

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

November 13, 2013

<u>Via E-mail</u>
John S. Kovach
Chief Executive Officer and Chief Financial Officer
Lixte Biotechnology Holdings, Inc.
248 Route 25A, No. 2
East Setauket, New York 11733

Re: Lixte Biotechnology Holdings, Inc.

Annual Report on Form 10-K for the Fiscal Year ended December 31, 2012

Filed March 15, 2013 File No. 000-51476

Dear Mr. Kovach:

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/ Daniel Greenspan for

Jeffrey P. Riedler Assistant Director

cc: David L. Ficksman, Esq.
TroyGould

1801 Century Park East, Suite 1600

Los Angeles, CA 90067