



DIVISION OF  
CORPORATION FINANCE

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

June 29, 2012

Via E-mail

Carl W. Hull  
Chairman and Chief Executive Officer  
Gen-Probe Incorporated  
10210 Genetic Center Drive  
San Diego, CA 92121

**Re: Gen-Probe Incorporated**  
**Preliminary Proxy Statement on Schedule 14A**  
**Filed May 18, 2012**  
**File No. 000-49834**

Dear Mr. Hull:

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/ Russell Mancuso for

Amanda Ravitz  
Assistant Director

cc (via email): Brian J. McCarthy, Esq. – Skadden, Arps, Slate, Meagher & Flom LLP