Via Facsimile and U.S. Mail Mail Stop 4720

November 4, 2009

Mr. Edward O. Lanphier II President and Chief Executive Officer Sangamo Biosciences, Inc. 501 Canal Blvd, Suite A100 Richmond, California 94804

Re: Sangamo Biosciences, Inc.

Form 10-K for the Fiscal Year Ended December 31, 2008 Filed on March 3, 2009 Definitive Proxy Statement on Schedule 14A Filed on April 21, 2009 Form 10-Q for the Quarterly Period Ended March 31, 2009 Filed on May 5, 2009 Form 10-Q for the Quarterly Period Ended June 30, 2009 Filed on August 3, 2009 Filed No. 000-30171

Dear Mr. Lanphier:

We have reviewed your filings and have the following comments. In our comments, we ask you to provide us with information to better understand your disclosure. Where a comment requests you to revise disclosure, the information you provide should show us what the revised disclosure will look like and identify the annual or quarterly filing, as applicable, in which you intend to first include it. If you do not believe that revised disclosure is necessary, explain the reason in your response. After reviewing the information provided, we may raise additional comments and/or request that you amend your filing.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for the fiscal year ended December 31, 2008

Business, page 4

1. We note your statement here and elsewhere in your 10-K that, "We are the leader in research, development and commercialization of zinc finger DNA-binding proteins." In light of your disclosure that you currently have no marketed products and that there is significant competition in the industry, please provide a basis for your statements that you are the leader in this industry, or alternatively, revise this statement.

Corporate Relationships

Enabling Technology Programs and Partners, page 15

- 2. Please expand your disclosure of the Pfizer agreements to provide the amount of remaining funding, if any, that you may receive from Pfizer under the 2004 research collaboration agreement.
- 3. With respect to your agreements with Genentech, OMT and La Roche, described on pages 16-17, please expand your disclosure to provide all of the material terms of these agreements, including the amount of any upfront and access fees; a range of royalty rates; aggregate milestones; any other material payments specified; usage restrictions; exclusivity provisions; obligations/rights to defend; other rights obtained and material obligations that must be met to keep the agreement in place; duration and termination provisions.
- 4. We note that you have included as exhibits various license agreements with Johnson & Johnson, the Massachusetts Institute of Technology, the Johns Hopkins University, and the Scripps Research Institute. However, it does not appear that you have described the material terms of each of these agreements in full. Therefore, please expand your disclosure to describe the material terms of each of these agreements, including, but not limited to any payment provisions, a range of royalty rates, aggregate milestones, usage restrictions, exclusivity provisions, obligations/rights to defend, other rights obtained and material obligations that must be met to keep the agreement in place, duration and termination provisions.
- 5. In addition, to the extent that any of the agreements referenced in your discussion of intellectual property on page 18 are material, including agreements with Harvard University, the Medical Research Council, the California Institute of Technology, City of Hope and the University of Utah, please file these as exhibits as required by Item 601 of Regulation S-K and provide the material terms of each.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Critical Accounting Estimates, page 43

6. Your referral to disclosure in Note 1 of the financial statements does not meet the guidance regarding disclosure about critical accounting estimates contained in Release FR-72. As noted in Section V of FR-72, disclosure of critical accounting estimates should supplement the description of accounting policies already disclosed in the notes to the financial statements and provide greater insight in the quality and variability of information regarding financial condition and operating performance. Please revise to provide these disclosures for those accounting estimates you deem critical.

Consolidated Financial Statements

Notes to Consolidated Financial Statements

Note 1 – Organization and Summary of Significant Accounting Policies, page 57

Revenue Recognition, page 59

7. Please disclose your accounting policy for sublicense payments, specifically as it relates to the minimum sublicensing payments totaling up to \$25.3 million over 11 years under the Dow AgroSciences LLC agreement.

Note 3 – Major Customers, Partnerships and Strategic Alliances

Agreement with Dow AgroSciences in Plant Agriculture, page 63

8. Please provide us your analysis supporting that the estimated performance period for the \$6 million commercial license fee paid in 2008 and the remaining research milestone payment of \$2.3 million is December 31, 2009. In your analysis, address the related sublicense agreement and minimum sublicense payments to be paid to you over the next 11 years and any performance obligations or services provided by you over the term of the entire license agreement.

Schedule 14A

2009 Cash Incentive Program, page 19

9. Please note that despite the fact you ultimately elected not to award incentive bonuses for 2008 that a discussion of the extent of achievement of the targets that were set for the named executive officers is still material to investors'

understanding of your compensation program. Please confirm that in you next proxy statement, in addition to disclosure similar to that you provided in your 2009 proxy statement, that you will provide a discussion of the extent of achievement of such targets, regardless of whether bonuses are ultimately awarded.

Forms 10-Q for the quarterly periods ended March 31, 2009 and June 30, 2009

Item 4 Controls and Procedures

(a) Evaluation of Disclosure Controls and Procedures

10. Your disclosure that "...disclosure controls and procedures as of the end of the period covered by this report were functioning effectively to provide reasonable assurance..." is unclear. Please revise your disclosure to state whether your principal executive and principal financial officer concluded that your disclosure controls and procedures were effective or not effective as of the end of the period covered by this report. If the principal executive and principal financial officer conclude that disclosure controls and procedures as of the end of the period covered by this report are effective at a reasonable assurance level, please revise your disclosure to clarify that your disclosure controls and procedures were designed to provide "reasonable assurance" that the controls and procedures will meet their objectives.

* * * *

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Your letter should key your responses to our comments. Detailed cover letters greatly facilitate our review. Please furnish your letter on EDGAR under the form type label CORRESP.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in your letter, a statement from the company acknowledging that:

• the company is responsible for the adequacy and accuracy of the disclosure in the filing;

- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comment on your filing.

Please contact Christine Allen, Staff Accountant, at (202) 551-3652 or Donald Abbott, Senior Staff Accountant, at (202) 551-3608 if you have any questions regarding the processing of your response as well as any questions regarding comments on the financial statements and related matters. You may contact Michael Rosenthall, Staff Attorney, at (202) 551-3674 or Daniel Greenspan, Special Counsel, at (202) 551-3623 with questions on any of the other comments. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg Senior Assistant Chief Accountant