

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549**

**POST EFFECTIVE AMENDMENT NO. 1 TO
FORM S-3**

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

**501 Canal Boulevard, Suite A100
Richmond, CA 94804
(510) 970-6000**

(Address, Including Zip Code, and Telephone Number,
Including Area Code, of Registrant's Principal Executive Offices)

**Edward O. Lanphier II
Sangamo BioSciences, Inc.
501 Canal Boulevard, Suite A100
Richmond, CA 94804
(510) 970-6000**

(Name, Address, Including Zip Code, and Telephone Number,
Including Area Code, of Agent for Service)

Copies to:

**John W. Larson, Esquire
Scott D. Karchmer, Esquire
Morgan, Lewis & Bockius LLP
One Market, Spear Street Tower
San Francisco, CA 94105
(415) 442-1000**

Approximate date of commencement of proposed sale to the public: Not applicable.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

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

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

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional class of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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 the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer
Non-accelerated filer (Do not check if a smaller reporting company)

Accelerated filer
Smaller reporting company

DEREGISTRATION OF SECURITIES

On April 27, 2007, Sangamo BioSciences, Inc. (the "Company") filed with the Securities and Exchange Commission a registration statement on Form S-3 (Registration No. 333-142425) (as amended and supplemented, the "Registration Statement"). The Registration Statement registered shares of common stock of the Company and warrants to purchase shares of common stock of the Company for an aggregate offering price not to exceed \$50,000,000.

The Company has decided to deregister all of the securities which are authorized for sale under the Registration Statement but which remain unsold to date. In accordance with an undertaking of the Company contained in the Registration Statement and as required by Item 512(a)(3) of Regulation S-K, the Company hereby files this post-effective amendment ("Post-Effective Amendment No. 1") to the Registration Statement to remove any of the securities of the Company being registered which remain unsold at the termination of the offering.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Company certifies that it has reasonable grounds to believe that it meets all the requirements for filings on Form S-3 and has duly caused this Post-Effective Amendment No. 1 to the Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized.

SANGAMO BIOSCIENCES, INC.

Richmond, California
Dated: June 17, 2009

By: /s/ Edward O. Lanphier II
Edward O. Lanphier II
President, Chief Executive Officer
and Director

Pursuant to the requirements of the Securities Act of 1933, as amended, this Post-Effective Amendment No. 1 to the Registration Statement has been signed below by H. Ward Wolff and Edward O. Lanphier II for himself and as attorney-in-fact for each of the other persons named below, in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Edward O. Lanphier II</u> Edward O. Lanphier II	President, Chief Executive Officer and Director (Principal Executive Officer)	June 17, 2009
<u>/s/ H. Ward Wolff</u> H. Ward Wolff	Executive Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)	June 17, 2009
<u>*</u> Paul B. Cleveland	Director	June 17, 2009
<u>*</u> William G. Gerber, M.D.	Director	June 17, 2009
<u>*</u> John W. Larson	Director	June 17, 2009
<u>*</u> Steven J. Mento, Ph.D.	Director	June 17, 2009
<u>*</u> Thomas G. Wiggins	Director	June 17, 2009

* By: /s/ Edward O. Lanphier II
Edward O. Lanphier II,
Attorney-in-fact

Exhibit Index

<u>Exhibit No.</u>	<u>Exhibit Title</u>
24.1	Power of Attorney (incorporated by reference to Exhibit 24.3 to the Company's Registration Statement on Form S-3 (Registration No. 333-142425) filed April 27, 2007).