



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

DIVISION OF
CORPORATION FINANCE

January 16, 2015

Via e-mail

Kim Thompson
Chief Executive Officer
Kraig Biocraft Laboratories, Inc.
120 N. Washington Square, Suite 805
Lansing, Michigan 48933

**Re: Kraig Biocraft Laboratories, Inc.
Amendment No. 1 to Registration Statement on Form S-1
Filed January 7, 2014
File No. 333-199820**

Dear Mr. Thompson:

We have reviewed your registration statement and have the following comments.

Risk Factors, page 4

1. We note your response to comment 1 of our letter dated November 20, 2014. Please revise, here or elsewhere as appropriate, to identify the risks associated with only registering 110 million shares of common stock, and the likelihood that you will not be able to access the full amount under the equity line due to the comparatively low number of shares that you are registering.

Existing stockholders could experience substantial dilution upon the issuance of Class A common stock pursuant to an equity line we have with Calm Seas Capital, page 5

2. We note your response to comment 5 of our letter dated November 20, 2014. However, other parts of your registration statement such as the Summary and Use of Proceeds continue to refer to the extension or renewal of the equity line financing. Please revise.

Selling Shareholder, page 14

3. Please revise to include the information contained in your response to comment 7 of our letter dated November 20, 2014 in your prospectus. Please note that prior comment 7 did not ask for a supplemental response. Please also ensure that your revised disclosure contains a discussion of the effect of your previous equity line financings on your stock price. We note that your supplemental response notes what your stock price range was in a given year but does not discuss any impact from your equity line financings.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 28

4. We note your revisions in response to comment 11 of our letter dated November 20, 2014. You appear to have presented the same information twice, and have not described the drivers behind changes in your general and administrative and professional fees in the three months or nine months ended September 30, 2014. Please revise.

Exhibits and Financial Statement Schedules, page 47

5. Your latest amendment did not include an updated consent from PS Stephenson & Co., P.C. Please note that you must include current auditor consents for each auditor that has audited financial statements included in your prospectus. Please file an updated consent for PS Stephenson, as well as M&K CPAs if necessary, with your next amendment.
6. We note your response to comment 14 of our letter dated November 20, 2014. Please note that Item 601(b)(10) of Regulation S-K allows for the omission of a material contract if the contract is "such as ordinarily accompanies the kind of business conducted by the registrant and its subsidiaries." It does not appear that the sale of protein-based fibers for commercial applications is ordinarily accompanied by extensive consulting agreements or agreements such as the Collaborative Yarn and Textile Development agreement, nor the \$450,000 per year support agreement that you have signed with Notre Dame, as disclosed on page 20. We re-issue comment 14 of our letter dated November 20, 2014.

You may contact Lisa Etheredge at (202)551-3424 or John Cash at (202)551-3768 if you have questions regarding comments on the financial statements and related matters. Please contact Leland Benton at (202)551-3791 or Craig Slivka at (202)551-4651 with any other questions.

Sincerely,

/s/ Craig Slivka, for

Pamela Long
Assistant Director

CC: Paul Simmons (*via e-mail*)
Ofsink, LLC