

Mail Stop 6010

February 25, 2009

Mr. Peter Lawrence
Chief Executive Officer
ArQule, Inc.
19 Presidential Way
Woburn, Massachusetts 01801

**Re: ArQule, Inc.
Form 10-K
Filed March 17, 2008
Response filed February 24, 2009
File No. 000-21429**

Dear Mr. Lawrence:

We have completed our review of your Form 10-K and related filings and have no further comments at this time.

Sincerely,

Jeffrey P. Riedler
Assistant Director

cc: Richard E. Baltz
Andrea L. Mancuso
Arnold & Porter LLP
Fax: 703-720-7399