

January 25, 2007

Mail Stop 6010

Euan S. Thomson, Ph.D.  
Chief Executive Officer  
Accuray Incorporated  
1310 Chesapeake Terrace  
Sunnyvale California 94089

**Re: Accuray Incorporated  
Amendments No. 2 and 3 to Registration Statement on Form S-1  
Filed January 16, 2007 and January 23, 2007  
File No. 333-138662**

Dear Dr. Thomson:

We have the following comments to your filing. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not raise additional comments.

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.

The Offering, page 7

1. We note your response to prior comment 8 in our letter dated January 11, 2007 that you have received a firm commitment from the warrant holder to exercise his shares immediately prior to the closing of the offering. Please tell us if there is written and legal documentation of the warrant holder's obligation to exercise the warrants prior to the closing of the offering.

Risk Factors, page 11

It is difficult and costly to protect our intellectual property..., page 21

2. We note your new disclosure about the letter from AS&E regarding a potential intellectual property dispute. Please disclose the nature of the intellectual property at issue.

Principal and Selling Stockholders, page 109

3. Please identify the natural person(s) with voting or investment power over the shares held by each selling stockholder.

As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested supplemental information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact Kristin Lochhead at (202) 551-3664 or in her absence, Brian Cascio at (202) 551-3605 if you have questions regarding comments on the financial statements and related matters. Please contact Jay Mumford at (202) 551-3637 or me at (202) 551-3444 with any other questions.

Sincerely,

Perry Hindin  
Special Counsel

cc: Michael W. Hall, Esq.  
Laura I. Bushnell, Esq.  
Jean-Marc Corredor, Esq.