

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

**SCHEDULE 13G**

Under the Securities Exchange Act of 1934  
(Amendment No. )\*

**SANGAMO BIOSCIENCES, INC.**

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(Name of Issuer)

**Common Stock, \$.01 par value per share**

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(Title of Class of Securities)

**800677106**

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(CUSIP Number)

**December 22, 2006**

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(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)
- Rule 13d-1(c)
- Rule 13d-1(d)

\*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

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CUSIP No.

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1. Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only)  
EDWARDS LIFESCIENCES CORPORATION  
33-4316614

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2. Check the Appropriate Box if a Member of a Group (See Instructions)

- (a)
  - (b)
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3. SEC Use Only

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4. Citizenship or Place of Organization  
Delaware

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Number of Shares Beneficially Owned by Each Reporting Person With	5.	Sole Voting Power 1,842,454
	6.	Shared Voting Power 0
	7.	Sole Dispositive Power 1,842,454
	8.	Shared Dispositive Power 0
9.	Aggregate Amount Beneficially Owned by Each Reporting Person 1,842,454	
10.	Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) <input type="radio"/>	
11.	Percent of Class Represented by Amount in Row (9) 5.26% based on 35,049,862 shares outstanding as of February 1, 2007.	
12.	Type of Reporting Person (See Instructions) CO	

Item 1.

- (a) Name of Issuer  
Sangamo Biosciences, Inc. (the "Issuer").
- (b) Address of Issuer's Principal Executive Offices  
501 Canal Boulevard, Suite A100, Richmond, California 94804.

Item 2.

- (a) Name of Person Filing  
This Statement is being filed by Edwards Lifesciences Corporation.
- (b) Address of Principal Business Office or, if none, Residence  
The address of the principal business office of Edwards Lifesciences Corporation is One Edwards Way, Irvine, California 92614.
- (c) Citizenship  
Edwards Lifesciences Corporation is a Delaware corporation.
- (d) Title of Class of Securities  
Common Stock, \$.01 par value per share (the "Shares")
- (e) CUSIP Number  
800677106

Item 3. If this statement is filed pursuant to §§240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:

- (a)  Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o).
- (b)  Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c).

- (c) o Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c).
- (d) o Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C 80a-8).
- (e) o An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E);
- (f) o An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F);
- (g) o A parent holding company or control person in accordance with § 240.13d-1(b)(1)(ii)(G);
- (h) o A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- (i) o A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
- (j) o Group, in accordance with §240.13d-1(b)(1)(ii)(J).

This Item 3 is not applicable.

Item 4. Ownership

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

- (a) Amount beneficially owned:

As of the date hereof, Edwards Lifesciences Corporation is the beneficial owner of 1,842,454 Shares.

- (b) Percent of class:

The number of Shares beneficially owned by Edwards Lifesciences Corporation constitutes approximately 5.26% of the total number of Shares outstanding as of February 1, 2007 (based upon information provided by the Issuer in its most recently-filed quarterly report on Form 10-K, there were 35,049,862 Shares outstanding as of February 1, 2007).

- (c) Number of shares as to which the person has:

Edwards Lifesciences Corporation:

- (i) Sole power to vote or to direct the vote  
1,842,454

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- (ii) Shared power to vote or to direct the vote  
0

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- (iii) Sole power to dispose or to direct the disposition of  
1,842,454

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- (iv) Shared power to dispose or to direct the disposition of  
0

Item 5. Ownership of Five Percent or Less of a Class

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following o.

This Item 5 is not applicable.

Item 6. Ownership of More than Five Percent on Behalf of Another Person

This Item 6 is not applicable.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company

See disclosure in Item 2 hereof.

Item 8. Identification and Classification of Members of the Group

This Item 8 is not applicable.

Item 9. Notice of Dissolution of Group

This Item 9 is not applicable.

Item 10. Certification

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

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**Signature**

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: April 2, 2007

EDWARDS LIFESCIENCES CORPORATION

By: /s/ Jay P. Wertheim

Name:

Jay P. Wertheim

Title:

Vice President, Associate General Counsel  
and Secretary

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