



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 3561

September 20, 2017

Via E-mail

Sean E. George, Ph.D.
President and Chief Executive Officer
Invitae Corporation
1400 16th Street
San Francisco, CA 94103

**Re: Invitae Corporation
 Registration Statement on Form S-4
 Filed September 13, 2017
 File No. 333-220448**

Dear Mr. George:

This is to advise you that we have not reviewed and will not review your registration statement.

Please refer to Rules 460 and 461 regarding requests for acceleration. We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Please contact Hillary Daniels at (202) 551-3959 with any questions.

Sincerely,

/s/ David Link for

John Reynolds
Assistant Director
Office of Beverages, Apparel, and
Mining

cc: Patty M. DeGaetano, Esq.
 Pillsbury Winthrop Shaw Pittman LLP