)	Mar. 31, 1999	Methods for inactivating target DNA and for detecting conformational change in a nucleic acid	US Patent No. 6,265,196 (Jul. 24, 2001) Reexamination Requested
US 08/676,318 (Scripps)	Jan. 18, 1995	Zinc finger protein derivatives and methods therefor	U.S. Patent No. 6,242,568 (6/5/01)
US 08/863,813 (Scripps)	May 27, 1997	Zinc finger protein derivatives and methods therefor	U.S. Patent No. 6,140,466 (10/31/00)
US 09/500,700 (Scripps)	Feb. 9, 2000	Zinc finger protein derivatives and methods therefor	U.S. Patent No. 6,790,941 (9/14//04)
AU 16865/95 (Scripps)	Jan. 18, 1995	Zinc finger protein derivatives and methods therefor	AU Patent No. 704601 (4/29/99)
CA 2,181,548 (Scripps)	Jan. 18, 1995	Zinc finger protein derivatives and methods therefor	Pending
EP 95 908 614.1 (Scripps)	Jan. 18, 1995	Zinc finger protein derivatives and methods therefor	Europ. Pat. No. 0 770 129 (11/23/05)

Serial No. (*Third Party License)	Filing date	Title	Status
FR (Scripps)	Jan. 18, 1995	Zinc finger protein derivatives and methods therefor	Europ. Pat. No. 0 770 129 (11/23/05)
GB (Scripps)	Jan. 18, 1995	Zinc finger protein derivatives and methods therefor	Europ. Pat. No. 0 770 129 (11/23/05)
FI 962879 (Scripps)	Jan. 18, 1995	Zinc finger protein derivatives and methods therefor	Pending
JP 07-519231 (Scripps)	Jan. 18, 1995	Zinc finger protein derivatives and methods therefor	Pending
NO 1996 2991 (Scripps)	Jan. 18, 1995	Zinc finger protein derivatives and methods therefor	Pending
AU 2002 300619 (Scripps)	May 27, 1998	Zinc finger protein derivatives and methods therefor	Pending
CA 2,291,861 (Scripps)	May 27, 1998	Zinc finger protein derivatives and methods therefor	Pending
EP 98 926 088.0 (Scripps)	May 27, 1998	Zinc finger protein derivatives and methods therefor	Pending
JP 11-500870 (Scripps)	May 27, 1998	Zinc finger protein derivatives and methods therefor	Pending
US 09/260,629 (MIT)	Mar. 1, 1999	Poly-Zinc Finger Proteins with improved linkers	U.S. Pat. No. 6,479,626 (Nov. 12, 2002)
US 10/146,221 (MIT)	May 13, 2002	Poly-Zinc Finger Proteins with improved linkers	U.S. Pat. No. 6,903,185 (June 7, 2005)
US 11/110,594 (MIT)	April 20,2005	Poly-Zinc Finger Proteins with improved linkers	US Patent No 7,153,949 (Dec. 26, 2006)
US 11/639,363 (MIT)	Dec. 14, 2006	Poly-Zinc Finger Proteins with improved linkers	Pending
AU 28849/99 (MIT)	Mar. 1, 1999	Poly-Zinc Finger Proteins with improved linkers	AU Pat. No. 746454 (August 15, 2002)

Serial No. (*Third Party License)	Filing date	Title	Status
CA 2,321,938 (MIT)	Mar. 1, 1999	Poly-Zinc Finger Proteins with improved linkers	Pending
EP 99909701.7 (MIT)	Mar. 1, 1999	Poly-Zinc Finger Proteins with improved linkers	Pending
JP 2000-534663 (MIT)	Mar. 1, 1999	Poly-Zinc Finger Proteins with improved linkers	Pending
AU 2003 25128 (Utah)	Jan. 22, 2003	Targeted chromosomal mutagenesis using zinc finger nucleases	Pending
CA 2,474,486 (Utah)	Jan. 22, 2003	Targeted chromosomal mutagenesis using zinc finger nucleases	Pending
EP 03 746 527.5 (Utah)	Jan. 22, 2003	Targeted chromosomal mutagenesis using zinc finger nucleases	Allowed
US 10/502,565 (Utah)	Jan. 22, 2003	Targeted chromosomal mutagenesis using zinc finger nucleases	Pending
US 10/656,531 (Caltech)	Sept. 5, 2003	Use of chimeric nucleases to stimulate gene targeting	Pending
AU 2003 298574 (Caltech)	Sept. 5, 2003	Use of chimeric nucleases to stimulate gene targeting	Pending
CA 2,497,913 (Caltech)	Sept. 5, 2003	Use of chimeric nucleases to stimulate gene targeting	Pending
EP 03 796 324.6 (Caltech)	Sept. 5, 2003	Use of chimeric nucleases to stimulate gene targeting	Pending
JP 2005-501601 (Caltech)	Sept. 5, 2003	Use of chimeric nucleases to stimulate gene targeting	Pending

EXHIBIT D

Press Release and Form 8-K Text

EXHIBIT E

Certain Agreements Relating to Third Party Licenses

Sangamo hereby notifies Genentech that (except as otherwise noted) a full and complete copy of each of the provisions explicitly referenced below in this Exhibit E is set forth in Exhibit F:

1. **Caltech Agreement.** Genentech acknowledges and agrees that Genentech does not have the right to grant sublicenses under the intellectual property licensed to Sangamo pursuant to the Caltech Agreement. The Parties acknowledge and agree that, as of the date of any termination of the Caltech Agreement (a) the California Institute of Technology ("**Caltech**") shall be a third party beneficiary of this Agreement as of the date of such termination and thereafter; (b) Sangamo shall remain responsible for all obligations to Genentech (other than those requiring Sangamo to hold a license under the Caltech Agreement, unless Caltech (at its discretion) elects to assume such obligations); and (c) Sangamo shall inform Genentech in writing (with a copy to Caltech) that Genentech's obligations pursuant to (a) and (b) are in effect as a result of such termination.

2. **JHU Agreement.** The provisions of Article II (other than Paragraph 2.4), Article X and Paragraph 15.4 of the JHU Agreement are hereby incorporated by reference into this Agreement and are binding upon Genentech and any of Genentech's sublicensees under the rights licensed to Sangamo under the JHU Agreement (but in each case solely to the extent such provisions are applicable to the rights granted in this Agreement) as if each were a party to the JHU Agreement. Any sublicense granted by Sangamo to Genentech that is in full force and effect and not then in default will survive as a direct license from the Johns Hopkins University ("**JHU**") to Genentech pursuant to Paragraph 13.6 of the JHU Agreement provided that Genentech agrees to assume the rights and obligations of such direct license. If Genentech agrees to assume such rights and obligations, (a) JHU's obligations to Genentech will be no greater than JHU's obligations to Sangamo under the JHU Agreement, (b) the scope of Genentech's rights with respect to the patent rights licensed under the JHU Agreement shall remain unchanged and Genentech shall be subject to all other non-financial terms and conditions in the JHU Agreement that apply to such scope of rights, (c) all further sublicenses granted by Genentech prior to termination of the JHU Agreement shall also survive such termination, (d) Genentech (or if there are at such time more than one sublicensee under the JHU Agreement, Genentech and all other sublicensees severally and jointly) shall be required to make any minimum annual royalty payments due pursuant to Paragraph 4.4 of the JHU Agreement and (e) Genentech shall be required to make any other monetary payment(s) that, had the JHU Agreement not been terminated, Sangamo would have been required to make under the JHU Agreement as a result of the activities of Genentech. The Parties agree that, in the event that the JHU Agreement is amended after the Effective Date, the provisions of this paragraph shall apply only to the extent required in any such amendment.

3. **MIT Agreement.** The provisions of Article 2 (other than Paragraph 2.8), Article 9 and Article 10 of the MIT Agreement are hereby incorporated by reference into this Agreement and are binding upon Genentech and any of Genentech's sublicensees under the rights licensed to Sangamo under the MIT Agreement (but in each case solely to the extent such provisions are applicable to the rights granted in this Agreement) as if each were a party to the MIT Agreement. Any sublicense granted by Sangamo to Genentech will survive as a direct license from the Massachusetts Institute of Technology ("**MIT**") to Genentech pursuant to Paragraph 13.6 of the MIT Agreement provided that

Genentech is not then in default under this Agreement and agrees to assume the rights and obligations of such direct license. If Genentech agrees to assume such rights and obligations, (a) such direct license shall be subject to the same non-financial terms and conditions as those in the MIT Agreement and (b) Genentech (or if there is at such time more than one sublicensee under the MIT Agreement, Genentech and all other sublicensees severally and jointly) shall pay any annual fees due pursuant to Paragraph 4.1(b) of the MIT Agreement. If Genentech becomes a direct licensee of MIT, Genentech shall make any monetary payment(s) that, had the MIT Agreement not been terminated, Sangamo would have been required to make under the MIT Agreement as a result of the activities of Genentech. The Parties agree that, in the event that the MIT Agreement is amended after the Effective Date, the provisions of this paragraph shall apply only to the extent required in any such amendment.

4. **Scripps Agreement.** Genentech acknowledges and agrees that any sublicense granted by Sangamo to Genentech shall be subject in all respects to the restrictions, exceptions, royalty obligations, reports, termination provisions and other provisions contained in the Scripps Agreement (but not including the payment of the license fee pursuant to Section 2.2 of the Scripps Agreement). The Parties agree that, in the event that the Scripps Agreement is amended after the Effective Date, the provisions of this paragraph shall apply only to the extent required in any such amendment. *[NOTE: Section 2.2 of the Scripps Agreement is* not *included in Exhibit F.]*

5. **Utah Agreement. [***]** of the Utah Agreement as a result of any sublicenses granted by Genentech under the Genentech License or any further sublicenses under the Genentech License granted by Genentech's sublicensees. **[***]** prior to the applicable deadlines set forth in Section **[***]** of the Utah Agreement. Any sublicense granted by Sangamo to Genentech will survive as a direct license from the University of Utah ("**Utah**") to Genentech pursuant to Section 13.4 of the Utah Agreement provided that Genentech is in good standing under this Agreement and agrees to assume the rights and obligations of such direct license. If Genentech agrees to assume such rights and obligations, (a) such direct license shall be subject to the same non-financial terms and conditions as those in the Utah Agreement and (b) Genentech (or if there is at such time more than one sublicensee under the Utah Agreement, Genentech and all other sublicensees severally and jointly) shall make any annual maintenance payments due pursuant to Section 6.2 of the Utah Agreement. If Genentech becomes a direct licensee of Utah, Genentech shall make any monetary payment(s) that, had the Utah Agreement not been terminated, Sangamo would have been required to make under the Utah Agreement as a result of the license to, or activities of, Genentech, including without limitation the annual sublicensee fees due pursuant to Section 4.3(ii) of the Utah Agreement with respect to Genentech (which for clarity shall continue notwithstanding the conversion of Genentech's sublicense to a direct license from Utah). The Parties agree that, in the event that the Utah Agreement is amended after the Effective Date, the provisions of this paragraph shall apply only to the extent required in any such amendment.

EXHIBIT F

Certain Provisions of Third Party Licenses

Copy of Selected Provisions from the JHU Agreement

ARTICLE II – GRANT

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

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

2.3 *[NOTE: As amended in Amendment No. 4 to the JHU Agreement.]* LICENSEE shall have the right to sublicense all or any part of this license. With respect to each sublicense in the Research Reagent Field granted by it under this Agreement, LICENSEE shall do the following:

(a) incorporate the language of Article II (other than Paragraph 2.4), Article X, and Paragraph 15.4 into each sublicense agreement (but in each case solely to the extent such language is applicable to the rights granted in such sublicense agreement), so that these Articles shall be binding upon the applicable sublicensee as if it were a party to this Agreement;

(b) include in each such sublicense agreement, language that is reasonably sufficient to enable LICENSEE to comply with its obligations under Paragraphs 2.4, 5.1, and 5.2 and Articles IX, XIII, and XV (other than Paragraph 15.4); and

(c) obtain an indemnity from the applicable sublicensee in favor of LICENSEE that is substantially similar in scope of the indemnity set forth in Article VIII and that includes JOHNS HOPKINS as an indemnified party on the same terms as LICENSEE.

With respect to each sublicense in any field other than the Research Reagent Field granted by it under this Agreement, LICENSEE agrees that such sublicense shall provide that the obligations to JOHNS HOPKINS of Articles II, VIII, IX, X, XIII, XV and Paragraphs 5.1 and 5.2 of this Agreement shall be

binding upon such sublicensee as if such sublicensee was a party to this Agreement. LICENSEE further agrees to attach copies of these Articles to such sublicense agreement and to incorporate these by reference in such sublicense agreement.

2.4 *[NOTE: Intentionally omitted.]*

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

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

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

2.8 *[NOTE: As amended in Amendment No. 4 to the JHU Agreement.]* Each of LICENSEE'S sublicensee(s) shall have the right to grant further sublicenses of the sublicense to the Patent Rights granted to it by LICENSEE, within the scope of such sublicense. Such further sublicenses shall include the provisions set forth in Paragraph 2.3 of this Agreement that were included in the sublicense agreement between LICENSEE and sublicensee and such provisions shall be binding on such further sublicensee as if such further sublicensee were a party to this Agreement. LICENSEE shall forward a copy of all further sublicense agreements granted by its sublicense(s) within thirty (30) days of LICENSEE's receipt of a copy thereof.

ARTICLE X - NON-USE OF NAMES

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

PARAGRAPH 13.6

13.6 *[NOTE: As amended in Amendment No. 4 to the JHU Agreement.]* Upon termination of this Agreement for any reason during the Exclusive Period, any sublicensee not then in default shall have the right to seek a license from JOHNS HOPKINS under the same terms and conditions as set forth hereunder. In addition, in the event that JOHNS HOPKINS terminates this Agreement pursuant to Paragraph 13.1, 13.2, or 13.3, each sublicense granted by LICENSEE which complies with the sublicense requirements of Paragraph 2.3, is in full force and effect and not then in default, will survive such termination of this Agreement and such sublicensee shall become a direct licensee of JOHNS HOPKINS, provided that (a) JHU's obligations to such sublicensee are no greater than JHU's obligations to LICENSEE under this Agreement, (b) the scope of such sublicensee's rights with respect to the Patent Rights shall remain unchanged and such sublicensee shall be subject to all other non-financial terms and conditions in this Agreement that apply to such scope of rights, (c) all further sublicenses granted by such sublicensee prior to termination of this Agreement shall also survive such termination, (d) such sublicensee (or if there are at such time more than one such sublicensees, such sublicensees severally and jointly) shall be required to make any minimum annual royalty payments due pursuant to Paragraph 4.4 and (e) such sublicensee shall be required to make any other monetary payment(s) that, had this Agreement not been terminated, LICENSEE would have been required to make under this Agreement as a result of the activities of such sublicensee. Each such sublicensee shall be an intended third-party beneficiary of the preceding sentence. LICENSEE shall notify JOHNS HOPKINS of each non-defaulted sublicense in existence at the time of termination by JOHNS HOPKINS pursuant to Paragraph 13.1, 13.2, or 13.3.

PARAGRAPH 15.4

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

Copy of Selected Provisions from the MIT Agreement

2 - GRANT

2.1 M.I.T. hereby grants to LICENSEE the right and license in the TERRITORY to practice under the PATENT RIGHTS and, to the extent not prohibited by other patents, to make, have made, use, lease, sell and import LICENSED PRODUCTS and to practice the LICENSED PROCESSES, until the expiration of the last to expire of the PATENT RIGHTS, unless this Agreement shall be sooner terminated according to the terms hereof.

2.2 LICENSEE agrees that LICENSED PRODUCTS leased or sold in the United States shall be manufactured substantially in the United States.

2.3 In order to establish exclusivity in the FIELDS OF USE for LICENSEE, M.I.T. hereby agrees that it shall not grant any other license to make, have made, use, lease, sell and import LICENSED PRODUCTS or to utilize LICENSED PROCESSES subject to the royalty-free, nonexclusive license rights of the United States Government per FAR 52.227-11, in the TERRITORY for the FIELDS OF USE.

2.4 *[NOTE: As amended in the First Amendment to the MIT Agreement.]* LICENSEE and M.I.T. agree that neither party shall assert the Patent Rights against not-for-profit institutions in their conduct of research, provided, however, that if a not-for-profit institution practices under the Patent Rights to conduct high throughput drug screening on behalf of a commercial entity, then the Patent Rights may be asserted against that institution.

2.5 M.I.T. reserves the right to practice under the PATENT RIGHTS and to allow third parties to practice under the PATENT RIGHTS in all fields of use for noncommercial research purposes.

2.6 LICENSEE shall have the right to enter into sublicensing agreements for the rights, privileges and licenses granted hereunder only in the FIELDS OF USE. Upon any termination of this Agreement, sublicensees' rights shall also terminate, subject to Paragraph 13.6 hereof.

2.7 *[NOTE: As amended in the Eighth Amendment to the MIT Agreement.]* With respect to each sublicense agreement [in the Reagent Field], LICENSEE agrees to do the following:

(a) incorporate the language of Article 2 (other than Paragraph 2.8), Article 9, Article 10, and Paragraph 15.4 into each sublicense agreement (but in each case solely to the extent such language is applicable to the rights granted in such sublicense agreement), so that these Articles shall be binding upon the applicable sublicensee as if they were a party to this Agreement;

(b) include in each such sublicense agreement language that is reasonably sufficient to enable LICENSEE to comply with its obligations under Paragraph 2.8 and Articles 5, 7, 12, 13 and 15 (other than Paragraph 15.4);

(c) use commercially reasonable effort to obtain a indemnity from the applicable sublicensee in favor of LICENSEE that is substantially similar in scope of the indemnity set forth in Article 8, and include M.I.T. as an indemnified party under any such indemnity on the same terms as LICENSEE.

2.8 *[NOTE: Intentionally omitted.]*

2.9 Nothing in this Agreement shall be construed to confer any rights upon LICENSEE by implication, estoppel or otherwise as to any technology or patent rights of M.I.T. or any other entity other than the PATENT RIGHTS, regardless of whether such patent rights shall be dominant or subordinate to any PATENT RIGHTS.

PARAGRAPH 4.1(b)

4.1 *[NOTE: As amended in the Fifth Amendment to the MIT Agreement.]* For the rights, privileges and license granted hereunder, LICENSEE shall pay royalties to M.I.T. in the manner hereinafter provided to the end of the term of the PATENT RIGHTS or until this Agreement shall be terminated:

b. License Maintenance Fees of (i) **[***]** per year on January 1, 2002 and each January 1 thereafter until the January 1 following the issuance of the first protein DNA claims and; (ii) **[***]** per year beginning the January 1 following the issuance of the first of the protein-DNA claims and every January 1 thereafter; provided, however, License Maintenance Frees may be credited to Running Royalties subsequently due on NET SALES for each said year, if any. License Maintenance Fees paid in excess of Running Royalties shall not be creditable to Running Royalties for future years.

9 - EXPORT CONTROLS

LICENSEE acknowledges that it is subject to United States laws and regulations controlling the export of technical data, computer software, laboratory prototypes and other commodities (including the Arms Export Control Act, as amended and the United States Department of Commerce Export Administration Regulations). The transfer of such items may require a license from the cognizant agency of the United States Government and/or written assurances by LICENSEE that LICENSEE shall not export data or commodities to certain foreign countries without prior approval of such agency. M.I.T. neither represents that a license shall not be required nor that, if required, it shall be issued.

10 - NON-USE OF NAMES

LICENSEE shall not use the names or trademarks of the Massachusetts Institute of Technology or Lincoln Laboratory, nor any adaptation thereof, nor the names of any of their employees, in any advertising, promotional or sales literature without prior written consent obtained from M.I.T., or said employee, in each case, except that LICENSEE may state that it is licensed by M.I.T. under one or more of the patents and/or applications comprising the PATENT RIGHTS.

***** CONFIDENTIAL PORTIONS OMITTED AND FILED SEPARATELY WITH THE COMMISSION**

PARAGRAPH 13.6

13.6 *[NOTE: As amended in the Eighth Amendment to the MIT Agreement.]* Upon termination of this Agreement for any reason, any sublicensee not then in default shall have the right to seek a license from M.I.T. M.I.T. agrees to negotiate such licenses in good faith under reasonable terms and conditions. In addition, in the event that M.I.T. terminates this Agreement pursuant to Paragraph 13.1, 13.2, or 13.3, each sublicense granted by LICENSEE to a sublicensee not then in default will survive such termination (as a direct license from M.I.T.), provided that such direct license shall be subject to the same non-financial terms and conditions as those in this Agreement and such sublicensee (or if there is at such time more than one such sublicensee, such sublicensees severally and jointly) shall be required to make any annual fees due pursuant to Paragraph 4.1(b) and each such sublicensee shall be required to make any monetary payment(s) that, had this Agreement not been terminated, LICENSEE would have been required to make under this Agreement as a result of the activities of such sublicensee. Each such sublicensee shall be an intended third-party beneficiary of the preceding sentence.

Copy of Selected Provisions from the Utah Agreement

4.3 For each SUBLICENSE granted by LICENSEE under the terms of this AGREEMENT, LICENSEE shall pay to LICENSOR (i) a sublicense fee of twenty thousand dollars ($20,000) within thirty (30) days of execution of each sublicense and (ii) an annual sublicense fee of ten thousand dollars ($10,000) for each year (excluding the first year) that such sublicense is in effect, payable within thirty (30) days of each anniversary of the effective date of such sublicense agreement.

6.2 As consideration for the license under this AGREEMENT, LICENSEE shall pay to LICENSOR an annual maintenance fee of twenty thousand dollars ($20,000) on or before each anniversary of the EFFECTIVE DATE of this AGREEMENT.

13.1 If LICENSEE should: (a) fail to deliver to LICENSOR any statement or report required hereunder when due (except where such payment is being contested in good faith); (b) fail to make any payment at the time that the same should be due; (c) violate or fail to perform any covenant, condition, or undertaking of the AGREEMENT to be performed by it hereunder; or (d) file a bankruptcy action, or have a bankruptcy action against it (which action remains undismissed for a period of sixty (60) days), or become insolvent; enter into a composition with creditors or have a receiver appointed for it; then LICENSOR may give written notice of such default, and its intent to terminate this AGREEMENT, to LICENSEE. If LICENSEE should fail to cure such default within thirty (30) days of such notice, the rights, privileges, and license granted hereunder shall automatically terminate; provided, however, that the cure period may be extended by sixty (60) days if LICENSEE conveys a written statement of its intent and plan to cure such default, and such plan is accepted by the LICENSOR, within thirty (30) days of the automatic termination date.

13.2 If LICENSEE shall cease to carry on its business with respect to the rights granted in this AGREEMENT, this AGREEMENT shall terminate upon thirty (30) days written notice by LICENSOR.

13.4 *[NOTE: As amended in the (first) Amendment (dated February 22, 2007) to the Utah Agreement.]* Notwithstanding anything to the contrary in this AGREEMENT, in the event that LICENSOR terminates this AGREEMENT pursuant to Section 13.1 or 13.2, each sublicense granted by LICENSEE to a SUBLICENSEE then in good standing under the terms of its sublicense agreement will survive such termination (as a direct license from LICENSOR), provided that (a) such direct license shall be subject to the same non-financial terms and conditions as those in this AGREEMENT, and LICENSOR shall not have any obligations to such SUBLICENSEE other than LICENSOR's obligations to LICENSEE as set forth herein; (b) such SUBLICENSEE (or if there is at such time more than one such SUBLICENSEE, such SUBLICENSEES severally and jointly) shall be required to make any annual maintenance payments due pursuant to Section 6.2; and (c) each such SUBLICENSEE shall be required to make any monetary payment(s) that, had this AGREEMENT not been terminated, LICENSEE would have been required to make under this AGREEMENT as a result of the license to, or activities of, such SUBLICENSEE, including without limitation the annual sublicensee fees due pursuant to Section 4.3(ii) with respect to such SUBLICENSEE (which for clarity shall continue notwithstanding the conversion of such SUBLICENSEE's sublicense to a direct license from LICENSOR). Each such SUBLICENSEE shall be an intended third-party beneficiary of this Section 13.4.

Exhibit 10.2

NOTE: Portions of this Exhibit are the subject of a Confidential Treatment Request by the Registrant to the Securities and Exchange Commission (the "Commission"). Such portions have been redacted and are marked with a "[***]" in place of the redacted language. The redacted information has been filed separately with the Commission.

Sangamo BioSciences, Inc.
Point Richmond Tech Center
501 Canal Blvd., Suite A100
Richmond, CA 94804
510-970-6000 (Tel)
510-236-8951(Fax)

Expressing Life

February 25, 2008

David A. Smoller, Ph.D.
President
Biotechnology Business Unit
Sigma-Aldrich Co.
3050 Spruce Street,
St. Louis, MO 63103

Re: License Agreement—Genentech Custom Project

Dear Dave:

In connection with the License Agreement dated July 10, 2007 (the "Agreement"), by and between Sangamo BioSciences, Inc. ("Sangamo") and Sigma-Aldrich Co. ("Sigma"), as amended, Sigma and Sangamo hereby agree as set forth below.

1. Pursuant to a certain Research and License Agreement, effective as of April 27, 2007 (the "Existing Sangamo/Genentech Agreement"), Sangamo is obligated to perform certain custom project services for Genentech, Inc. ("Genentech") with respect to [***] named in such Existing Sangamo/Genentech Agreement. This confirms that as between Sigma and Sangamo, Sangamo's rights and obligations under the Existing Sangamo/Genentech Agreement are as set out in Section 6.1(a) of the Agreement and in Sections 6, 7 and 8 of this letter agreement.

2. Genentech desires that certain additional custom services projects be performed with respect to additional targets to be selected by Genentech ("Additional Services").

3. Under Sections 6.1(b) and (c) of the Agreement, Sigma (and not Sangamo) has the right to enter into the contractual relationship with Genentech with respect to such Additional Services. Notwithstanding the foregoing, in light of the relationship between Genentech and Sangamo under the Existing Sangamo/Genentech Agreement and for the sake of expediency, Sigma and Sangamo agree that Sangamo (and not Sigma) will enter into an agreement with Genentech to perform the Additional Services (the "New Sangamo/Genentech Agreement"), as enabled by and in accordance with the provisions of this letter agreement. An unexecuted copy

of the final version of the New Sangamo/Genentech Agreement is attached to this letter agreement as Exhibit A. The Existing Sangamo/Genentech Agreement and the New Sangamo/Genentech Agreement are referred to collectively as the "Sangamo/Genentech Agreements."

4. Sangamo and Sigma agree that [***]

5. The foregoing is not intended to limit Sangamo's obligation, other than to the extent provided in any Assumption Agreement(s), under the New Sangamo/Genentech Agreement to perform the Additional Services or Sangamo's obligation under the Agreement to perform certain activities with respect to custom services projects in the Field generally, including without limitation the Manufacture and supply of Active Supplied ZFNs and/or Modified Cell Lines.

6. Notwithstanding the exclusive nature of any licenses granted to Sigma in the Agreement or any other terms of the Agreement, Sigma agrees that Sangamo is permitted to grant the rights and licenses to Genentech that are specified in the New Sangamo/Genentech Agreement (including without limitation the licenses set forth in Sections 5.1(a) and 5.1(d) therein) and otherwise to perform Sangamo's obligations that are set forth in the New Sangamo/Genentech Agreement, and the grant of such licenses and performance of such obligations do not violate the terms of the Agreement.

7. Sigma confirms that Sangamo's grant of an exclusive license to Sigma in the Agreement was made expressly subject to the rights granted to Genentech in the Existing Sangamo/Genentech Agreement, and, as a result, Sangamo is permitted to perform Sangamo's obligations that are set forth in the Existing Sangamo/Genentech Agreement and the performance of such obligations does not violate the terms of the Agreement.

8. Without limiting the provisions of this letter agreement:

(a) Subject to the other terms of this Section 8(a), Sigma hereby grants to Sangamo a non-exclusive, worldwide, sublicensable license, under the Sigma IP Rights (as defined below), (i) to make, use and import ZFN Reagents (as defined in the Sangamo/Genentech Agreements) (and any associated expression plasmids provided by Sangamo to Genentech under the Sangamo/Genentech Agreements) solely for the purpose of altering the genomic DNA of any of the Designated Genes (as defined in the Sangamo/Genentech Agreements) in a cell line to create ZFN Modified Cell Lines (as defined in the Sangamo/Genentech Agreements); (ii) to alter the genomic DNA of any of the Designated Genes in a cell line to create Modified Cell Lines (as defined in the Sangamo/Genentech Agreements); and (iii) to make, use and import Modified Cell Lines created under clauses (i) and (ii) solely for the purpose of making Licensed Products (as defined in the Sangamo/Genentech Agreements). The license set forth in (i)-(iii) of the previous sentence shall terminate with respect to a particular Designated Gene immediately upon the termination of the license granted by Sangamo to Genentech with respect to such Designated Gene, as set forth in the applicable Sangamo/Genentech Agreement. For the purpose of this letter agreement, "Sigma IP Rights" means Sigma's intellectual property rights in (A) Know-How (as defined in the Sangamo/Genentech Agreements) that is Controlled by (as defined in the Sangamo/Genentech Agreements *mutatis mutandis*) Sigma, existing as of the effective

date of the Agreement or thereafter, to the extent necessary or reasonably useful to make or use (including for validation purposes) ZFN Reagents and/or ZFN Modified Cell Lines or (B) Patents (as defined in the Sangamo/Genentech Agreements) that are Controlled by Sigma, existing as of the effective date of the Agreement or thereafter, having one or more claims that encompass ZFN Reagents and/or ZFN Modified Cell Lines and/or the making and/or use of ZFN Reagents and/or ZFN Modified Cell Lines. To the extent that the foregoing license includes rights that are expressly licensed to Sangamo under the Agreement, the foregoing license is intended merely to confirm such rights and shall not be construed as limiting any licenses granted to Sangamo under the Agreement. To the extent that the foregoing license includes rights that are not expressly licensed to Sangamo under the Agreement, Sangamo shall have the right to grant sublicenses under such rights solely to Genentech, and Sangamo (but, for clarity, not Genentech) agrees to practice such rights solely for the purpose of performing its obligations under the Sangamo/Genentech Agreements.

(b) [***]

(c) [***]

(d) [***]

(e) To the extent that Genentech receives, pursuant to each of the Sangamo/Genentech Agreements, a sublicense under any license granted by Sigma to Sangamo under the Agreement or under this letter agreement, any such sublicense may be further sublicensed by Genentech to multiple tiers of sublicensees, and such sublicense (including any further sublicenses thereunder) shall survive the termination of the Agreement, this letter agreement, or Sangamo's license rights under the foregoing agreements, provided that Genentech is not then in default under the applicable Sangamo/Genentech Agreement.

9. Sigma and Sangamo agree:

(a) Sangamo shall pay to Sigma [***] of each of the following payments received by Sangamo from Genentech under the New Sangamo/Genentech Agreement:

(i) [***]

(ii) [***]

(iii) [***]

(iv) [***]

(b) Payments by Sangamo under Section 9(a) of this letter agreement shall be made within [***] of Sangamo's receipt of the relevant payment from Genentech. Sections 7.11-7.15 of the Agreement shall apply to all payments made under this letter agreement.

(c) The portion of the Genentech payments described in Section 9(a) of this letter agreement that are retained by Sangamo (i.e., [***] of such payments) shall be deemed to fully satisfy Sigma's obligations under Section 7.7 of the Agreement.

(d) Solely for the purpose of Section 7.5 of the Agreement, the portion of the Genentech payments described in Section 9(a) of this letter agreement that is retained by Sangamo (i.e., [***] of such payments) shall be deemed to be royalty payments received by Sangamo and shall be deemed to be in respect of sales occurring in the calendar quarter in which Sangamo received such payments from Genentech. For clarity, such Genentech payments described in Section 9(a) of this letter agreement shall not constitute Sublicensing Revenue for purposes of the Agreement.

(e) Sangamo shall use Diligent Efforts (as defined in the Agreement) to promptly bill and collect amounts due Sangamo pursuant to Sections 3.2, 3.3, 3.4 and 3.5 of the New Sangamo/Genentech Agreement.

(f) Any Custom Product Deliverables provided by Sangamo to Genentech under the New Sangamo/Genentech Agreement shall count towards the [***], as set forth in Section 6.2(b) of the Agreement. Sigma shall owe the payment(s) specified in Section 6.2(b) of the Agreement if the Custom Product Deliverables provided by Sangamo to Genentech under the New Sangamo/Genentech Agreement causes Sangamo to exceed such maximum.

(g) Notwithstanding anything to the contrary herein, Sangamo shall retain one hundred percent (100%) of all payments made to Sangamo under the Existing Sangamo/Genentech Agreement.

10. Sangamo and Sigma further agree:

(a) For the avoidance of doubt, the Subject Matter (as defined in Section 4.3(a) of the New Sangamo/Genentech Agreement) shall be deemed to be a "Sangamo Improvement" pursuant to the Agreement, and any resulting patent or patent application that claims such Subject Matter shall be deemed to be a "Sangamo Patent" and included within "Sangamo Technology" pursuant to the Agreement.

(b) For the avoidance of doubt, the obligation of Sangamo to indemnify, defend and hold Sigma harmless pursuant to Section 12.1(d) of the Agreement includes obligations owed by Sangamo to Genentech pursuant to the Sangamo/Genentech Agreements.

(c) Sangamo further agrees that, solely for the purposes of evaluating whether Sangamo is in breach of its obligations under the Agreement and determining Sangamo's liability therefor, Sangamo's obligation to perform the Research (as defined in the New Sangamo/Genentech Agreement) for Genentech shall be deemed to be a "collaborative service reasonably necessary for the performance by Sigma of the Custom Projects," as such phrase is used in Section 6.2 of the Agreement.

(d) Notwithstanding any provision of the Agreement to the contrary, Sangamo (and not Sigma) shall be responsible for paying all fees, milestones, royalties and other compensation owed to Third Parties pursuant to Third Party Licenses identified in Exhibit B of the Agreement on account of the grant to Genentech of the licenses set forth in the New Sangamo/Genentech Agreement, or the (ii) the generation, development and/or commercialization of Licensed Products (as defined in the New Sangamo/Genentech Agreement) by Genentech.

(e) Sangamo will promptly provide to Sigma a copy of all notices received by Sangamo from Genentech pursuant to the New Sangamo/Genentech Agreement with respect to the Additional Services to the extent such obligations involve the performance of a custom service project in the Field for Genentech.

(f) Prior to providing any notice to Genentech under Section 2.1(b) of the New Sangamo/Genentech Agreement with respect to the Additional Services, to the extent such obligations involve the performance of a custom service project in the Field for Genentech, Sangamo will first review such notice with Sigma and consider any comments of Sigma in good faith.

11. As between Sangamo and Sigma, the following information is the Confidential Information of Sangamo under the Agreement (whether or not so marked) and may only be used by Sigma for the benefit of Genentech: (a) the New Sangamo/Genentech Agreement, including the version attached to this letter agreement as Exhibit A and any earlier drafts provided by Sangamo to Sigma; (b) the Existing Sangamo/Genentech Agreement, a copy of which was provided by Sangamo to Sigma; (c) any notices provided by Sangamo to Sigma under Sections 10(e) or 10(f) of this letter agreement; and (d) any other Confidential Information (as defined in the Sangamo/Genentech Agreements) of Genentech provided by Sangamo to Sigma in connection with either of the Sangamo/Genentech Agreements).

12. The Agreement is hereby amended to the extent necessary to implement the provisions of this letter agreement. Sangamo and Sigma agree that Genentech is an express third party beneficiary of (with the right to enforce) such provisions (other than the provisions in Sections 9 and 10 of this letter agreement), whether or not Sangamo shall have first undertaken the enforcement thereof.

Any capitalized term used in this letter agreement that is not defined herein shall have the meaning given to such term in the Agreement.

Please confirm Sigma's acknowledgment and agreement by signing below.

Sincerely,

/s/ Edward Lanphier
Edward Lanphier
President and Chief Executive Officer

Acknowledged and Agreed:

Sigma-Aldrich Co.

By: /s/ David A. Smoller
David A. Smoller, Ph.D.
President, Biotechnology Business Unit

Exhibit A

New Sangamo/Genentech Agreement

(ATTACHED)

Exhibit 31.1

CERTIFICATION

I, Edward O. Lanphier II, certify that:

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

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

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

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

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

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

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

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

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

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

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

Date: May 9, 2008

/s/ Edward O. Lanphier II
Edward O. Lanphier II
President and Chief Executive Officer

Exhibit 31.2

CERTIFICATION

I, H. Ward Wolff, certify that:

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

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

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

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

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

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

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

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

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

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

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

Date: May 9, 2008

/s/ H. Ward Wolff

H. Ward Wolff
Executive Vice President and Chief Financial Officer
(Principal Financial and Accounting Officer)

Exhibit 32.1

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

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

(1) the Quarterly Report of the Company on Form 10-Q for the quarterly period ended March 31, 2008, as filed with the Securities and Exchange Commission (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

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

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

Date: May 9, 2008

/s/ H. Ward Wolff
H. Ward Wolff
Executive Vice President and Chief Financial Officer
(Principal Financial and Accounting Officer)

Date: May 9, 2008