



1320 Centre Street, Suite 202  
Newton, MA 02459

Phone: 617-243-0060  
Fax: 617-243-0066

July 23, 2009

United States Securities and Exchange Commission  
Division of Corporation Finance  
100 F Street, N.E., Mail Stop 3030  
Washington, DC 20549

Attn: Geoffrey Kruczek

Re: Oculus Innovative Sciences, Inc.  
Registration Statement on Form S-1  
File No. 333-158539

Dear Mr. Kruczek:

I am securities counsel for Oculus Innovative Sciences, Inc. (the "Company"). I am responding to comments regarding the Form S-1, File No. 333-158539 (the "Registration Statement") contained in the letter from the staff of the Securities and Exchange Commission (the "Staff"), dated July 22, 2009.

Set forth below is the Company's response to the Staff's comments. The numbering of the response corresponds to the numbering of the comment in the letter from the Staff.

Risk Factors, page 2

Comment 1. We note your response to prior comment 3. Given that it is generally not appropriate to register for resale shares that are not outstanding that underlie another security that is not outstanding, please feel free to contact the staff for further guidance if you intend to do so in the future.

Response 1. The Company notes the Staff's comment.

Security Ownership.... page 9

Comment 2. Please refer to prior comment 9 in our letter to you dated July 20, 2009 regarding registration statement file number 333-157776 and update your table here as appropriate.

Response 2. The Company will comply with the Staff's comment. The applicable revised disclosure is attached hereto as Annex A and will be included in the prospectus filed by the Company pursuant to Rule 424, following effectiveness of the Registration Statement.

If you have further questions or comments, please feel free to contact us. We are happy to cooperate in any way we can.

Regards,

/s/ Amy M. Trombly

---

Annex A

SECURITY OWNERSHIP OF  
CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The following table sets forth certain information as of July 17, 2009, as to shares of our common stock beneficially owned by: (1) each person who is known by us to own beneficially more than 5% of our common stock, (2) each of our named executive officers listed in the summary compensation table, (3) each of our directors and (4) all of our directors and executive officers as a group.

We have determined beneficial ownership in accordance with the rules of the SEC. Except as indicated by the footnotes below, we believe, based on the information furnished to us, that the persons and entities named in the table below have sole voting and investment power with respect to all shares of common stock that they beneficially own, subject to applicable community property laws.

In computing the number of shares of common stock beneficially owned by a person and the percentage ownership of that person, we deemed outstanding shares of common stock subject to options held by that person that are currently exercisable or exercisable within 60 days after July 17, 2009. We did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other person.

Name of Beneficial Owner <sup>(1)</sup>	Number of Shares of Common Stock Beneficially Owned	Percentage of Common Stock Beneficially Owned <sup>(2)</sup>
<b>5% Stockholders:</b>		
Hojabr Alimi <sup>(3)</sup>	1,424,112	6.8%
Robert Burlingame <sup>(4)</sup>	1,755,486	8.4%
Seamus Burlingame <sup>(5)</sup>	1,580,504	7.7%
<b>Directors and Named Executive Officers:</b>		
Hojabr Alimi <sup>(3)</sup>	1,424,112	6.8%
Robert Miller <sup>(6)</sup>	169,460	*
James Schutz <sup>(7)</sup>	234,395	1.1%
Bruce Thornton <sup>(8)</sup>	141,407	*
Robert Burlingame <sup>(4)</sup>	1,755,486	10.1%
Richard Conley <sup>(9)</sup>	271,137	1.3%
Gregory French <sup>(10)</sup>	193,383	*
Jay Birnbaum <sup>(11)</sup>	73,334	*
Gregg Alton <sup>(12)</sup>	51,518	*
<b>All directors and executive officers as a group (9 persons)</b>	<b>4,314,232</b>	<b>19.5%</b>

\* Percentage of shares beneficially owned does not exceed one percent.

- (1) Unless otherwise stated, the address of each beneficial owner listed on the table is c/o Oculus Innovative Sciences, Inc., 1129 N. McDowell Blvd., Petaluma, California 94954.
  - (2) Based on 20,582,342 common shares issued and outstanding on July 17, 2009.
  - (3) Mr. Alimi is our President, Chief Executive Officer and Chairman of the Board of Directors. Mr. Alimi beneficially owns 1,011,250 shares of common stock and 412,862 shares of common stock issuable upon the exercise of options that are exercisable within 60 days of July 17, 2009.
-

- (4) Mr. Burlingame is a member of our Board of Directors. Mr. Burlingame beneficially owns 1,294,931 shares of common stock, 130,000 shares of common stock issuable upon the exercise of options that are exercisable within 60 days of July 17, 2009 and, 75,000 shares of common stock issuable upon exercise of warrants that are exercisable within 60 days of July 17, 2009. Additionally Mr. Burlingame may be deemed to hold 200,000 shares held by Vetericyn, Inc., a California corporation, and 55,555 shares held by Lytle Creek Industries, an entity of which Mr. Burlingame is a majority owner. Mr. Burlingame also holds warrants for 388,889 shares of common stock which may be exercised within 60 days of July 17, 2009, but only to the extent Mr. Burlingame would not, as a result of the exercise, beneficially own more than 4.99% of our outstanding common stock.
- (5) Seamus Burlingame is the son of Robert Burlingame, a member of our board of directors. Seamus Burlingame's beneficial ownership is comprised of 1,580,504 shares of common stock. Seamus Burlingame's address is c/o Burlingame Industries, Inc., 3546 N. Riverside Avenue, Rialto, CA 92377. Seamus Burlingame also holds warrants for 777,778 shares of common stock which may be exercised within 60 days of July 17, 2009, but only to the extent he would not, as a result of the exercise, beneficially own more than 4.99% of our outstanding common stock.
- (6) Mr. Miller is our Chief Financial Officer. Mr. Miller beneficially owns 60,000 shares of common stock which include 50,000 shares held by The Miller 2005 Grandchildren's Trust, for which Mr. Miller is a trustee. Mr. Miller also beneficially owns 109,460 shares of common stock issuable upon the exercise of options that are exercisable within 60 days of July 17, 2009. Mr. Miller is the beneficial owner and has shared power with Margaret Miller, in their capacities as trustee of The Miller 2005 Grandchildren's Trust, to vote and dispose of or direct the disposition of 128,605 shares, and Mr. Miller is the beneficial owner of and has the sole power to vote and dispose of or direct the disposition of 10,000 shares.
- (7) Mr. Schutz is our Vice President of Corporate Development, General Counsel, Corporate Secretary and a member of our Board of Directors. Mr. Schutz beneficially owns 10,000 shares of common stock and 224,395 shares of common stock issuable upon the exercise of options that are exercisable within 60 days of July 17, 2009.
- (8) Mr. Thornton is our Executive Vice President. Mr. Thornton beneficially owns 133,785 shares of common stock issuable upon the exercise of options that are exercisable within 60 days of July 17, 2009.
- (9) Mr. Conley is a member of our Board of Directors. Mr. Conley beneficially owns 42,650 shares of common stock and 228,487 shares of common stock issuable upon the exercise of options that are exercisable within 60 days of July 17, 2009.
- (10) Mr. French is a member of our Board of Directors. Mr. French beneficially owns 46,664 shares of common stock and 146,719 shares of common stock issuable upon the exercise of options that are exercisable within 60 days of July 17, 2009.
- (11) Mr. Birnbaum is a member of our Board of Directors. Mr. Birnbaum beneficially owns 73,334 shares of common stock issuable upon the exercise of options that are exercisable within 60 days of July 17, 2009.
- (12) Mr. Alton is a member of our Board of Directors. Mr. Alton beneficially owns 51,518 shares of common stock issuable upon the exercise of options that are exercisable within 60 days of July 17, 2009.

As of July 17, 2009, there are no arrangements known to management which may result in a change in control of our Company.