

March 22, 2006

VIA MAIL & EDGAR FILING

Mary K. Fraser
United States Securities and Exchange Commission
Division of Corporation Finance
450 Fifth Street, N.W. – Mail Stop 6010
Washington, DC 20549

Re: SEC Comment Letter Dated March 20, 2006
Arrowhead Research Corporation - Form S-3 Registration Statement
Filed March 9, 2006 - File No. 333-132310

Dear Ms. Fraser:

We have received your letter dated March 20, 2006, by fax in our office on March 20, 2006, detailing your review of the above-referenced filing Form S-3 filed on March 9, 2006 ("Form S-3"). This letter responds to your comments relating to such Form S-3. For your convenience, the subheadings and order of responses set forth below correspond with the subheadings and order set forth in the March 20, 2006 letter. Also, for your convenience, we included your comments in bold.

1. Please revise the signature page of your registration statement to identify and include the signature of your principal accounting officer/controller.

An amended Form S-3 has been filed via EDGAR concurrently with this letter, including a revised signature page that sets forth that Mr. Joseph T. Kingsley is the company's principal financial officer as well as the company's principal accounting officer.

We appreciate your efforts with respect to this matter. If you have any questions about our responses or would like to discuss any of our views further, please feel free to contact Jane Davidson, Vice President, Operations, or Joseph T. Kingsley, Chief Financial Officer, at 626-304-3400 on any matters.

Sincerely,

/s/ Dr. Leon Ekchian

Dr. Leon Ekchian
President

cc: Joseph T. Kingsley
Jane Davidson
Rachael Simonoff Wexler, Esq.