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

DIVISION OF
CORPORATION FINANCE

January 13, 2014

Via E-Mail
Philip J. Young
President and CEO
AmpliPhi Biosciences Corporation
4870 Sadler Road, Suite 300
Glen Allen, Virginia 23060

Re: AmpliPhi Biosciences Corporation
Registration Statement on Form 10-12G
Filed December 16, 2013
File No. 000-23930

Dear Mr. Young:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

General

1. Please note that your registration statement will become effective by operation of law 60 days from the date you filed it and that you will then be responsible for filing reports required by Section 13 of the Securities Exchange Act of 1934, even if we have not completed the review process of your filing. If you do not wish to incur those obligations until all of the following issues are resolved, you should withdraw your registration statement and resubmit a new registration statement when you have revised your document

2. Please note that where we provide examples or references to portions of your filing to illustrate what we mean by our comments, they are examples and not exhaustive lists. If our comments are applicable to portions of the filings that we have not cited as examples, please make the appropriate changes elsewhere in the filing in accordance with our comments.

Item 1. Business
AmpliPhage-001: Lung Infections in Cystic Fibrosis (CF) Patients Caused by *P. aeruginosa*, page 5

3. Please revise your disclosure to explain what you mean by "clinical isolates," "phage titers," and "the MHRA" the first time you use each such term.

4. Please define the term "PaO 1," as used in the chart on page 7.

5. You state that you have demonstrated the effectiveness of phages in multiple preclinical studies. Please expand your disclosure to state whether you have conducted studies in addition to the three studies presented on pages 6 and 7 of your registration statement. If you have completed other studies, please describe whether the results of those other studies were consistent with the three studies described.

6. Please expand your description of the Institut Pasteur study described on page 6 of your registration statement to state whether the groups shown in the graphic constitute the full groups, i.e., that each group included eight mice, and, if not, disclose the actual size of the groups and whether the results pictured are a representative sample of the full group.

   In addition, please state whether the results of this study were statistically significant, disclose the p-values, and explain what those p-values measure.

7. Please expand your description of the Brompton Clinic study to disclose the size of each study group.

8. Please expand your description of the Institut Pasteur study described on page 7 of your registration statement to disclose the size of the groups and the p-values.

AmpliPhage- 004: Gastrointestinal (GI) Infection Caused by *C. difficile Infection (CDI)*, page 8

9. You state that deaths in the United States from *C. dificile* infections increased over 400%, with 90% of them occurring in hospitalized or confined patients over 65. Please expand this disclosure to provide an estimate of the size of the affected population.

Anti-Infective Treatments with Bacteriophages—Life Cycle of a Lytic Phage, page 10

10. Please explain what you mean by "lytic phage."

11. Please expand your disclosure to discuss the prior misunderstandings with respect to the biology of phages and how such misunderstanding impacted the development of bacteriophage technology.

12. Please identify the party that conducted the 2009 clinical trial for treatment of venous ulcers using phages.

13. Please revise your disclosure to discuss the status and indication of on-going clinical trials involving the use of phages and identify the parties conducting such trials.

Exclusive Channel Collaboration Agreement with Intrexon, page 13

14. Please expand your description of your Intrexon agreement in the Business section to disclose:
    - the technology access fee;
    - the milestone fees;
    - the range of royalties payable expressed as a percentage within ten percent (i.e., single digits, teens, twenties, etc.).

University of Leicester Development Agreements, page 14

15. Please expand your description of your Leicester agreements in the Business section to disclose:
    - the range of royalties payable expressed as a percentage within ten percent (i.e., single digits, teens, twenties, etc.); and
    - the aggregate amount of milestone payments payable under the agreement.

Sale of Assets to Celladon Corporation, page 15

16. Please expand your description of your Celladon agreement in the Business section to describe:
    - the 1.75% royalty and the option to cancel that royalty for a one-time payment of $1.75 million; and
    - the sublicense fee disclosed on page 50.

Intellectual Property, page 16

17. Please expand your description of your U.K. Health Protection Agency license agreement to describe the material terms of the agreement, and file a copy of that agreement as an exhibit to your registration statement.

Item 1A. Risk Factors
"We do not have a sales force and do not currently have plans to develop one." page 31

18. We note that this risk factor indicates that you do not have plans to develop a sales force. However, your disclosure at page 18 indicates that you expect to commence commercialization by building a sales and marketing organization. Accordingly, please

revise your disclosure in one or both places to clarify whether you intend to build an internal sales organization or to engage a third-party sales force.

"We will rely on third parties to conduct some clinical trials…," page 34

19. We note your disclosure in this risk factor that you may seek to conduct clinical trials outside of the United States. Please revise your disclosure to include a separate risk factor which highlights this disclosure and discusses any risks the Company may face as a result of the conduct of clinical trials outside of the United States. For example, you should discuss the possibility that the FDA may not accept the results of such trials and how such lack of acceptance could impact the regulatory approval process.

Risks Related to Our Common Stock

20. Please revise your risk factor disclosure to include a separate risk factor discussing the extent to which your common stock is characterized as a "penny stock" under Section 3(a)(51) of the Exchange Act and any risks the Company may face as a result. For example, you should highlight the steps that broker-dealers must take prior to effect transactions in penny stocks under Section 15(h) of the Exchange Act. You should also discuss the specific legal remedies available to investors in penny stocks if broker-dealers do not meet their obligations under the penny stock rules or if penny stock is sold in violation of the investor's rights or otherwise in a fraudulent manner.

"The price of our common stock has been and may continue to be volatile." page 40

21. We note your reference to your stock being volatile even if you are listed on the NYSE MKT. Please revise this risk factor:
    - to clarify that your stock is currently quoted on the OTC Markets and indicate the specific tier on which it current trades; and
    - to state whether you intend to apply to list your stock on the NYSE or other exchange.

"Maintaining and improving our financial controls and the requirements of being a public company…" page 42

22. Please revise this risk factor to clarify that should you be listed on an exchange other than the NYSE, then you would be subject to the rules of that exchange.

Item 5. Directors and Executive Officers, page 54

23. Please revise your registration statement to include the biographical information required by Item 401(e) of Regulation S-K for Mr. Harper.

Non-Employee Directors, page 55

24. Please expand your disclosure to discuss briefly the specific experience, qualifications, attributes or skills that led to the conclusion that each director should serve in that capacity pursuant to Item 401(e)(1) of Regulation S-K.

Item 6. Executive Compensation, page 56

25. In your next amendment, please include the information required by Item 402 of Regulation S-K for the fiscal years ended December 31, 2012 and 2013.

Item 15. Financial Statements and Exhibits
Statement of Operations, page F-3

26. Diluted net loss per share for 2013 reflects antidilution. Please tell us how loss per share for 2013 complies with ASC 260-10-45-17. Also provide the disclosure specified by ASC 260-10-50.

27. Tell us the supporting authoritative accounting literature that supports including dividend expense of preferred stock in net income (loss) or revise as necessary.

Statement of Stockholders' Equity, page F-4

28. The statement on page F-4 indicates 102,235,274 common shares outstanding as of September 30, 2013. You state on page 63 that as of December 6, 2013 10,528,505 shares of common stock were outstanding. Please reconcile and revise the disclosure as necessary.

Statement of Cash Flows, page F-5

29. It appears that "conversion of loan notes.." of $5,809,000 and $507,000 and "issuance of Series B Convertible Preferred Stock for loan notes" of $6,220,000 are not cash transactions and should not be included on the statement of cash flows but reported separately pursuant to ASC 230-10-50-3. Please revise or tell us why you believe no revision is necessary.

4. Collaborative and Other Agreements, page F-9

30. You state that, in March 2013, the Company entered into an Exclusive Channel Collaboration Agreement with Intrexon Corporation. In accordance with the agreement, the Company paid a one-time technology access fee to Intrexon of $3,000,000 in common stock. Please describe what methods, models and assumptions you used to determine the fair value of your common stock given as consideration for the fee. Include whether an independent valuation specialist was used and to what extent.

7. Stock Options and Warrants, page F-10

31. Some of the warrants appear to contain pricing variability features (section 10(e) of Exhibit 4.2). Due to the potential variable nature of the exercise price, please tell us, citing specific guidance in ASC 815-40 how you determined that the warrants are considered to be indexed to the Company's common stock. Refer to ASC 815-40-55-33. Tell us how you accounted for each issuance of warrants and disclose the fair value recognized and the assumptions used to determine fair value.

Consolidated Financial Statements For The Years Ended December 31, 2012 and 2011
Statement of Operations, page F-15

32. In June 2012 you sold all of your assets used in the gene therapy business for $3 million which it appears you have classified as licensing revenue.
    - Tell us why this amount should not be classified as discontinued operations in accordance with ASC 205-20 or as a gain on sale within other income.
    - On page F-25 you indicate the proceeds were $3 million. On page 50 you indicate the proceeds were $3.5 million. Please revise the disclosure to remove the inconsistency.
    - It appears that the cash received from this sale of assets is classified on the statement of cash flows as an operating cash flow but should be classified as an investing cash flow. Please revise or tell us why no revision is necessary.

33. Basic and diluted loss per share for 2011 of $0.08 should be shown in parentheses to indicate it is a loss.

9. Business Combinations, page F-26

34. You state that the Company acquired Special Phage Services on November 9, 2012 for $7.2 million and Biocontrol Limited on January 6, 2011 for $8.584 million. Consideration given for each acquisition was shares of your common stock. The transactions resulted in the recording of Goodwill in the amounts of $7.841 million and $9.726 million, respectively. In both acquisitions, it appears that the acquisition price is attributable primarily to rights to each company's "know-how, patents and phage libraries" and that neither company was generating revenue from a commercialized product. We have the following comments on these transactions:
    - Please tell us how you determined that each company met the definition of a "Business" under ASC 805-10-55 paragraphs 2 through 9.
    - Tell us why you have not identified, determined the fair value of and recorded the above described intangible assets and reduced goodwill accordingly. Tell us if any portion of the intangibles can be attributed to in-process research and development that should be separately identified, fair valued and recorded.
    - Describe what methods, models and assumptions you used to determine the fair value of your common stock given as consideration for the acquisition of the two

companies and how you valued Contingent Consideration. Include whether an independent valuation specialist was used and to what extent.
- Tell us what costs were incurred for each acquisition and where such costs were expensed in the Consolidated Statements of Operations.
- Disclose in this note the milestones which will result in release of the shares held in escrow.

35. It appears that the acquisition cost of $7.2 million for SPH Holdings is significant to total assets of the registrant at December 31, 2011 of $11.5 million as to require financial statements of SPH Holdings as specified by Rule 8-04 of Regulation S-X. Please provide the required audited financial statements or tell us why you believe financial statements are not required.

36. The statement of stockholders' equity indicates you issued 22,817,198 shares of common stock for Biocontrol on January 6, 2011 when total common shares outstanding at December 31, 2010 were 22,004,503. Expand your disclosure in this note to indicate your conclusion as to who the accounting acquirer was pursuant to ASC 805-40 and the basis for that conclusion.

Item 16. Exhibits and financial statement schedules.
(a) Exhibits, page II-5

37. Please file the agreements underlying your acquisitions of Biocontrol Limited in 2011 and Special Phage Holdings Pty Ltd. in 2012.

38. Please revise the footnotes to your Exhibit Index to indicate correctly which exhibits are management contracts or compensatory plans or arrangements and which are subject to your confidential treatment request.

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 the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. 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 responding to our comments, please provide a written 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.

You may contact James Peklenk at (202) 551-3661 or Lisa Vanjoske at (202) 551-3614 if you have questions regarding comments on the financial statements and related matters. Please contact Amy Reischauer at (202) 551-3793, Bryan Pitko at (202) 551-3203, or me at (202) 551-3715 with any other questions.

Sincerely,

/s/ Bryan Pitko for

Jeffrey P. Riedler
Assistant Director

cc: Via E-Mail
Stephen B. Thau
Morrison & Foerster LLP
755 Page Mill Road
Palo Alto, CA 94304-1018