



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

DIVISION OF
CORPORATION FINANCE

April 30, 2014

Via Email

Marc A. Stapley
Senior Vice President and
Chief Financial Officer
Illumina, Inc.
5200 Illumina Way
San Diego, California 92122

**Re: Illumina, Inc.
Form 10-K for the Fiscal Year Ended December 29, 2013
Filed February 18, 2014
File No. 001-35406**

Dear Mr. Stapley:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K for the Fiscal Year Ended December 29, 2013

Item 7. Management's Discussion and Analysis

Revenue, page 30

1. We see you acquired Verinata Health, Inc. in February 2013, Advanced Liquid Logic Inc. in July 2013 and NextBio in November 2013. Please revise future filings as appropriate to disclose and quantify how those acquisitions affected your revenues for the periods presented.

Gross Margin, page 31

2. We note your disclosure that acquisitions contributed to the decrease in your gross margin. Please revise future filings as appropriate to quantify how the acquisitions affected your gross margin for the periods presented.

Item 8. Financial Statements

Note 3. Acquisitions, page 61

3. Please tell us how you considered the disclosure required by FASB ASC 805-10-50-2(h)(1) and 50-3 related to the amounts of revenue and earnings included in the statement of operations since the acquisition date.

Note 5. Fair Value Measurements, page 66

4. We note from your disclosure in the paragraph following the table on page 66 that you determine the fair value of your debt securities based upon one or more valuations reported by your investment accounting and reporting service provider. You disclose that the investment service provider values the securities. Please tell us the nature and extent of the role played by the valuation expert and clarify the extent to which any statements are attributed to the valuation expert as opposed to your management. In this regard, we also refer you to the guidance provided in Question 233.02 of Division's C&DI to the Securities Act Rules which can be found at <http://www.sec.gov/divisions/corpfin/guidance/securitiesactrules-interps.htm>.

Note 11. Income Taxes, page 76

5. We note the reconciling item in your tax rate reconciliation on page 76 for *Impact of foreign operations*. Please tell us the nature of the significant components of this item (i.e., tax rate differentials and foreign tax credits) and any tax jurisdictions that represent a significant portion of the item.

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 Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Marc A. Stapley
Illumina, Inc.
April 30, 2014
Page 3

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to 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.

You may contact Andri Boerman, Staff Accountant, at (202) 551-3645, or Kate Tillan, Assistant Chief Accountant, at (202) 551-3604 if you have questions regarding comments on the financial statements and related matters. Please contact Tim Buchmiller at (202) 551-3635 or Jay Mumford at (202) 551-3637 with any other questions. You may also contact me at (202) 551-3671.

Sincerely,

/s/ Kate Tillan for

Martin James
Senior Assistant Chief Accountant