

Via Facsimile and U.S. Mail
Mail Stop 4720

March 16, 2010

Mr. Thomas R. Staab, II
Treasurer & Chief Financial Officer
Inspire Pharmaceuticals, Inc.
4222 Emperor Boulevard, Suite 200
Durham, NC 27703-8466

**Re: Inspire Pharmaceuticals, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2008
DEF 14A filed March 26, 2009
File No. 1-31577**

Dear Mr. Staab:

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

Sincerely,

Gus Rodriguez
Accounting Branch Chief