SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8 REGISTRATION STATEMENT

Under The Securities Act of 1933

SANGAMO BIOSCIENCES, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

68-0359556 (IRS Employer Identification No.)

501 Canal Boulevard, Suite A100 Richmond, California 94804 (Address of principal executive offices) (Zip Code)

Sangamo BioSciences, Inc. 2000 Stock Incentive Plan Sangamo BioSciences, Inc. 2000 Employee Stock Purchase Plan Gendaq Limited 2001 Enterprise Management Incentive Share Option Plan (Full title of the Plans)

Edward O. Lanphier II President and Chief Executive Officer Sangamo BioSciences, Inc. 501 Canal Boulevard, Suite A100 Richmond, California 94804 (Name and address of agent for service) (510) 970-6000 (Telephone number, including area code, of agent for service)

This Post-Effective Amendment No. 1 to the Registration Statement shall become effective immediately upon filing with the Securities and Exchange commission in accordance with Section 8(a) of the Securities Act of 1933, as amended, and Rule 462 thereunder.

REALLOCATION

On July 5, 2001, Sangamo BioSciences, Inc. (the "Registrant") registered 1,121,938 shares of Common Stock in the aggregate, for issuance under the Registrant's 2000 Stock Incentive Plan, the Registrant's 2000 Employee Stock Purchase Plan and the Gendaq Limited 2001 Enterprise Management Incentive Share Option Plan (collectively, the "Plans") on Form S-8 Registration Statement Number 333-64642. Those shares were allocated among the Plans as follows: 775,123 shares under the Registrant's 2000 Stock Incentive Plan, 221,463 under the Registrant's 2000 Employee Stock Purchase Plan and 125,352 under the Gendaq Limited 2001 Enterprise Management Incentive Share Option Plan. The Registrant is hereby reallocating 31,906 of the 125,352 shares previously registered under the Gendaq Limited 2001 Enterprise Management Incentive Share Option Plan to be registered under individual written compensation agreements, as described in more detail below. Such reallocation is to be effective immediately upon the filing of this Post-Effective Amendment.

Registrant hereby incorporates all of the information contained in the Registration Statement and supplements it with the following information:

The following individuals entered into written compensation agreements with Gendaq Limited which provided for the grant of an option to purchase ordinary shares of Gendaq Limited (collectively, the "Gendaq Options"). Pursuant to the acquisition of Gendaq Limited by the Registrant, the Gendaq Options are anticipated to be replaced by options to purchase common stock of the Registrant in the amounts specified below.

| Mr. Fotis Kafatos | 2,278 Shares |
|---------------------|---------------|
| | |
| Dr. Benjamin Miflin | 2,278 Shares |
| | |
| Mr. Inder M. Verma | 11,396 Shares |

Mr. Nam-Hai Chua

Mr. George Church

11,396 Shares

4,558 Shares

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8, and has duly caused this Post-Effective Amendment No. 1 to S-8 Registration Statement No. 333-64642 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Richmond, State of California, on this 24th day of July, 2001.

SANGAMO BIOSCIENCES, INC.

By:

/s/ EDWARD O. LANPHIER*

Edward O. Lanphier II President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS:

That each person whose signature appears below constitutes and appoints Edward O. Lanphier II, President and Chief Executive Officer, and Shawn K. Johnson, Director of Finance, and each of them, as such person's true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for such person and in such person's name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to file same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his or her substitutes, may lawfully do or cause to be done by virtue thereof.

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

| | Signature | Title | Date |
|------|--------------------------------------|--|---------------|
| | /s/ EDWARD O. LANPHIER* | President, Chief Executive Officer and Director (Principal Executive Officer) | July 24, 2001 |
| | Edward O. Lanphier II | | |
| | /s/ SHAWN K. JOHNSON* | Director of Finance (Principal Accounting Officer) | July 24, 2001 |
| | Shawn K. Johnson | • | |
| | /s/ HERBERT W. BOYER* | Director | July 24, 2001 |
| | Herbert W. Boyer, Ph.D. | - | |
| | /s/ WILLIAM G. GERBER* | Director | July 24, 2001 |
| | William G. Gerber, M.D. | - | |
| | /s/ JOHN W. LARSON* | Director | July 24, 2001 |
| | John W. Larson | | |
| | /s/ WILLIAM J. RUTTER* | Director | July 24, 2001 |
| | William J. Rutter, Ph.D. | - | |
| | /s/ MICHAEL C. WOOD* | Director | July 24, 2001 |
| | Michael C. Wood | • | |
| *by: | /s/ SHAWN K. JOHNSON* | | |
| _ | Shawn K. Johnson Attorney-in-fact | | |