



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

DIVISION OF
CORPORATION FINANCE

April 24, 2012

Via E-mail

Christopher Anzalone
Chief Executive Officer
Arrowhead Research Corporation
225 South Lake Avenue, Suite 300
Pasadena, CA 91101

**Re: Arrowhead Research Corporation
Form 10-K for Fiscal Year Ended September 30, 2011
Filed December 20, 2011
File No. 000-21898**

Dear Mr. Anzalone:

We have completed our review of your filing. We remind you that our comments or changes to disclosure in response to our comments do not foreclose the Commission from taking any action with respect to the company or 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. 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 rules require.

Sincerely,

/s/ Jeffrey Riedler

Jeffrey Riedler
Assistant Director

cc: Ryan Murr
Ropes and Gray LLP
Three Embarcadero Center
San Francisco, CA 94111