

COMPLETE GENOMICS INC  
Form 10-Q  
August 15, 2011  
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**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**Form 10-Q**

(Mark One)

**QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended June 30, 2011

OR

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number: 001-34939

**Complete Genomics, Inc.**

(Exact Name of Registrant as Specified in its Charter)

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**Delaware**  
(State or Other Jurisdiction of  
Incorporation or Organization)

**20-3226545**  
(I.R.S. Employer  
Identification No.)

**2071 Stierlin Court**

**Mountain View, California**  
(Address of Principal Executive Offices)

**94043**  
(Zip Code)

**(650) 943-2800**

(Registrant's Telephone Number, Including Area Code)

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer  Accelerated filer

Non-accelerated filer  (Do not check if a smaller reporting company) Smaller reporting company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

As of August 1, 2011, the number of outstanding shares of the registrant's common stock, par value \$0.001 per share, was 33,070,072.

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**COMPLETE GENOMICS, INC.**

**FORM 10-Q FOR THE QUARTER ENDED JUNE 30, 2011**

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	<b>December 31, June 30, 2011</b>	<b>December 31, December 31, 2010</b>
<b>(in thousands, except par value and share data)</b>		
<b>Assets</b>		
Current assets		
Cash and cash equivalents	\$ 82,757	\$ 68,918
Short-term investments	43,657	
Accounts receivable	7,263	4,943
Inventory	4,290	3,980
Prepaid expenses	775	1,101
Other current assets	73	78
<b>Total current assets</b>	<b>138,815</b>	<b>79,020</b>
Property and equipment, net	28,650	23,843
Other assets	900	297
<b>Total assets</b>	<b>\$ 168,365</b>	<b>\$ 103,160</b>
<b>Liabilities, Preferred Stock and Stockholders Equity</b>		
Current liabilities		
Accounts payable	\$ 6,283	\$ 3,066
Accrued liabilities	4,382	3,102
Notes payable, current	3,262	5,780
Deferred revenue	7,077	5,739
<b>Total current liabilities</b>	<b>21,004</b>	<b>17,687</b>
Notes payable, net of current	20,598	7,521
Deferred rent, net of current	3,935	4,316
<b>Total liabilities</b>	<b>45,537</b>	<b>29,524</b>
<b>Commitments and contingencies (Note 7)</b>		
Preferred stock, par value \$0.001 5,000,000 shares authorized and no shares outstanding at June 30, 2011 and December 31, 2010		
<b>Stockholders equity</b>		
Common stock, \$0.001 par value 300,000,000 shares authorized and 33,060,500 shares issued and outstanding at June 30, 2011; 300,000,000 shares authorized and 25,922,627 shares issued and outstanding at December 31, 2010		
	33	26
Additional paid-in capital	290,062	212,458
Accumulated deficit	(167,267)	(138,848)
<b>Total stockholders equity</b>	<b>122,828</b>	<b>73,636</b>

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Total liabilities, preferred stock and stockholders' equity	\$	168,365	\$	103,160
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See accompanying notes to condensed financial statements.

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**COMPLETE GENOMICS, INC.**  
**CONDENSED STATEMENTS OF OPERATIONS**  
**(UNAUDITED)**

	\$12,698	\$12,698	\$12,698	\$12,698
	<b>Three months ended</b>		<b>Six months ended</b>	
	<b>June 30,</b>		<b>June 30,</b>	
	<b>2011</b>	<b>2010</b>	<b>2011</b>	<b>2010</b>
	(in thousands, except share and per share data)			
Revenue	\$ 5,865	\$ 1,089	\$ 12,698	\$ 1,425
Costs and expenses:				
Costs of revenue	6,122		12,704	
Start-up production costs		4,908		8,985
Research and development	8,028	4,928	14,836	11,097
General and administrative	3,468	1,763	6,248	4,862
Sales and marketing	3,138	1,313	5,838	2,539
Total costs and expenses	20,756	12,912	39,626	27,483
Loss from operations	(14,891)	(11,823)	(26,928)	(26,058)
Interest expense	(810)	(833)	(1,150)	(1,144)
Interest and other income (expense), net	(258)	25	(341)	235
Net loss	\$ (15,959)	\$ (12,631)	\$ (28,419)	\$ (26,967)
Net loss per share basic and diluted	\$ (0.56)	\$ (13.93)	\$ (1.05)	\$ (45.09)
Weighted-average shares of common stock outstanding used in computing net loss per share basic and diluted	28,290,407	907,075	27,131,605	598,080

See accompanying notes to condensed financial statements.

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**COMPLETE GENOMICS, INC.**  
**CONDENSED STATEMENTS OF CASH FLOWS**  
**(UNAUDITED)**

	<b>Six months ended June 30, 2011      2010 (in thousands)</b>	
<b>Cash flows from operating activities</b>		
Net loss	\$ (28,419)	\$ (26,967)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	5,301	3,033
Amortization of debt issuance costs		130
Increase in inventory reserves	32	
Issuance of common stock to founders		1,840
Change in fair value of warrant liability	361	(235)
Stock-based compensation	1,567	889
Noncash interest expense related to notes payable	108	638
Loss on the disposal of property and equipment	8	36
Changes in operating assets and liabilities :		
Accounts receivable	(2,320)	134
Inventory	(342)	(1,885)
Prepaid expenses	326	4,577
Other current assets	5	41
Other assets	(366)	(62)
Accounts payable	1,019	1,226
Accrued liabilities	1,561	543
Deferred revenue	1,338	2,234
Deferred rent	(381)	(344)
Net cash used in operating activities	(20,202)	(14,172)
<b>Cash flows from investing activities</b>		
Purchases of available-for-sale securities	(43,657)	
Purchases of property and equipment	(7,822)	(15,700)
Purchase of patent	(250)	
Net cash used in investing activities	(51,729)	(15,700)

See accompanying notes to condensed financial statements.

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**COMPLETE GENOMICS, INC.**  
**CONDENSED STATEMENTS OF CASH FLOWS**  
**(UNAUDITED)**

	<b>Six months ended June 30, 2011      2010 (in thousands)</b>	
<b>Cash flows from financing activities</b>		
Proceeds from notes payable	20,000	22,121
Repayment of notes payable	(8,644)	(2,158)
Proceeds from issuance of convertible preferred stock, net of issuance costs		10,011
Proceeds from issuance of common stock, net of issuance costs	73,932	
Exercise of stock options	482	105
<b>Net cash provided by financing activities</b>	<b>85,770</b>	<b>30,079</b>
<b>Net increase in cash and cash equivalents</b>	<b>13,839</b>	<b>207</b>
<b>Cash and cash equivalents at beginning of period</b>	<b>68,918</b>	<b>7,765</b>
<b>Cash and cash equivalents at end of period</b>	<b>\$ 82,757</b>	<b>\$ 7,972</b>
<b>Supplemental disclosure of cash flow information</b>		
Cash paid for interest	\$ 953	\$ 369
<b>Supplemental disclosure of noncash investing and financing activities</b>		
Issuance of warrants for common stock in connection with debt	\$ 987	\$ 5,372
Acquisition of property and equipment in accounts payable	\$ 2,198	\$ 938
Reclassification of warrant liability to additional-paid-in capital upon exercise of warrant	\$ 643	\$
Accrued deferred offering costs	\$	\$ 552

See accompanying notes to condensed financial statements.



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**Complete Genomics, Inc.**

**Notes to Condensed Financial Statements (unaudited)**

**1. THE COMPANY AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

***Nature of Operations***

Complete Genomics, Inc., (the Company) is a human genome sequencing company that has developed and commercialized a DNA sequencing platform for complete human genome sequencing and analysis. The Company's Complete Genomics Analysis Platform (CGA Platform) combines its proprietary human sequencing technology with its advanced informatics and data management software and its end-to-end outsourced service model to provide customers with data that is immediately ready to be used for genome-based research. The Company's solution provides academic and biopharmaceutical researchers with complete human genomic data and analysis without requiring them to invest in in-house sequencing instruments, high-performance computing resources and specialized personnel. In the DNA sequencing industry, complete human genome sequencing is generally deemed to be coverage of at least 90% of the nucleotides in the genome. The Company was incorporated in Delaware on June 14, 2005 and began operations in March 2006.

These financial statements are prepared on a going concern basis that contemplates the realization of assets and discharge of liabilities in the normal course of business. The Company has incurred net operating losses and negative cash flows from operations during every year since inception. At June 30, 2011 and December 31, 2010, the Company had an accumulated deficit of \$167.3 million and \$138.8 million, respectively.

In November 2010, the Company closed the initial public offering of its common stock (the IPO) and sold 6,000,000 shares of its common stock at a public offering price of \$9.00 per share. The Company received gross proceeds of approximately \$54.0 million from this transaction, before underwriting discounts and commissions and offering expenses. On June 1, 2011, the Company completed an offering of 6,325,000 shares of its common stock at \$12.50 per share. The Company received gross proceeds of approximately \$79.1 million from this transaction, before underwriting discounts and commissions and offering expenses.

Management believes that cash and cash equivalents and short-term investments at June 30, 2011 are sufficient to fund its operations for at least the next 12 months.

***Basis of Presentation***

The interim condensed financial statements have been prepared and presented by the Company in accordance with accounting principles generally accepted in the United States (GAAP) and the rules and regulations of the Securities and Exchange Commission, without audit, and reflect all adjustments necessary to state fairly the Company's interim financial information. The accounting principles and methods of computation adopted in these financial statements are the same as those of the audited financial statements for the year ended December 31, 2010.

The preparation of the Company's unaudited condensed financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the unaudited condensed financial statements and the reported amounts of expenses during the reporting period. Significant estimates include assumptions made in the liability for warrants to purchase common stock, revenue recognition and stock-based compensation. Actual results could differ from those estimates.

Certain information and footnote disclosures normally included in the Company's annual financial statements prepared in accordance with GAAP have been condensed or omitted. The accompanying condensed unaudited financial statements should be read in conjunction with the audited financial statements for the year ended December 31, 2010 included in the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 30, 2011. The financial results for any interim period are not necessarily indicative of financial results for the full year or any other interim period.

The Company operates in one segment, providing complete human genome sequencing and analysis.



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### ***Summary of Significant Accounting Policies***

With the exception of newly added accounting policies on available-for-sale securities, capitalized software internal-use software, comprehensive loss and revisions to the revenue recognition accounting policy (as described below), there have been no changes to the Company's significant accounting policies during the six months ended June 30, 2011 as compared to the significant accounting policies described in its audited financial statements included in the Company's Annual Report on Form 10-K for the year ended December 31, 2010.

#### ***Available-for-Sale Securities***

The Company classifies its investments in fixed income securities as available-for-sale securities. Fixed income securities consist of U.S. treasury notes and treasury bills. These available-for-sale investments are held in the custody of one major financial institution. The specific identification method is used to determine the cost basis of fixed income securities sold. These securities are recorded in the balance sheets at fair value. Unrealized gains and losses on these securities are included as a separate component of accumulated other comprehensive income (loss), net of tax. The Company classifies its available-for-sale securities as current based on the nature of the securities and their availability for use in current operations.

#### ***Capitalized Software Internal-use software***

The Company capitalizes certain costs incurred for the development of internal-use software. These costs, which include the costs associated with coding, software configuration, upgrades and enhancements are included in property and equipment, net in the balance sheet.

#### ***Comprehensive Loss***

Comprehensive loss is comprised of net loss and other comprehensive income (loss). Other comprehensive income (loss) is comprised of the unrealized gains and losses on the Company's available-for-sale securities. Other comprehensive income (loss) has not been material to date.

#### ***Revenue Recognition***

The Company generates revenue from selling our human genome sequencing services. Revenues are recognized when all of the following criteria are met: persuasive evidence of an arrangement exists, title has transferred, the price is fixed or determinable and collectability is reasonably assured. Upon completion of the sequencing process, the Company ships or makes available the research-ready genomic data to the customer. The Company uses shipping documents and third-party evidence to verify shipment of the data. In order to determine whether collectability is reasonably assured, the Company assesses a number of factors, including past transaction history with the customer and the creditworthiness of the customer. If the Company determines that collectability is not reasonably assured, the Company defers the recognition of revenue until collectability becomes reasonably assured.

For revenue generated under purchase orders, the Company has established standard terms and conditions that are specified for all orders. The Company uses the purchase order to establish persuasive evidence of an arrangement and whether there is a fixed and determinable price for the order. Revenue is recognized based upon the shipment of individual genomic data to customers and satisfaction of related terms and conditions contained in the purchase order.

For revenue generated under contracts, the Company considers each contract's terms and conditions to determine its obligations associated with the contract. The Company will defer revenue until individual genomic data has been shipped to customers and related significant obligations, as defined in the contract, have been met.

The Company also receives down payments from customers prior to the commencement of the genome sequencing process. Any down payments received are recorded as deferred revenue until the Company meets all revenue recognition criteria.

In the first quarter of 2011, the Company adopted the provisions of Accounting Standards Update (ASU) 2009-13, *Revenue Recognition (Topic 605) Multiple-Deliverable Revenue Arrangements* (which amended existing accounting guidance for revenue recognition for multiple-element arrangements). Simultaneously, the Company created a dedicated customer support team. The Company applied the provisions ASU 2009-13 on a prospective basis to all revenue arrangements entered into or materially modified since the beginning of 2011. The impact of adoption was not material to the Company's results of operations for the first half of 2011.



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In general, the Company's multiple element arrangements provide for delivery of research-ready genomic data and technical customer support. The Company has evaluated the allocation of the arrangement consideration to its deliverables using the relative-selling-price hierarchy required in ASU 2009-13 of vendor specific objective evidence (VSOE), third party evidence (TPE) or its best estimate of selling price (ESP). VSOE is based on the price charged when the element is sold separately and is the price actually charged for that deliverable. The Company typically is not able to determine VSOE for an element because a substantial majority of the selling prices for the Company's services do not fall within a reasonably narrow range. TPE is determined based on a competitor's price for similar deliverables when sold separately. The Company typically is not able to determine TPE as the Company is unable to reliably determine competitor prices for similar deliverables when sold separately. Therefore, the Company uses ESP in its allocation of arrangement consideration to its genome sequencing data and its technical support services.

The objective of ESP is to determine the price at which the Company would enter into a transaction with the customer if the service were to be sold by the Company on a standalone basis. Specifically, for such price determination, the Company considers the cost to provide the service, the targeted margin on that service, the economic conditions and trends, and its ongoing pricing strategy and policies.

The revenue related to the technical customer support service is recognized on a straight-line basis, beginning from the date the revenue related to the delivery of the genome sequencing data is recognized, over the time period during which the technical support services are provided.

**Accounting Pronouncements Not Yet Adopted**

In June 2011, the Financial Accounting Standard Board issued guidance on the presentation of total comprehensive income, the components of net income, and the components of other comprehensive income. This guidance is intended to improve the comparability, consistency, and transparency of financial reporting and to increase the prominence of items reported in other comprehensive income. The guidance is effective for fiscal years, and interim periods within those years, beginning after December 15, 2011. The Company does not expect the adoption of this guidance to have a material impact on its financial statements.

**2. CONCENTRATION OF CREDIT RISKS AND OTHER RISKS AND UNCERTAINTIES**

The Company is subject to all of the risks inherent in an early-stage company developing a new approach to DNA sequencing. These risks include, but are not limited to, significant capital requirements, limited management resources, intense competition, dependence upon customer acceptance of the products in development and the changing nature of the DNA sequencing industry. The Company's operating results may be materially affected by the foregoing factors.

The Company depends on a limited number of suppliers, including single-source suppliers, of various critical components in the sequencing process. The loss of these suppliers, or their failure to supply the Company with the necessary components on a timely basis, could cause delays in the sequencing process and adversely affect the Company.

The Company derives accounts receivable from direct sales and amounts contractually due, but not received, under contracts. The Company reviews its exposure to accounts receivable and generally requires no collateral for any of its accounts receivable. The allowance for doubtful accounts is the Company's best estimate of the amount of expected credit losses existing in accounts receivable and is based upon specific customer issues that have been identified. As of June 30, 2011 and December 31, 2010, the Company has not recorded any allowance for doubtful accounts.

The Company allocates its revenues to individual countries based on the primary locations of its customers.

As of June 30, 2011 and December 31, 2010, customers representing greater than 10% of accounts receivable were as follows:

Customer	June 30, 2011	December 31, 2010
Customer A	31%	*
Customer I	11%	*
Customer J	*	27%
Customer K	*	16%

\* *Less than 10%*

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For the three and six months ended June 30, 2011 and 2010, customers representing greater than 10% of revenue were as follows:

Customer	Three months ended June 30,		Six months ended June 30,	
	2011	2010	2011	2010
Customer A	30%	*	14%	*
Customer B	13%	*	*	*
Customer C	*	26%	21%	20%
Customer D	*	*	12%	*
Customer E	*	*	*	11%
Customer F	*	13%	*	*
Customer G	*	13%	*	*
Customer H	*	20%	*	15%

\* Less than 10%

For the three and six months ended June 30, 2011 and 2010, countries representing greater than 10% of revenue were as follows:

Countries	Three months ended June 30,		Six months ended June 30,	
	2011	2010	2011	2010
United States	70%	66%	70%	67%
China	*	20%	*	15%
The Netherlands	*	*	16%	*
United Kingdom	18%	*	*	*

\* Less than 10%

**3. NET LOSS PER SHARE**

Basic net loss per share is computed by dividing net loss attributed to common stockholders by the weighted-average number of common shares outstanding during the period. The Company's potential dilutive shares, which include outstanding options for common stock, restricted stock units, preferred stock and outstanding warrants, have not been included in the computation of diluted net loss per share for all periods, as the result would be anti-dilutive. Such potentially dilutive shares are excluded when the effect would be to reduce the net loss per share.

The following outstanding shares of potentially dilutive securities were excluded from the computation of diluted net loss per share for the periods presented because including them would have had an anti-dilutive effect:

	June 30,	
	2011	2010
Options to purchase common stock	4,046,916	2,251,093
Restricted stock units for common stock	27,500	
Warrants to purchase convertible preferred stock		384,153
Warrants to purchase common stock	1,533,823	2,581,005
Convertible preferred stock (on an as-if converted basis)		10,533,490
Total	5,608,239	15,749,741





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The following table summarizes the Company's available-for-sale securities at June 30, 2011 (in thousands):

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Fixed income securities:				
U.S. government securities(1)	\$ 43,657	\$ 1	\$ (1)	\$ 43,657
<b>Total fixed income securities</b>	<b>\$ 43,657</b>	<b>\$ 1</b>	<b>\$ (1)</b>	<b>\$ 43,657</b>

(1) The weighted average contractual maturity of these securities is 117 days as of June 30, 2011.

There were no available-for-sale investments prior to March 31, 2011. There were no realized gains or losses or impairments charges on available-for-sale securities for the three months ended June 30, 2011.

For fixed income securities that have unrealized losses as of June 30, 2011, the Company has determined that (i) it does not have the intent to sell any of these securities and (ii) it is not more likely than not that it will be required to sell any of these investments before recovery of the entire amortized cost basis.

**5. FAIR VALUE MEASUREMENTS**

Assets and liabilities recorded at fair value in the financial statements are categorized based upon the level of judgment associated with the inputs used to measure their fair value. Hierarchical levels which are directly related to the amount of subjectivity associated with the inputs to the valuation of these assets or liabilities are as follows:

*Level 1:* Observable inputs, such as quoted prices in active markets for identical assets or liabilities.

*Level 2:* Observable inputs, other than Level 1 prices, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

*Level 3:* Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The following tables set forth the Company's financial instruments that are measured at fair value on a recurring basis as of June 30, 2011 and December 31, 2010 and by level within the fair value hierarchy. Assets and liabilities measured at fair value are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The Company's assessment of the significance of a particular input to the fair value measurement in its entirety requires management to make judgments and consider factors specific to the asset or liability.

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As of June 30, 2011, the Company's fair value hierarchy for its financial assets that are carried at fair value was as follows:

	Level 1	Level 2 (in thousands)	Level 3	Total
<b>Assets</b>				
Money market funds (included in cash and cash equivalents)	\$ 71,699	\$	\$	\$ 71,699
U.S. government securities (included in short-term investments)		43,657		43,657
Total	\$ 71,699	\$ 43,657	\$	\$ 115,356

As of December 31, 2010, the Company's fair value hierarchy for its financial assets and financial liabilities that are carried at fair value was as follows:

	Level 1	Level 2 (in thousands)	Level 3	Total
<b>Assets</b>				
Money market fund (included in cash and cash equivalents)	\$ 50,623	\$	\$	\$ 50,623
<b>Liabilities</b>				
Warrants to purchase common stock (included in accrued liabilities)	\$	\$	\$ 282	\$ 282

Level 2 U.S. government securities are priced using non-binding market consensus prices that are corroborated by observable market data, quoted market prices for similar instruments, or pricing models, such as discounted cash flow techniques. The Company did not have any transfers between Level 1 and Level 2 fair value measurements during the six months ended June 30, 2011.

Level 3 warrant liabilities were valued using the Black-Scholes option pricing model. The expected term for these warrants is based on the remaining contractual life of these warrants. The expected volatility assumption was determined by examining the historical volatility for industry peers, as the Company did not have a sufficient trading history for its common stock. The risk-free interest rate assumption is based on U.S. Treasury investments whose term is consistent with the expected term of the warrants. The expected dividend assumption is based on the Company's history and expectation of dividend payouts.

The change in the fair value of the common stock warrant liability is summarized below:

	(in thousands)
<b>Fair value at December 31, 2010</b>	\$ 282
Increase in the fair value recorded in interest and other income (expense), net	361
Reclassification to additional paid-in capital upon exercise of warrants in June 2011	(643)
<b>Fair value at June 30, 2011</b>	\$

**6. BALANCE SHEET COMPONENTS****Inventory**

Inventory consists of the following:

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	<b>June 30, 2011</b>	<b>December 31, 2010</b>
	(in thousands)	
Raw materials	\$ 1,628	\$ 1,426
Work-in-progress	1,891	1,917
Finished goods	771	637
Total	\$ 4,290	\$ 3,980

**Table of Contents*****Property and Equipment, Net***

Property and equipment, net, consist of the following:

	June 30, 2011	December 31, 2010
	(in thousands)	
Computer equipment	\$ 9,000	\$ 7,519
Computer software	2,171	1,857
Furniture and fixtures	441	354
Machinery and equipment	21,739	19,362
Leasehold Improvements	8,383	7,024
Equipment under construction	4,432	37
	46,166	36,153
Less: Accumulated depreciation and amortization	(17,516)	(12,310)
	\$ 28,650	\$ 23,843

Depreciation and amortization expense for the three months ended June 30, 2011 and 2010 was \$2.8 million and \$1.7 million, respectively. Depreciation and amortization expense for the six months ended June 30, 2011 and 2010 was \$5.3 million and \$3.0 million, respectively.

***Accrued Liabilities***

Accrued liabilities consist of the following:

	June 30, 2011	December 31, 2010
	(in thousands)	
Accrued compensation and benefits	\$ 2,835	\$ 1,934
Warrants to purchase common stock		282
Deferred rent, current	742	702
Other	805	184
	\$ 4,382	\$ 3,102

***Intangible Assets, Net***

In March 2006, the Company entered into an intellectual property agreement with Callida Genomics, Inc. for licenses related to the Company's core technology. Under the agreement, the Company has made annual payments of \$250,000 for a duration of six years beginning in March 2006. Prior to March 2011, the payments are recorded in research and development expense. As of December 31, 2010, the Company's product was being commercialized and no longer under development. Accordingly, the \$250,000 licensing payment made in March 2011 is recorded as a license cost of our developed technology in intangible assets in Other Assets. The intangible assets have an estimated useful life of five years and as of June 30, 2011, there was \$12,500 accumulated amortization recorded.

**7. COMMITMENTS AND CONTINGENCIES*****Oxford Loan Agreement***

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On March 25, 2011, the Company entered into a loan and security agreement (the Oxford Loan and Security Agreement ) with Oxford Finance Corporation ( Oxford ). The Oxford Loan Agreement provides for a term loan of \$20.0 million. The outstanding balance of the term loan must be repaid in full by October 1, 2014 (the Maturity Date ). Under the terms of the Oxford Loan Agreement, the outstanding balance accrues interest at a rate of 9.80% per annum. Until May 1, 2012 (the Amortization Date ), the Company is required to make monthly payments equal to the accrued interest on the outstanding loan balance, and, following the Amortization Date through the Maturity Date the outstanding loan balance will be repaid in thirty (30) equal monthly payments of principal and interest.

As a condition to the Oxford Loan Agreement, a portion of the term loan was used to repay the remaining balance of \$7.4 million on the Company s existing loan agreement with Comerica. Following repayment of the outstanding indebtedness, the Loan and Security Agreement with Comerica was terminated. The remainder of the term loan will be used to fund the Company s working capital requirements.

The term loan is secured by a senior priority on all of the Company s assets, excluding the Company s intellectual property and those assets securing borrowings under the Loan and Security Agreement with Atel (the Atel Loan Agreement ). In addition, the Company has agreed not to pledge its intellectual property to another entity without Oxford s approval or consent.

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In connection with the entry into the Oxford Loan Agreement, the Company issued to Oxford warrants to purchase an aggregate of 160,128 shares of common stock at an exercise price of \$7.495 per share (Note 8). The warrants expire on the seventh anniversary of the issuance date. The Company also agreed to provide Oxford certain registration rights covering the warrants.

The Oxford Loan Agreement contains customary representations and warranties, covenants, closing and advancing conditions, events of defaults and termination provisions by, among and for the benefit of the parties. The affirmative covenants include, among other things, that the Company timely file taxes, maintain certain operating accounts subject to control agreements in favor of Oxford, maintain liability and other insurance, and pledge security interests in any ownership interest of a future subsidiary. The negative covenants preclude, among other things, disposing of certain assets, engaging in any merger or acquisition, incurring additional indebtedness, encumbering any collateral, paying dividends or making prohibited investments, in each case, without the prior consent of Oxford. The Oxford Loan Agreement provides that an event of default will occur if (1) there is a material adverse change in the Company's business, operations or condition (financial or otherwise), (2) there is a material impairment in the prospects of the Company repaying any portion of its obligations under the term loan, (3) there is a material impairment in the value of the collateral pledged to secure the Company's obligations under the agreement or in Oxford's perfection or priority over the collateral, (4) the Company defaults in the payment of any amount payable under the agreement when due, or (5) the Company breaches any negative covenant or certain affirmative covenants in the agreement (subject to a grace period in some cases). The repayment of the term loan is accelerated following the occurrence of an event of default or otherwise, requiring the Company to immediately pay to Oxford an amount equal to the sum of: (i) all outstanding principal plus accrued but unpaid interest, (ii) the prepayment fee, (iii) the final payment, plus (iv) all other sums, that shall have become due and payable but have not been paid, including interest at the default rate with respect to any past due amounts. As of June 30, 2011, the Company was in compliance with all the covenants.

The Company paid to Oxford an aggregate of approximately \$100,000 in commitment fees in connection with the Oxford Loan Agreement. In connection with the entry into the Oxford Loan Agreement, the Company and Atel amended the Atel Loan Agreement for certain technical and administrative amendments.

*Atel Loan Agreement*

The Atel Loan Agreement consists of a \$6.0 million term loan for equipment purchases. Under the terms of the Atel Loan Agreement, the term loan balance is being repaid in 36 equal monthly payments of principal and interest. Interest accrues on the term loan at a rate of 11.26% per annum. The outstanding borrowings under the term loan are collateralized by a senior priority interest in certain of the Company's current property and equipment, and all property and equipment that is purchased during the term of the Atel Loan Agreement.

In connection with the Atel Loan Agreement, the Company issued to Atel a warrant to purchase 49,834 shares of the Company's common stock at an exercise price of \$7.224 per share, as discussed in Note 8. This warrant was exercised in full on June 17, 2011.

The Atel Loan Agreement contains customary representations and warranties, covenants, closing and advancing conditions, events of defaults and termination provisions by, among and for the benefit of the parties. The affirmative covenants include, among other things, that the Company maintain liability and other insurance and pledge security interests in any ownership interest of a future subsidiary. The negative covenants preclude, among other things, disposing of certain assets, engaging in any merger or acquisition, incurring additional indebtedness, encumbering any collateral, paying dividends or making prohibited investments, in each case, without the prior consent of Atel. As of June 30, 2011, the Company was in compliance with all the covenants.

Future loan payments under the Oxford and Atel loan agreements as of June 30, 2011 are as follows:

	(in thousands)
<b>Years Ending December 31,</b>	
2011(six months remaining)	\$ 2,153
2012	9,034
2013	11,202
2014	8,294
Total Payments	30,683
Less:	
Interest expense	5,744
Unamortized portion of value of warrants issued in connection with Atel and Oxford loans	1,079

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Total principal payments	23,860
Less: notes payable, current	3,262
Notes payable, net of current	\$ 20,598

**Table of Contents***Legal Proceedings*

On August 3, 2010, a patent infringement lawsuit was filed by Illumina, Inc. and Solexa, Inc. (an entity acquired by Illumina), or the plaintiffs, against the Company in the U.S District Court in Delaware. The case caption is *Illumina, Inc. and Solexa, Inc. v. Complete Genomics, Inc.*, Civil Action No. 10-649. The complaint alleges that Complete Genomics' Analysis Platform, and in particular the combinatorial probe anchor ligation technology, infringes upon three patents held by Illumina and Solexa. The plaintiffs seek unspecified monetary damages and injunctive relief. If the Company is found to infringe one or more valid claims of a patent-in-suit and if the district court grants an injunction, the Company may be forced to redesign portions of our sequencing process, seek a license or cease the infringing activity. On September 23, 2010, the Company filed an answer to the complaint as well as its counterclaims against the plaintiffs. On November 9, 2010, the U.S. District Court in Delaware granted the Company's motion to transfer the case to the Northern District of California. On May 5, 2011, the Court entered a stipulated order to dismiss two patents from the lawsuit. The dismissal is without prejudice but includes conditions on the ability to file lawsuits on these patents, including a limitation that Illumina may not re-file such lawsuits against the Company until the later of (1) August 1, 2012, or (2) the exhaustion of all appeal rights in both (a) the pending reexaminations in the U.S. Patent and Trademark Office and (b) the pending civil litigation in which these patents are also asserted, *Life Technologies Corp. v. Illumina*, Case No. 11-CV703 (S.D. Cal.). The Company believes that it has substantial and meritorious defenses to the plaintiffs' claims and intends to vigorously defend its position. However, a negative outcome in this matter could have a material adverse effect on the Company's financial position, results of operations, cash flows and business. The Company is not currently able to estimate the potential loss, if any, that may result from this litigation.

From time to time, the Company may become involved in other legal proceedings and claims arising in the ordinary course of its business. Other than as described above, the Company is not currently a party to any legal proceedings the outcome of which, if determined adversely to the Company, would individually or in the aggregate have a material adverse effect on its business, operating results, financial condition or cash flows.

**8. WARRANTS FOR COMMON STOCK**

In March 2011, the Company issued a warrant to purchase 160,128 shares of common stock at an exercise price of \$7.495 per share in connection with the Oxford Loan Agreement. The warrant expires on the seventh anniversary of its issuance date. The initial fair value of the warrant was calculated using the Black-Scholes option pricing model with the following assumptions: seven year contractual term; 75.01% volatility; 0% dividend rate; and a risk-free interest rate of 2.87%. The fair value of the warrant was determined to be \$987,000 and was recorded as equity in additional paid-in capital and a discount to the carrying value of the loan.

The discount is being amortized to interest expense using the effective interest rate method over the 42-month term of the loan.

In December 2010, the Company issued a warrant to purchase 49,834 shares of common stock at an exercise price of \$7.224 per share in connection with the Atel Loan Agreement. The warrant expires on the tenth anniversary of its issuance date. The initial fair value of the warrant was calculated using the Black-Scholes option pricing model with the following assumptions: 10 year contractual term; 76.2% volatility; 0% dividend rate; and a risk-free interest rate of 3.33%. The fair value of the warrant was determined to be \$282,000 and was recorded as a liability and a discount to the carrying value of the loan. The fair value of the warrant was recorded as a liability due to certain mandatory redemption features at the option of the holder. The discount is being amortized to interest expense using the effective interest rate method over the three-year term of the loan. These warrants were marked to market each reporting period until they were exercised. The final mark to market revaluation of the warrants occurred on June 17, 2011, the date the warrants were exercised.

**9. STOCK-BASED COMPENSATION***Stock-based Compensation Plans*

The number of shares reserved for issuance under the 2010 Equity Incentive Award Plan (the 2010 Plan) and the Employee Stock Purchase Plan (the ESPP) increased by 1,036,905 shares and 518,452 shares, respectively, effective January 1, 2011. As of June 30, 2011, there were 2,545,562 and 1,268,452 shares available to be granted under the 2010 Plan and the ESPP, respectively.



**Table of Contents***Stock-based Compensation Expense*

During the three and six months ended June 30, 2011 and 2010, respectively, the Company granted stock options to employees to purchase common stock as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2011	2010	2011	2010
	(in thousands, except share and per share amounts)			
Number of options granted to employees	1,443,300	20,000	1,547,000	935,189
Weighted-average grant date fair value per share of options granted to employees	\$ 7.62	\$ 1.85	\$ 7.44	\$ 1.70
Total fair value of options granted to employees which vested	\$ 658	\$ 178	\$ 993	\$ 355

During the three and six months ended June 30, 2011 and 2010, respectively, the Company did not grant any options to nonemployees nor did it grant any restricted stock units.

The following table summarizes stock-based compensation expense from stock options and restricted stock unit awards to employees and nonemployees as well as from the ESPP during the three and six months ended June 30, 2011 and 2010, respectively:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2011	2010	2011	2010
	(in thousands)			
Employee awards	\$ 1,044	\$ 343	\$ 1,517	\$ 819
Nonemployee awards	29	6	50	70
<b>Total stock-based compensation expense</b>	<b>\$ 1,073</b>	<b>\$ 349</b>	<b>\$ 1,567</b>	<b>\$ 889</b>

As of June 30, 2011, the Company had unrecognized stock-based compensation expense related to unvested stock options and restricted stock units granted to employees of \$14.0 million, which is expected to be recognized over the remaining weighted-average vesting period of 3.5 years.

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**Table of Contents****ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

*This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (the Exchange Act), which are subject to the safe harbor created by those sections. Forward-looking statements are based on our management's beliefs and assumptions and on information currently available to our management. All statements other than statements of historical factors are forward-looking statements for purposes of these provisions. In some cases you can identify forward-looking statements by terms such as may, will, should, could, would, expect, plan, anticipate, believe, estimate, project, predict, and potential, and similar expressions intended to identify forward-looking statements. Such forward-looking statements are subject to risks, uncertainties and other important factors that could cause actual results and the timing of certain events to differ materially from future results expressed or implied by such forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those identified below, and those discussed in the section titled Risk Factors in this report. Furthermore, such forward-looking statements speak only as of the date of this report. Except as required by law, we undertake no obligation to update any forward-looking statements to reflect events or circumstances after the date of such statements.*

**Overview**

We are a life sciences company that has developed and commercialized a DNA sequencing platform for complete human genome sequencing and analysis, and our goal is to become the preferred solution for complete human genome sequencing and analysis. Our Complete Genomics Analysis Platform, or CGA Platform, combines our proprietary human genome sequencing technology with our advanced informatics and data management software and our innovative, end-to-end, outsourced service model to provide our customers with data that is immediately ready to be used for genome-based research. We believe that our solution provides academic and biopharmaceutical researchers with complete human genomic data and analysis at an unprecedented combination of quality, cost and scale without requiring them to invest in in-house sequencing instruments, high-performance computing resources and specialized personnel. By removing these constraints and broadly enabling researchers to conduct large-scale complete human genome studies, we believe that our solution has the potential to significantly advance medical research and expand understanding of the basis, treatment and prevention of complex diseases.

We have targeted our complete human genome sequencing service at academic, governmental and other research institutions, as well as pharmaceutical and other life science companies. In the DNA sequencing industry, complete human genome sequencing is generally deemed to be coverage of at least 90% of the nucleotides in the genome. We perform our sequencing service at our Mountain View, California headquarters facility, which began commercial operation in May 2010. In the near term, we expect to make significant expenditures related to the expansion of our Mountain View sequencing facility and our research and development initiatives, as well as to increase our sales and marketing and general and administrative expenses to support our commercial operations and anticipated growth. In future years, we may construct additional genome centers in the United States and in other strategic markets to accommodate an expected growing, global demand for high-quality, low-cost complete human genome sequencing on a large scale.

Our ability to generate revenue, and the timing of our revenue, will depend on generating new orders and contracts, receiving qualified DNA samples from customers and the rate at which we can convert our backlog of sequencing orders into completed and delivered data and the price per genome contracted with the customer. We define backlog as the number of genomes for which customers have placed orders that we believe are firm and for which no revenue has yet been recorded. As of June 30, 2011, we had a backlog of orders for sequencing of approximately 2,200 genomes which we believe could contribute approximately \$12.0 million toward total revenue over the next 12 months. The speed with which we can convert orders into revenue depends principally on:

the speed with which our customers provide us with qualified samples after submitting an order;

the rate at which our system can sequence a genome; and

the rate at which all significant contractual obligations are fulfilled.

The presence or absence in a specific quarter of one or more new large orders for hundreds of genomes combined with our uncertain sales cycle and changes in the variables that influence conversion of orders to revenue will cause our results of operations and our backlog to fluctuate on a quarterly basis, perhaps significantly from one quarter to the next. In addition, we have only recently engaged in commercial-scale manufacturing, so we have a very limited history on which we can rely in making predictions regarding operating variables such as customer delivery of qualified genomic samples, equipment failure, throughput yield and other factors that could affect our ability to sequence genomes

and recognize revenue.

On June 1, 2011, we completed an offering of 6,325,000 shares at \$12.50 per share and received gross proceeds of approximately \$79.1 million from this transaction, before underwriting discounts and commissions and offering expenses.

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We have not been profitable in any period since we were formed. We incurred net losses of \$16.0 million and \$12.6 million for the three months ended June 30, 2011 and 2010, respectively. We incurred net losses of \$28.4 million and \$27.0 million for the six months ended June 30, 2011 and 2010, respectively. As of June 30, 2011, we had an accumulated deficit of \$167.3 million.

Although we do not anticipate any material seasonal effects, given our limited operating history as a revenue generating company, our sales cycle is uncertain. A limited number of customers accounted for all of the revenue we recognized for the six months ended June 30, 2011, with Pfizer Inc., The National Institute of Diabetes and Digestive and Kidney Diseases and the University of Amsterdam accounting for approximately 21%, 14% and 12%, respectively, of this revenue. If demand for our services expands as expected, we do not anticipate that the loss of any of the customers named above would have a long-term material adverse effect on our future results of operations.

***Critical Accounting Policies and Estimates***

Our management's discussion and analysis of our financial condition and results of operations are based on our unaudited financial statements that have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of our financial statements requires our management to make estimates, assumptions and judgments that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the applicable periods. Management bases its estimates, assumptions and judgments on historical experience and on various other factors that it believes to be reasonable under the circumstances. Different assumptions and judgments would change the estimates used in the preparation of our financial statements, which, in turn, could materially change the results from those reported. Our management evaluates its estimates, assumptions and judgments on an ongoing basis. Historically, our critical accounting estimates have not differed materially from actual results. However, if our assumptions change, we may need to revise our estimates, or take other corrective actions, either of which may also have a material adverse effect on our statements of operations, liquidity and financial condition.

Except for the revenue recognition policy described below, there have been no significant changes in critical accounting policies during the six months ended June 30, 2011, as compared to the critical accounting policies described in *Management's Discussion and Analysis of Financial Condition and Results of Operations - Critical Accounting Policies and Estimates* in our Annual Report on Form 10-K for the year ended December 31, 2010.

***Revenue Recognition***

We generate revenue from selling our human genome sequencing services. Revenues are recognized when all of the following criteria are met: persuasive evidence of an arrangement exists, title has transferred, the price is fixed or determinable and collectability is reasonably assured. Upon completion of the sequencing process, we ship or make available the research-ready genomic data to the customer. We use shipping documents and third-party evidence to verify shipment of the data. In order to determine whether collectability is reasonably assured, we assess a number of factors, including past transaction history with the customer and the creditworthiness of the customer. If we determine that collectability is not reasonably assured, we defer the recognition of revenue until collectability becomes reasonably assured.

For revenue generated under purchase orders, we have established standard terms and conditions that are specified for all orders. We use the purchase order to establish persuasive evidence of an arrangement and whether there is a fixed and determinable price for the order. Revenue is recognized based upon the shipment of individual genomic data to customers and satisfaction of related terms and conditions contained in the purchase order.

For revenue generated under contracts, we consider each contract's terms and conditions to determine its obligations associated with the contract. We will defer revenue until individual genomic data has been shipped to customers and related significant obligations, as defined in the contract, have been met.

We also receive down payments from customers prior to the commencement of the genome sequencing process. Any down payments received are recorded as deferred revenue until we meet all revenue recognition criteria.

In the first quarter of 2011, we adopted the provisions of Accounting Standards Update (ASU) 2009-13, *Revenue Recognition (Topic 605) Multiple-Deliverable Revenue Arrangements* (which amended existing accounting guidance for revenue recognition for multiple-element arrangements). Simultaneously, we created a dedicated customer support team. We applied the provisions ASU 2009-13 on a prospective basis to all revenue arrangements entered into or materially modified since the beginning of 2011. The impact of adoption was not material to our results of operations for the first half of 2011.

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In general, our multiple element arrangements provide for delivery of research-ready genomic data and technical customer support. We have evaluated the allocation of the arrangement consideration to our deliverables using the relative-selling-price hierarchy required in ASU 2009-13 of vendor specific objective evidence ( VSOE ), third party evidence ( TPE ) or our best estimate of selling

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price (ESP). VSOE is based on the price charged when the element is sold separately and is the price actually charged for that deliverable. We typically are not able to determine VSOE for an element because a substantial majority of the selling prices for our services do not fall within a reasonably narrow range. TPE is determined based on a competitor's price for similar deliverables when sold separately. We typically are not able to determine TPE as we are unable to reliably determine competitor prices for similar deliverables when sold separately. Therefore, we use ESP in our allocation of arrangement consideration to our genome sequencing data and our technical support services.

The objective of ESP is to determine the price at which we would enter into a transaction with the customer if the service were to be sold by us on a standalone basis. Specifically, for such price determination, we consider the cost to provide the service, the targeted margin on that service, the economic conditions and trends, and our ongoing pricing strategy and policies.

The revenue related to the technical customer support service is recognized on a straight-line basis, beginning from the date the revenue related to the delivery of the genome sequencing data is recognized, over the time period during which the technical support services are provided.

**Results of Operations**

During the three months ended June 30, 2010, we achieved commercial production but most revenue during this period was derived from genomic samples that were sequenced on our prototype production instruments. In addition, a substantial number of our research and development employees operated in production capacities while we continued to develop and refine our commercial genome sequencing process and validate our prototype instruments in anticipation of full commercial production. As a result, the costs that we incurred related to the sequencing of genomic samples during this period have been included in start-up production costs in the statement of operations.

Start-up production costs and cost of revenue include the costs related to acceptance testing of customer genomic samples, sample preparation and sequencing, the processing of data generated by our sequencing instruments and delivery of data to our customers.

By 2011 we achieved full commercial production as the development of the commercial genome sequencing process was completed and employees were dedicated to the production process. Therefore, the costs we incurred sequencing genomic samples during the three and six months ended June 30, 2011 are included in cost of revenue in the statement of operations.

Over the last six quarters, we have reduced the cost of our complete human genome sequencing service through improvements to our sequencing technology and processes that have resulted in increased yields and capacity. However, our cost of providing complete human genome sequencing may change in any given quarter depending on fluctuations in yields and capacity. In addition, we have also decreased the price of our complete human genome sequencing service significantly quarter over quarter, which has been driven in part by competitive dynamics, as well as our own cost reductions. Current pricing for our services start at \$5,000 per genome for orders of less than 50 genomes and \$4,000 per genome for orders of greater than 50 genomes. In the future, we anticipate further reductions in both the cost to us and the price to our customers for our complete human genome sequencing service.

**Comparison of Three Months Ended June 30, 2011 and 2010**

The following table shows the amounts of the listed items from our statements of operations for the periods presented and period-over-period changes (in thousands, except for percentages).

	Three months ended		Second Quarter 2011 vs.	
	2011	June 30, 2010	Second Quarter 2010 \$ Change (unaudited)	% Change
Revenue	\$ 5,865	\$ 1,089	\$ 4,776	439%
Costs and expenses:				
Costs of revenue	6,122		(6,122)	*
Start-up production costs		4,908	4,908	*
Research and development	8,028	4,928	(3,100)	(63)%
General and administrative	3,468	1,763	(1,705)	(97)%
Sales and marketing	3,138	1,313	(1,825)	(139)%

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Total costs and expenses	20,756	12,912	(7,844)	(61)%
Loss from operations	(14,891)	(11,823)	(3,068)	(26)%
Interest expense	(810)	(833)	23	3%
Interest and other income (expense), net	(258)	25	(283)	(1,132)%
Net loss	\$ (15,959)	\$ (12,631)	\$ (3,328)	(26)%

\* result is not meaningful

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### *Revenue*

During the three months ended June 30, 2011, we recognized \$5.9 million of revenue, compared to \$1.1 million during the same period in 2010. In the three months ended June 30, 2010, we generated limited revenue since we had just begun commercial operations during the quarter. While prices for genome sequencing declined significantly from the three months ended June 30, 2010 when compared to the three months ended June 30, 2011, they were more than offset by increases in sequencing orders as a result of market adoption of complete human genome sequencing and our expanded marketing and sales activities.

### *Costs of Revenue*

During the three months ended June 30, 2011, we incurred \$6.1 million of costs to provide our genome sequencing service. The \$6.1 million of cost of revenue primarily consisted of \$3.7 million in salary, benefits and overhead, \$1.7 million in equipment depreciation and \$0.7 million in materials.

We anticipate that these costs as a percentage of revenue will fluctuate as we increase sequencing capacity and our capacity utilization changes, as the sequencing price we charge to our customers change and as we continue to improve and automate our human genome sequencing processes. However, we anticipate that our total cost of revenue will increase in absolute dollars as we sequence additional genomes and our revenue grows.

### *Start-up Production Costs*

During the three months ended June 30, 2010, we incurred \$4.9 million of start-up production costs to support the development of our genome sequencing service. The \$4.9 million of start-up production costs primarily consisted of materials, salary and benefits and depreciation expense.

### *Research and Development*

Research and development expenses were \$8.0 million during the three months ended June 30, 2011, compared to \$4.9 million during the three months ended June 30, 2010, representing an increase of \$3.1 million, or 63%. The increase in research and development expenses was primarily due to an increase in salaries and benefits expense of \$0.7 million, an increase of \$0.4 million in consulting and outside services and an increase of \$1.1 million in supplies and materials to support development activities. The increase in salaries and benefits cost is a result of increased headcount and refocusing of certain research and development resources that had been directed to start-up production activities in prior quarters.

We expect to continue to invest in research and development activities as we seek to enhance our sequencing processes, components and systems to improve the yield and throughput and reduce the cost of our sequencing service. Consequently, we believe that in the near future, our research and development expenses will increase.

### *General and Administrative*

General and administrative expenses were \$3.5 million for the three months ended June 30, 2011, compared to \$1.8 million for the three months ended June 30, 2010, representing an increase of \$1.7 million, or 97%. The increase in general and administrative expenses was primarily due to an increase of \$0.4 million in employee salaries and benefits, an increase of \$0.7 million in legal fees, an increase of \$0.1 million in recruiting fees and an increase of \$0.3 million in stock based compensation. The increase in salaries and benefits expense was primarily due to increased headcount to support operations as a public company. The increase in legal expense is primarily related to our ongoing litigation with Illumina.

We expect that general and administrative expenses will increase for the remainder of 2011 to support our operations as a public company and ongoing litigation with Illumina.

### *Sales and Marketing*

Sales and marketing expenses were \$3.1 million during the three months ended June 30, 2011, compared to \$1.3 million during the three months ended June 30, 2010, representing an increase of \$1.8 million, or 139%. The increase in sales and marketing expenses is due primarily to an increase in employee salaries and benefits expense of \$0.7 million, an increase in consulting and outside services expense of \$0.2 million and an increase in marketing activities of \$0.3 million. The increase in expenses was primarily a result of the growth of our sales and marketing organization to support the increased sales activity and overall growth of the Company.



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We expect that sales and marketing expenses will continue to increase for the remainder of 2011 as we increase our headcount for sales and marketing personnel to expand our customer base and to generate growth in terms of both complete human genomes ordered and revenues.

**Table of Contents***Interest Expense*

During the three months ended June 30, 2011 and 2010, we incurred interest expense of \$0.8 million as the amount of debt during each period was approximately \$24.0 million.

*Interest and Other Income (Expense), Net*

Interest and other income (expense), net, for the three months ended June 30, 2011 was an expense of \$0.3 million compared to income of \$0.1 million for the three months ended June 30, 2010. The change between the two periods was primarily due to the change in the fair value of our warrant liability.

*Comparison of Six Months Ended June 30, 2011 and 2010*

The following table shows the amounts of the listed items from our statements of operations for the periods presented and period-over-period changes (in thousands, except for percentages).

	Six months ended June 30,		First Half 2011 vs. First Half 2010	
	2011	2010	\$ Change (unaudited)	% Change
Revenue	\$ 12,698	\$ 1,425	\$ 11,273	791%
Costs and expenses:				
Costs of revenue	12,704		(12,704)	*
Start-up production costs		8,985	8,985	*
Research and development	14,836	11,097	(3,739)	(34)%
General and administrative	6,248	4,862	(1,386)	(29)%
Sales and marketing	5,838	2,539	(3,299)	(130)%
Total costs and expenses	39,626	27,483	(12,143)	(44)%
Loss from operations	(26,928)	(26,058)	(870)	(3)%
Interest expense	(1,150)	(1,144)	(6)	(1)%
Interest and other income (expense), net	(341)	235	(576)	(245)%
Net loss	\$ (28,419)	\$ (26,967)	\$ (1,452)	(5)%

\* result is not meaningful

*Revenue*

During the six months ended June 30, 2011, we recognized \$12.7 million of revenue, compared to \$1.4 million during the same period in 2010. In the six months ended June 30, 2010, we generated limited revenue since we had just begun commercial operations during the second quarter. The significant revenue increase in the six months ended June 30, 2011 as compared to the corresponding period in 2010 reflects an increase in sequencing orders resulting from increased market adoption of complete human genome sequencing and our expanded marketing and sales activities, which have expanded our customer base over the last year. The revenue generated from the increase in sequencing orders has been partially offset by a decrease in the average price per genome.

*Costs of Revenue*

During the six months ended June 30, 2011, we incurred \$12.7 million of costs to provide our genome sequencing service. The \$12.7 million of cost of revenue primarily consisted of \$7.8 million in salary, benefits and overhead, \$3.5 million in equipment depreciation and \$1.4 million in materials.

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We anticipate that these costs as a percentage of revenue will fluctuate as we increase sequencing capacity and our capacity utilization changes, as the sequencing price we charge to our customers changes and as we continue to improve and automate our human genome sequencing processes. However, we anticipate that our total cost of revenue will increase in absolute dollars as we sequence additional genomes and our revenue grows.

### *Start-up Production Costs*

During the six months ended June 30, 2010, we incurred \$9.0 million of start-up production costs to support the development of our genome sequencing service. The \$9.0 million of start-up production costs primarily consisted of \$6.2 million in salary, benefits and overhead, \$1.8 million in equipment depreciation and \$1.0 million in materials.

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### *Research and Development*

Research and development expenses were \$14.8 million during the six months ended June 30, 2011, compared to \$11.1 million during the six months ended June 30, 2010, representing an increase of \$3.7 million, or 34%. The increase in research and development expenses was primarily due to an increase in salaries and benefits expense of \$0.7 million, an increase of \$0.4 million in consulting services and an increase of \$1.2 million in supplies and materials to support development activities. The increase in salaries and benefits cost is a result of increased headcount and reallocation of certain research and development resources that had been directed to start-up production activities in prior quarters.

We expect to continue to invest in research and development activities as we seek to enhance our sequencing processes, components and systems to improve the yield and throughput and reduce the cost of our sequencing service. Consequently, we believe that in the near future, our research and development expenses will increase.

### *General and Administrative*

General and administrative expenses were \$6.2 million for the six months ended June 30, 2011, compared to \$4.9 million for the six months ended June 30, 2010, representing an increase of \$1.4 million, or 29%. The increase in general and administrative expenses was primarily due to an increase of \$0.5 million in employee salaries and benefits, an increase of \$0.8 million in legal fees and an increase of \$0.2 million in recruiting fees. These increases were partially offset by a \$0.6 million reduction in stock-based compensation expense related to equity grants to two founders in the six months ended June 30, 2010. The increase in salaries and benefits expense was primarily due to increased headcount to support operations as a public company. In addition, outside services expense for legal increased primarily due to our ongoing litigation with Illumina.

We expect that general and administrative expenses will increase for the remainder of 2011 to support our operations as a public company and ongoing litigation with Illumina.

### *Sales and Marketing*

Sales and marketing expenses were \$5.8 million during the six months ended June 30, 2011, compared to \$2.5 million during the six months ended June 30, 2010, representing an increase of \$3.2 million, or 130%. The increase in sales and marketing expenses is due primarily to an increase in employee salaries and benefits expense of \$1.6 million, and an increase in consulting expense and various marketing activities expense of \$0.3 million each. The increase in expenses was primarily a result of the growth of our sales and marketing organization to support the increased sales activity and overall growth of the Company.

We expect that sales and marketing expenses will continue to increase for the remainder of 2011 as we increase our headcount for sales and marketing personnel to expand our customer base and to generate growth in terms of both complete human genomes ordered and revenues.

### *Interest Expense*

During the six months ended June 30, 2011 and 2010, we incurred interest expense of \$1.1 million.

### *Interest and Other Income (Expense), Net*

Interest and other income (expense), net, for the six months ended June 30, 2011 was an expense of \$0.3 million compared to income of \$0.2 million for the six months ended June 30, 2010. The change between the two periods was primarily due to the change in the fair value of our warrant liability.

### *Liquidity and Capital Resources*

Since our inception, we have generated operating losses in every quarter, resulting in an accumulated deficit of \$167.3 million as of June 30, 2011. We have financed our operations to date primarily through private placements of preferred stock and promissory notes, borrowings under our credit facilities, proceeds from our initial and follow-on public offerings and term debt. As of June 30, 2011, we had working capital of \$117.8 million, consisting of \$138.8 million in current assets and \$21.0 million in current liabilities. As of December 31, 2010, working capital was \$61.3 million, consisting of \$79.0 million in current assets and \$17.7 million in current liabilities. Cash in excess of immediate operating requirements is invested primarily in money market funds and short-term investments in accordance with our investment policy, primarily with

the goals of capital preservation and liquidity maintenance.

**Table of Contents***Cash Flows for the Six Months Ended June 30, 2011 and 2010*

The following table summarizes our cash flows for the six months ended June 30, 2011 and 2010.

	Six months ended June 30,	
	2011	2010
	(in thousands)	
Net cash used in operating activities	\$ (20,202)	\$ (14,172)
Net cash used in investing activities	(51,729)	(15,700)
Net cash provided by financing activities	85,770	30,079
Net increase in cash and cash equivalents	\$ 13,839	\$ 207

*Operating Activities*

Net cash used in operating activities was \$20.2 million during the six months ended June 30, 2011 and consisted of a net loss of \$28.4 million, offset by noncash items of \$7.4 million and a net change in operating assets and liabilities of \$0.8 million. Noncash items for the six months ended June 30, 2011 consisted primarily of the change in the fair value of our warrant liability of \$0.4 million, depreciation expense of \$5.3 million and stock-based compensation expense of \$1.6 million. The significant items in the change in operating assets and liabilities include an increase in accounts payable of \$1.0 million, an increase in accrued liabilities of \$1.6 million and an increase in deferred revenue of \$1.3 million, partially offset by an increase in accounts receivable of \$2.3 million. The increases in accounts receivable and deferred revenue were due to increased revenue and advance billing arrangements during the first six months of 2011. The increase in accounts payable was due to purchases and expenses incurred as a result of the growth of the Company during the first six months of 2011.

Net cash used in operating activities was \$14.2 million during the six months ended June 30, 2010 and consisted of a net loss of \$27.0 million, offset by noncash items of \$6.3 million and a net change in operating assets and liabilities of \$6.5 million. Noncash items for the six months ended June 30, 2010 consisted primarily of depreciation expense of \$3.0 million, noncash compensation expense related to stock grants to our founders and stock-based compensation expense of \$1.8 million and \$0.9 million, respectively. The significant changes in operating assets and liabilities include increases in inventory and deferred revenues of \$1.9 million and \$2.2 million, respectively, offset by a decrease in prepaid expenses of \$4.6 million.

*Investing Activities*

Net cash used in investing activities was \$51.7 million and \$15.7 million for the six months ended June 30, 2011 and 2010, respectively. The significant increase in the six months ended June 30, 2011 was due to the purchase of \$43.7 million in available-for-sale investments with the proceeds of the common stock offering in June 2011. There were no purchases of available-for-sale securities last year. The remaining cash used for both periods primarily relates to purchases of property and equipment. The purchases of property and equipment during the first six months of 2011 and 2010 were primarily for sequencing equipment, computing infrastructure, research and development prototype equipment and facility improvements.

*Financing Activities*

Net cash provided by financing activities during the six months ended June 30, 2011 of \$85.8 million consisted primarily of \$73.9 million in net proceeds from our common stock offering in the second quarter of 2011 and \$20.0 million in proceeds from our term loan with Oxford. These proceeds were partially offset by repayments on term loans of \$8.6 million.

Net cash provided by financing activities during the six months ended June 30, 2010 of \$30.1 million consisted primarily of \$22.1 million in proceeds from term loans and \$10.0 million in net proceeds from the issuance and sale of Series D preferred stock. These proceeds were partially offset by repayment of notes payable of \$2.2 million.

*Operating and Capital Expenditure Requirements*

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To date, we have not achieved profitability on a quarterly or annual basis. We expect our cash expenditures to increase significantly in the short-term. We plan to fund our short-term liquidity requirements using cash on hand at June 30, 2011. Our principal short-term liquidity needs are:

to fund our operating losses;

to fund our working capital for commercial operations, including personnel costs and other operating expense;

to expand the sequencing and computing capacity in our Mountain View and Santa Clara leased facilities;

to finance the further development of our sequencing technology and services;

to finance sales and marketing activities; and

to service our debt obligations.

We have a capital intensive business model and we forecast investing approximately \$10.0 million in additional capital during the remainder of 2011. In addition, as a public company we also incur significant legal, accounting and other expenses that we did not

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incur as a private company. We anticipate that we will continue to incur net losses for the foreseeable future as we continue to expand our business and build our infrastructure. We believe that, based on our current level of operations and anticipated growth, our cash and cash equivalent balances and short-term investments, including interest income we earn on those balances, will be sufficient to meet our anticipated cash requirements for at least the next 12 months.

In addition to our continued expenditures for the expansion of our Mountain View sequencing facility, further development of our sequencing technology and services, and expansion of our sales and marketing activities, our principal long-term liquidity needs are:

to fund our operating losses;

to fund our working capital for commercial operations, including any growth in working capital required by growth in our business;

to expand the sequencing and computing capacity in our Mountain View and Santa Clara leased facilities;

to finance the further development of our sequencing technology and services;

to finance sales and marketing activities;

to finance the possible development of additional sequencing centers; and

to service our debt obligations.

Our cash requirements to support our long term business needs will depend on market demand, pricing, competitive dynamics and other strategic decisions made by management. Additionally, our forecast of the period of time through which our financial resources will be adequate to support our operations and the costs to support our general and administrative, sales and marketing and research and development activities are forward-looking statements and involve risks and uncertainties. Actual results could vary materially and negatively as a result of a number of factors, including the factors discussed in our risk factors in Part II Item 1A below. We have based these estimates on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we currently expect.

Additional financing, which is not in place at this time, may be from the sale of equity or convertible or other debt securities in a public or private offering, from an additional credit facility, or strategic partnership coupled with an investment in our company or a combination of both. If we raise additional funds through the issuance of convertible debt securities, or other debt securities, these securities could have rights senior to those of our common stock and could contain covenants that restrict our operations. The issuance of any equity securities will also dilute the interest of our current stockholders. We may be unable to raise sufficient additional financing on terms that are acceptable, if at all.

### ***Term Loans***

On December 17, 2010, we entered into a loan and security agreement with Atel Ventures, Inc. ( Atel ). On March 25, 2011, we entered into a new loan and security agreement with Oxford Finance Corporation ( Oxford ).

### ***Atel Loan Agreement***

The loan and security agreement with Atel (the Atel Loan Agreement ) consists of a \$6.0 million term loan for equipment purchases, which is collateralized to secure the term loan. Under the terms of the Atel Loan Agreement, the term loan balance is being repaid in 36 equal monthly payments of principal and interest. Interest accrues on the term loan at a rate of 11.26% per annum. The outstanding borrowings under the term loan are collateralized by a senior priority interest in certain of our current property and equipment, and all property and equipment that was purchased during the term of the Atel Loan Agreement. In connection with entering into the loan and security agreement with Oxford, we and



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Atel made certain administrative and technical amendments to the Atel Loan Agreement.

In connection with the Atel Loan Agreement, we issued to Atel a warrant to purchase 49,834 shares of our common stock at an exercise price of \$7.224 per share. The warrant was exercised in full on June 17, 2011.

The Atel Loan Agreement contains customary representations and warranties, covenants, including closing and advancing conditions, events of defaults and termination provisions. The affirmative covenants include, among other things, that we maintain certain cash account balances, and liability and other insurance, and that we pledge security interests in any ownership interest of a future subsidiary. The negative covenants preclude us from, among other things, disposing of certain assets, engaging in any merger or acquisition, incurring additional indebtedness, encumbering any collateral, paying dividends or making prohibited investments, in each case without the prior consent of Atel. As of June 30, 2011, we were in compliance with all the covenants in the Atel Loan Agreement.

**Table of Contents*****Oxford Loan Agreement***

On March 25, 2011, we entered into a loan and security agreement (the *Oxford Loan Agreement*) with Oxford Finance Corporation (*Oxford*). The *Oxford Loan Agreement* provides for a term loan of \$20.0 million. The outstanding balance of the term loan must be repaid in full by October 1, 2014 (the *Maturity Date*). Under the terms of the *Oxford Loan Agreement*, the outstanding balance accrues interest at a rate of 9.80% per annum. Until May 1, 2012 (the *Amortization Date*), we must make monthly payments equal to the accrued interest on the outstanding loan balance, and, following the *Amortization Date* through the *Maturity Date* the outstanding loan balance will be repaid in thirty (30) equal monthly payments of principal and interest.

As a condition to the *Oxford Loan Agreement*, a portion of the term loan was used to repay the remaining balance of \$7.4 million on our existing term loan agreement with Comerica. Following repayment of the outstanding indebtedness, the *Comerica Loan Agreement* was terminated. We intend to use the remainder of the *Oxford* term loan to fund our working capital requirements.

The term loan is secured by a senior priority on all of our assets, excluding our intellectual property and those assets securing borrowings under the *Atel* loan agreement. In addition, we have agreed not to pledge our intellectual property to another entity without *Oxford*'s approval or consent.

In connection with the entry into the *Oxford Loan Agreement*, we issued to *Oxford* warrants to purchase an aggregate of 160,128 shares of our common stock (the *Warrant Shares*) at an exercise price of \$7.495 per share. The warrants expire on the seventh anniversary of the issuance date. We also agreed to provide *Oxford* certain registration rights covering the *Warrant Shares*.

The *Oxford Loan Agreement* contains customary representations and warranties, covenants, closing and advancing conditions, events of defaults and termination provisions. The affirmative covenants include, among other things, that we timely file taxes, maintain certain operating accounts subject to control agreements in favor of *Oxford*, maintain liability and other insurance, and pledge security interests in any ownership interest of a future subsidiary. The negative covenants preclude, among other things, disposing of certain assets, engaging in any merger or acquisition, incurring additional indebtedness, encumbering any collateral, paying dividends or making prohibited investments, in each case, without the prior consent of *Oxford*. The *Oxford Loan Agreement* provides that an event of default will occur if (1) there is a material adverse change in our business, operations or condition (financial or otherwise), (2) there is a material impairment in the prospects of us repaying any portion of our obligations under the term loan, (3) there is a material impairment in the value of the collateral pledged to secure our obligations under the agreement or in *Oxford*'s perfection or priority over the collateral, (4) we default in the payment of any amount payable under the agreement when due, or (5) we breach any negative covenant or certain affirmative covenants in the agreement (subject to a grace period in some cases). The repayment of the term loan is accelerated following the occurrence of an event of default or otherwise, which would require us to immediately pay an amount equal to the sum of: (i) all outstanding principal plus accrued but unpaid interest, (ii) the prepayment fee, (iii) the final payment, plus (iv) all other sums, that shall have become due and payable but have not been paid, including interest at the default rate with respect to any past due amounts. As of June 30, 2011, we were in compliance with all the covenants.

***Contractual Obligations and Commitments***

The following summarizes the future commitments arising from our contractual obligations at June 30, 2011 (in thousands):

	Total	Payment due by period			
		Less than 1 year	1-3 years	3-5 years	More than 5 years
<b>Contractual obligations</b>					
Debt obligations <sup>(1)</sup>	\$ 24,939	\$ 3,070	\$ 18,912	\$ 2,957	\$
Interest <sup>(2)</sup>	5,744	2,418	2,515	811	
Operating lease obligations <sup>(3)</sup>	16,159	3,390	6,214	5,522	1,033
Purchase obligations <sup>(4)</sup>	8,365	6,030	2,122	213	
<b>Total</b>	<b>\$ 55,207</b>	<b>\$ 14,908</b>	<b>\$ 29,763</b>	<b>\$ 9,503</b>	<b>\$ 1,033</b>

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- (1) *Represents our outstanding debt under our term loans as of June 30, 2011.*
- (2) *Represents interest payments on our outstanding debt under our term loans as of June 30, 2011.*
- (3) *Consists of contractual obligations under non-cancellable office space operating leases.*
- (4) *Consists of purchase obligations related to our data center and non-cancellable orders for sequencing components. The table above also includes agreements to purchase goods or services that have cancellation provisions requiring little or no payment. The amounts under such contracts are included in the table above because management believes that cancellation of these contracts is unlikely and the Company expects to make future cash payments according to the contract terms or in similar amounts for similar materials.*

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### ***Off-Balance Sheet Arrangements***

We do not currently have, nor have we ever had, any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. In addition, we do not engage in trading activities involving non-exchange traded contracts.

### **ITEM 3: QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK**

As of June 30, 2011, our investment portfolio consists of money market funds and fixed-income governmental securities. The primary objectives of our investment are to preserve capital and maintain liquidity. Our primary exposures to market risk are interest rate income sensitivity, which is affected by changes in the general level of U.S. interest rates, and conditions in the credit markets, including default risk. However, since all of our investments are in money market funds and highly liquid short-term governmental securities, we do not believe we are subject to any significant market interest rate risk exposure. We do not have any foreign currency or any other derivative financial instruments.

### **ITEM 4: CONTROLS AND PROCEDURES**

#### ***Evaluation of Disclosure Controls and Procedures***

Our management, with the participation of our chief executive and financial officers, evaluated the effectiveness of our disclosures controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, as of June 30, 2011. The term disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate, to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of June 30, 2011, our chief executive officer and chief financial officer concluded that, as of such date, our disclosure controls and procedures were effective at a reasonable assurance level.

#### ***Changes in Internal Control over Financial Reporting***

There was no change in our internal control over financial reporting during the quarter ended June 30, 2011 identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Exchange Act that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

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**PART II OTHER INFORMATION**

**ITEM 1: LEGAL PROCEEDINGS**

On August 3, 2010, a patent infringement lawsuit was filed by Illumina, Inc. and Solexa, Inc. (an entity acquired by Illumina), or the plaintiffs, against us in the U.S District Court in Delaware. The case caption is *Illumina, Inc. and Solexa, Inc. v. Complete Genomics, Inc.*, Civil Action No. 10-649. The complaint alleges that our Complete Genomics Analysis Platform, and in particular our combinatorial probe anchor ligation technology, infringes upon three patents held by Illumina and Solexa. The plaintiffs seek unspecified monetary damages and injunctive relief. If we are found to infringe one or more valid claims of a patent-in-suit and if the district court grants an injunction, we may be forced to redesign portions of our sequencing process, seek a license or cease the infringing activity. On September 23, 2010, we filed our answer to the complaint as well as our counterclaims against the plaintiffs. On November 9, 2010, the U.S. District Court in Delaware granted our motion to transfer the case to the Northern District of California. On May 5, 2011, the Court entered a stipulated order to dismiss two patents from the lawsuit. The dismissal is without prejudice but includes conditions on the ability to file lawsuits on these patents, including a limitation that Illumina may not re-file such lawsuits against us until the later of (1) August 1, 2012, or (2) the exhaustion of all appeal rights in both (a) the pending reexaminations in the U.S. Patent and Trademark Office and (b) the pending civil litigation in which these patents are also asserted, *Life Technologies Corp. v. Illumina*, Case No. 11-CV703 (S.D. Cal.). We believe that we have substantial and meritorious defenses to the plaintiffs claims and intend to vigorously defend our position. However, a negative outcome in this matter could have a material adverse effect on our financial position, results of operations, cash flows and business. We are not currently able to estimate the potential loss, if any, that may result from this litigation.

From time to time, we may become involved in other legal proceedings and claims arising in the ordinary course of our business. Other than as described above, we are not currently a party to any legal proceedings the outcome of which, if determined adversely to us, we believe would individually or in the aggregate have a material adverse effect on our business, operating results, financial condition or cash flows.

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**ITEM 1A. RISK FACTORS**

*Investing in our common stock involves a high degree of risk. You should carefully consider the risks described below and the other information in this Annual Report on Form 10-Q. If any of such risks actually occur, our business, operating results or financial condition could be adversely affected. In those cases, the trading price of our common stock could decline and you may lose all or part of your investment.*

***Risks Related to Our Limited Operating History, Financial Condition and Capital Requirements***

***We are an early, commercial-stage company and have a limited operating history, which may make it difficult to evaluate our current business and predict our future performance.***

We are an early, commercial-stage company and have a limited operating history. We were incorporated in Delaware in June 2005 and began operations in March 2006. From March 2006 until mid-2009, our operations focused on research and development of our DNA sequencing technology platform. In December 2009, we recognized our first revenue from the sale of our genome sequencing services, and in 2010 and the six months ended June 30, 2011, our revenue was \$9.4 million and \$12.7 million, respectively. Our limited operating history, particularly in light of our novel, service-based business model in the rapidly evolving genome sequencing industry, may make it difficult to evaluate our current business and predict our future performance. Our lack of a long operating history, and especially our very short history as a revenue-generating company, make any assessment of our profitability or prediction about our future success or viability subject to significant uncertainty. We have encountered and will continue to encounter risks and difficulties frequently experienced by early, commercial-stage companies in rapidly evolving industries. If we do not address these risks successfully, our business will suffer.

***We have a history of losses, and we may not achieve or sustain profitability in the future, on a quarterly or annual basis.***

We have not been profitable in any quarterly period since we were formed. We incurred net losses of \$57.7 and \$28.4 million for the year ended December 31, 2010 and the six months ended June 30, 2011, respectively. As of June 30, 2011, our accumulated deficit was \$167.3 million. Based on our current operating plans and assumptions, we do not expect to achieve profitability on an annual basis in the near future. In addition, we expect our cash expenditures to increase significantly in the near term, including significant expenditures for the expansion of our Mountain View, California sequencing facility, research and development, sales and marketing and general and administrative expenses and the possible development of additional sequencing centers. We may encounter unforeseen difficulties, complications and delays in expanding our Mountain View sequencing facility or in establishing additional genome sequencing centers and other unforeseen factors that require additional expenditures. These costs, among other factors, have had and will continue to have an adverse effect on our working capital and stockholders equity. We will have to generate and sustain substantially increased revenue to achieve and maintain profitability, which we may never do. If we are unable to achieve and then maintain profitability, the market value of our common stock will decline.

***Our operating results may fluctuate in the future. As a result, we may fail to meet or exceed the expectations of research analysts or investors, which could cause our stock price to decline.***

Our financial condition and operating results may fluctuate from quarter to quarter and year to year in the future due to a variety of factors, many of which are beyond our control. Factors relating to our business that may contribute to these fluctuations include the following, as well as other factors described elsewhere in this Form 10-Q:

our ability to achieve profitability;

our need for and ability to obtain capital necessary to operate and expand our business;

the timing of the receipt of customer samples;

the size and frequency of customer orders;

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our ability to lower the average cost per genome that we sequence;

the presence or absence in a specific quarter of one or more new large orders for hundreds of genomes;

our ability to expand our sequencing operations;

the demand for the sequencing of complete human genomes;

the existence and extent of government funding for research and development relating to genome sequencing;

the emergence of alternative genome sequencing technologies;

risks associated with expanding our business into international markets;

our dependence on single-source suppliers;

our ability to manage our growth;

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our ability to successfully partner with other businesses in joint ventures or collaborations, or integrate any businesses we may acquire with our business;

our dependence on, and the need to attract and retain, key management and qualified sales personnel;

our ability to obtain, protect and enforce our intellectual property rights and avoid infringing the intellectual property rights of others;

our ability to prevent the theft or misappropriation of our know-how or technologies;

lawsuits brought against us by third parties;

business interruptions, such as earthquakes and other natural disasters;

public concerns about the ethical, legal and social concerns related to the use of genetic information;

our ability to comply with current laws and regulations and new or expanded regulatory schemes;

our ability to properly handle and dispose of hazardous materials used in our business and biological waste; and

our ability to use our net operating loss carryforwards to offset future taxable income.

Due to the various factors mentioned above, and others, the results of any prior quarterly or annual periods are not necessarily indicative of our future operating performance.

***We may need additional capital in the future in order to maintain and expand our business. A failure to secure additional capital may have a material effect on our ability to meet our long-term objectives.***

Our future capital requirements are substantial, particularly as we further develop our business, expand the sequencing and computing capacity in our Mountain View and Santa Clara, California leased facilities and establish additional genome sequencing centers. Historically, we have financed our operations through private placements of preferred stock, convertible debt, borrowings under our credit facility, secured debt and through our recently completed common stock offerings.

We believe that, based on our current level of operations and anticipated growth, our cash and cash equivalent and short-term investment balances, including interest income we earn on those balances, will be sufficient to meet our anticipated cash requirements for at least the next 12 months. Our cash requirements to support our longer term business needs will depend on market demand, pricing, competitive dynamics and other strategic decisions made by management. Additionally, our forecast of the period of time through which our financial resources will be adequate to support our operations and the costs to support our general and administrative, sales and marketing and research and development activities are forward-looking statements and involve risks and uncertainties. Actual results could vary materially as a result of a number of factors.

We may not be able to raise sufficient additional financing on terms that are acceptable, if at all. Given the risks associated with our business, including our limited operating history and our new business model in an emerging industry, and recent difficulties for life sciences companies raising funds in the capital markets, we may be unable to raise additional capital in the amounts we require, if at all. Our failure to raise additional capital in sufficient amounts, may impact our ability to achieve our long-term business objectives. In addition, if future financings involve the issuance of equity securities, our existing stockholders would suffer dilution. If we raise additional debt financing, we may be subject to restrictive covenants that limit our ability to conduct our business. If we fail to raise sufficient funds and continue to incur losses, our ability to



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operate our business, take advantage of strategic opportunities, further develop and enhance our technology or otherwise respond to competitive pressures could significantly suffer. If this happens, we may be forced to:

slow the commercialization of our services;

delay or terminate research or development programs;

slow or halt the establishment of additional genome sequencing centers;

curtail or cease operations; or

seek to obtain funds through collaborative and licensing arrangements, which may require us to relinquish commercial rights or grant licenses on terms that are not favorable to us.

The amount of additional capital and timing at which we require the additional capital necessary to fund our operations and expand our business depends on many factors, including:

the financial success of our genome sequencing business;

our ability to increase the sequencing and computing capacity in our Mountain View and Santa Clara leased facilities;

the rate at which we establish additional genome sequencing centers and whether we can find suitable partners to establish such centers, if at all;

whether we are successful in obtaining payments from customers;

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whether we can enter into collaborations or establish a recurring customer base;

the progress and scope of our research and development projects;

the effect of any joint ventures or acquisitions of other businesses or technologies that we may enter into or make in the future;

the filing, prosecution and enforcement of patent claims; and

the costs associated with lawsuits brought against us by third parties, including our current litigation with Illumina, Inc.

### ***Risks Related to Our Business***

***Our only source of revenue is our human genome sequencing service, which is a new business model in an emerging industry, and failure to achieve market acceptance will harm our business.***

Since our inception, all of our efforts have been focused on the creation of a technology platform for our human genome sequencing service, which we have only just recently commercialized. We expect to generate all of our revenue from our human genome sequencing service for the foreseeable future. As a result, market acceptance of our human genome sequencing service is critical to our future success.

Providing genome sequencing as a service is a new and unproven business model in a relatively new and rapidly evolving industry. We are using proprietary technology, involving multiple scientific and engineering disciplines, and a novel service model to bring complete human genome sequencing to an unproven market. Historically, companies in this industry have sold sequencing instruments directly to customers, and the customer performs the sequencing itself. We do not know if the purchasers and users of sequencing instruments will adopt our service model. For example, many potential customers want to sequence human genomes for proprietary studies that may lead to discoveries which they would seek to exploit, either commercially or through the publication of scientific literature. Accordingly, these potential customers may have significant reservations about allowing a third party to control the sequencing processes for their proprietary studies. Alternatively, other potential customers may want to sequence only portions of human genomes, rather than complete human genomes. There are many reasons why our services might not become widely adopted, ranging from logistical or quality problems to a failure by our sales force to engage potential customers, and including the other reasons stated in this Risk Factors section. As a result, our genome sequencing service may not achieve sufficient market acceptance to allow us to become profitable.

***Our success depends on the growth of markets for analysis of genetic variation and biological function, and the shift of these markets to complete human genome sequencing.***

We are currently targeting customers for our genome sequencing service in academic and government research institutions and in the pharmaceutical and other life science industries. Our customers are using our service for small- and large-scale human genome studies for a wide variety of diagnostic and discovery applications. These markets are new and emerging, and they may not develop as quickly as we anticipate, or reach their full potential. The development of the market for complete human genome sequencing and the success of our service depend in part on the following factors:

demand by researchers for complete human genome sequencing;

the usefulness of genomic data in identifying or treating disease;

the ability of our customers to successfully analyze the genomic data we provide;

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the ability of researchers to convert genomic data into medically valuable information;

the capacity and scalability of the hardware storage components necessary to store, manage, backup, retain and safeguard genomic data; and

the development of software tools to efficiently search, correlate and manage genomic data.

For instance, demand for our genome sequencing service may decrease if researchers fail to find meaningful correlations between genetic variation and disease susceptibility through genome-wide association studies. In addition, factors affecting research and development spending generally, such as changes in the regulatory environment affecting pharmaceutical and other life science companies and changes in government programs that provide funding to companies and research institutions, could harm our business. If our target markets do not develop in a timely manner, demand for our service may grow at a slower rate than we expect, or may fall, and we may not achieve profitability.

To date, relatively few complete human genomes have been sequenced, in large part due to the high cost of large-scale sequencing. Our business plan assumes that the demand for sequencing complete human genomes will increase significantly as the cost of complete human genome sequencing decreases. This assumption may prove to be incorrect, or the increase in demand may take significantly more time than we anticipate. For example, potential customers may not think our cost reductions are sufficient to permit or justify large-scale sequencing. Moreover, some companies and institutions have focused on sequencing targeted areas of the genome that are believed to be primarily associated with disorders and diseases, as opposed to the entire genome. Demand for sequencing complete human genomes may not increase if these targeted sequencing strategies, such as exome sequencing, where selected regions containing key portions of genes are sequenced, prove to be more cost effective or are viewed as a more efficient method of genetic analysis than complete human genome sequencing. Since exome sequencing is currently less expensive than the sequencing of an entire human genome, customers, including those with limited budgets, may choose to sequence exomes instead of using our human genome sequencing services.

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***We face significant competition. Our failure to compete effectively could adversely affect our sales and results of operations.***

We currently compete with companies that develop, manufacture and market genome sequencing instruments or provide genome sequencing services. We expect competition to increase as our competitors develop new, improved or cheaper instruments or expand their businesses to include sequencing services, and as new companies enter the market with innovative technologies.

The market for genome sequencing technology is highly competitive and is served by several large companies with significant market shares. For example, established companies such as Illumina, Inc., Life Technologies Corporation and Roche Diagnostics Corporation are marketing instruments for genetic sequencing that are directly competitive with our services, and these companies have significantly greater financial, technical, marketing and other resources than we do to invest in new technologies and have substantial intellectual property portfolios and substantial experience in product development and regulatory expertise. Also, there are many other companies, such as NABsys, Inc., Oxford Nanopore Technologies, Ltd., and Pacific Biosciences, Inc., that are developing sequencing technologies or services that would compete with ours. Moreover, large established companies may acquire smaller companies with emerging technologies and use their extensive resources to develop and commercialize such technologies or incorporate such technologies into their instruments and services. For example, in 2010, Life Technologies acquired Ion Torrent Systems, Inc., a chip-based sequencing technology company.

In addition, there are many research, academic and other non-profit institutions that are pursuing new sequencing technologies. These institutions often have access to significant government and other funding. For example, BGI (formerly known as Beijing Genomics Institute) in the People's Republic of China offers a service that is similar to ours and is funded by the government of China. In the United States, agencies such as the National Human Genome Research Institute provide funding to institutions to discover new sequencing technology. We may compete directly with these institutions, or these institutions may license their technologies to third parties with whom we would compete.

While many of our existing competitors primarily sell sequencing instruments, they may also provide sequencing services like us. Since these competitors have already developed their own sequencing technology, they will not experience significant technological barriers to entry and can likely enter the sequencing services market fairly quickly and with little additional cost. For example, Illumina started providing whole genome sequencing services in-house and through its Illumina Genome Network in mid-2010, and Life Technologies has announced a collaboration to build a genome sequencing facility. Furthermore, many of these instrumentation companies have already established a significant market presence and are trusted by customers in the industry. As established instrumentation companies enter the sequencing services market, many potential customers may purchase sequencing services from these companies instead of us, even if we offer superior technology and services.

***Our order backlog may never be completed, and we may never earn revenue on backlogged contracts to sequence genomes. In addition, the timing of the conversion of our order backlog into revenue is dependent on the timing of receipt of samples from our customers.***

As of June 30, 2011, we had a backlog of orders for sequencing approximately 2,200 genomes, which we believe could result in approximately \$12.0 million in revenue over the next 12 months. This figure represents the number of genomes for which customers have placed sequencing orders that we believe are firm and for which we have not yet recognized revenue. We may not be able to convert order backlog into revenue at the rate or times we anticipate, or at all. Consequently, the order backlog we report in this Form 10-Q and elsewhere from time to time may not be indicative of future revenue.

We may fail to complete backlog orders as we expect for many reasons. We may experience sequencing delays or customers may be delayed in providing samples for sequencing or might cancel orders. We are in the early stages of launching our services, and while we have been increasing our throughput capacity rapidly, we have in the past experienced growing backlog due to our inability to keep pace with new orders. Delays in sequencing for which we are responsible could cause backlog orders to be cancelled by customers, which has happened to us at least once. Even with sufficient throughput capacity, we are not always in control of the rate at which we complete orders and therefore convert backlog to revenue. For example, customers often place firm orders with us before providing us with genomic samples, delaying our start of the sequencing process by weeks or months. A delay in receiving samples, particularly from a large order, may cause our results of operations to fluctuate significantly from one quarter to the next. Additionally, once we receive a customer's samples, we test them to assure that they are of sufficient quality and quantity for sequencing. If not, we contact the customer and request additional samples, resulting in further delay. Also, customers may negotiate a period of time, measured in weeks or in some cases months, to accept or reject our sequencing reports once delivered. Customer acceptance in these instances is a prerequisite for recording revenue for those orders. For these reasons, you should use caution in adopting changes in, or the absolute amount of, our backlog as a proxy for market acceptance of our sequencing services or as an indicator of future revenue.

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***The presence or absence in a specific quarter of one or more new large orders, or the cancellation of any previous orders, for hundreds of genomes may cause our results of operations and backlog to fluctuate significantly on a quarterly basis.***

Since beginning commercial operations, we have received purchase orders or contracts from a limited number of customers each quarter, typically between 10 and 20 customers quarterly. Historically, the size of each purchase order has fluctuated between a few genomes and multiple hundreds of genomes. As a result, the presence or absence in a specific quarter of one or more new large orders, or the cancellation of any previous orders, for hundreds of genomes combined with our uncertain sales cycle and changes in the variables that influence conversion of orders into revenue, may cause our results of operations and our backlog to fluctuate on a quarterly basis. These fluctuations may be significant from one quarter to the next. In addition, our limited commercial history and the characteristic of our quarterly orders makes it very difficult to predict or forecast our future operating results and backlog.

***If we are not successful in reducing the average cost of our sequencing service, demand for our services, as well as our ability to achieve profitability, will suffer.***

Our ability to expand our customer base depends largely on our ability to reduce the average cost of sequencing a human genome. For example, certain academic or government-sponsored research organizations may forgo or delay whole genome-wide studies based on the cost required to sequence complete human genomes, in favor of other less expensive studies, including targeted sequencing strategies such as exome sequencing. Additionally, certain of our target customers may decide it is more cost-effective to purchase sequencing instruments from a competitor than contract for our sequencing service. To compete effectively with competitors who sell and market sequencing instruments, our service must provide cost advantages, superior quality and time savings over the purchase of sequencing instruments.

In addition, we have significantly reduced the price of our complete human genome sequencing services over the past few quarters. This reduction in price has been driven in part by competitive pricing pressure as well as increased order sizes from our customers. As our competitors reduce the price of their sequencing services, or as new competitors enter the market or expand their business model to include sequencing services, we expect increased pricing pressure, which may force us to decrease the price of our genome sequencing service. Our gross profit and operating results will suffer if we are unable to offset any reductions in our prices by reductions in our costs through developing new or enhanced technologies or methods, or increasing our sales volumes.

***We must significantly increase our production capabilities in order to achieve profitability.***

We have very limited experience in running a commercial-scale production facility. We have only one sequencing facility, which at present has the capacity to sequence approximately 600 complete human genomes per month. This capacity is significantly less than what would be required to achieve profitability. Our business plan assumes that we will be able to increase our capacity multiple fold.

We plan to increase the capacity of our sequencing facility by installing additional sequencing machines, improving our software and designing and installing newer generations of sequencing instruments that are currently under research and development. We may also construct additional genome sequencing centers in the United States and elsewhere in 2012 and afterward. We may encounter difficulties in expanding our sequencing infrastructure, and we may not build and improve this infrastructure in time to meet the volume, quality or timing requirements necessary to be successful. Manufacturing and supply quality issues may arise, including due to third parties who provide the components of our technology platform. Implementing improvements to our sequencing technology may involve significant changes, which may result in delays, or may not achieve expected results. For example, we are experimenting with increasing the density of DNBs on our DNA arrays. These experiments may be unsuccessful and may not lead to feasible technological improvements that increase the capacity or reduce the costs of our sequencing services. If capacity or cost limitations prevent us from meeting our customers' expectations, we will lose revenue and our potential customers may take their business to our competitors.

Our need to increase capacity may require us to upgrade our machines to enhance our current production process. This may render our current machines obsolete sooner than anticipated. If this occurs, the value of these machines could be impaired and we may need to write down the value of this equipment, which could have a material impact on our financial statements in light of the dollar significance of the long-lived assets carried on our balance sheet.

***The emergence of competitive genome sequencing technologies may harm our business.***

The success of our genome sequencing services will depend, in part, on our ability to continue to enhance the performance and decrease the cost of our genome sequencing technology. A number of genome sequencing technologies exist, and new methods and improvement to existing methods are currently being developed, including technology platforms developed by companies that we expect will directly compete with us as providers of sequencing services or instruments. These new technologies may result in faster, more cost-effective and more accurate sequencing

methods than ours. For example, our sequencing technology does not currently cover all of the nucleotides in the genome. If competitive technologies emerge that sequence portions of the genome that our technology does not, our business could suffer if those portions contain important genomic information. We expect to face competition from emerging companies, including NABsys, Oxford Nanopore Technologies and Pacific Biosciences. As a result of the emergence of these competitive sequencing technologies, demand for our service may decline or never develop sufficiently to sustain our operations.

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Our industry is rapidly changing, with emerging and continually evolving technologies that increase the efficiency and reduce the cost of sequencing genomes. As new technologies emerge, we believe that the cost and error rates of, and the time required to, sequence human genomes will eventually decrease to a level where competition in the industry will shift to other factors, such as providing related services and analytical technologies. We may not be able to maintain any technological advantage over these new sequencing technologies, and if we fail to compete effectively on other factors relevant to our customers, our business will suffer.

***Our genome sequencing technology platform was developed for human DNA and is not currently optimized to sequence non-human DNA.***

Our technology platform was developed and has been optimized for sequencing human DNA, and we do not intend to sequence non-human DNA. We face significant competition from established companies who sell genome sequencing instruments that can sequence both human and non-human DNA. Many of the academic and research institutions that are our target customers conduct studies on both human and non-human DNA. Prospective customers may choose to purchase sequencing instruments from a competitor because of their broader sequencing application. Our competitors may also choose to provide sequencing services for non-human DNA. As a result, there may not be sufficient demand for our human genome sequencing service, which will harm our business.

***We depend on a limited number of suppliers, including single-source suppliers, of various critical components for our sequencing process. The loss of these suppliers, or their failure to supply us with the necessary components on a timely basis, could cause delays in the current and future capacity of our sequencing center and adversely affect our business.***

We depend on a limited number of suppliers, including some single-source suppliers, of various critical components for our sequencing process. We do not have long-term contracts with our suppliers or service providers. Because we do not have long-term contracts, our suppliers generally are not required to provide us with any guaranteed minimum production levels. As a result, we may not be able to obtain sufficient quantities of critical components in the future.

Although alternative suppliers exist for each of the critical components of our sequencing process, that process has been designed around the functions, limitations, features and specifications of the components that we currently utilize. For example, the cameras in our sequencers are supplied by Hamamatsu Photonics and the optical equipment is supplied by Carl Zeiss, Inc. A failure by either or both of these companies to supply these components would require us to integrate alternative cameras and optical equipment, and potentially integrate other components, into future sequencing instruments. If we are required to integrate new components into future sequencers, we would experience a delay in the deployment of these sequencers, and, as a result, our efforts to expand our sequencing capacity would be delayed.

A delay or interruption by our suppliers may also harm our business. For example, the wafers that comprise the base of our sample slide are fabricated by SVTC Technologies, L.L.C. We have not yet qualified an alternative source for the supply of these wafers, which are critical to our sequencing process, and the custom manner in which these wafers are made may make it difficult to qualify other semiconductor suppliers to manufacture them for us. Similarly, an interruption of services by Amazon Web Services, on whom we rely to deliver finished genomic data to our customers, would result in our customers not receiving their data on time.

In addition, the lead time needed to establish a relationship with a new supplier can be lengthy, and we may experience delays in meeting demand in the event we must switch to a new supplier. The time and effort to qualify a new supplier could result in additional costs, diversion of resources or reduced manufacturing yields, any of which would negatively impact our operating results. Our dependence on single-source suppliers exposes us to numerous risks, including the following:

our suppliers may cease or reduce production or deliveries, raise prices or renegotiate terms;

delays by our suppliers could significantly limit our ability to sequence customer data and delay our efforts to increase our sequencing capacity;

we may be unable to locate a suitable replacement on acceptable terms or on a timely basis, if at all; and

delays caused by supply issues may harm our reputation, frustrate our customers and cause them to turn to our competitors for future projects.

***If our Mountain View genome sequencing facility becomes inoperable, we will be unable to perform our genome sequencing services and our business will be harmed.***

We currently do not have redundant sequencing facilities on a scale that could support our business. We perform all of our commercial genome sequencing in our facility located in Mountain View, California. Mountain View is situated on or near earthquake fault lines. Our facility, the equipment we use to perform our sequencing services and our other business process systems are costly to replace and could require substantial time to repair or replace. The facility may be harmed or rendered inoperable by natural or man-made disasters, including earthquakes, wildfires, floods, acts of terrorism or other criminal activities, infectious disease outbreaks and power outages, which may render it difficult or impossible for us to sequence genomes for some period of time. In addition, these events may temporarily interrupt our ability to receive samples from our customers or materials from our suppliers and our access to our various systems necessary to operate our business. The inability to perform our sequencing service would result in the loss of customers and harm our reputation. We do not currently have insurance coverage for damage arising from an earthquake. Our insurance covering damage to our property may not be sufficient to cover all of our potential losses and will not cover us in the event of an earthquake, and may not continue to be available to us on acceptable terms, or at all.



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***Failure to achieve expected sequencing process yields, or variability in our sequencing process yields, could harm our operating results and damage our reputation.***

Our sequencing process, like any other commercial-scale production process, is not flawless. For example, our DNBs may not adhere to all of the sticky spots on the surface of the silicon wafers we use to sequence DNA, or parts of the wafers may be unreadable. We refer to the efficiency of our sequencing process as its yield. The sequencing process yields we achieve depend on the design and operation of our sequencing process, which uses a number of complex and sophisticated biochemical, informatics, optical and mechanical processes. An operational or technology failure in one of these complex processes may result in sequencing processing yields that are lower than we anticipate or that vary between sequencing runs. In addition, we are regularly evaluating and refining our sequencing process. These refinements may initially result in unanticipated issues that further reduce our sequencing process yields or increase the variability of our sequencing yields. Low sequencing yields, or higher than anticipated variability, increases total sequencing costs and reduces the number of genomes we can sequence in a given time period, which can cause variability in our operating results and damage our reputation.

***We may have to resequence genomes due to contamination of DNA samples or other failures in the sequencing process.***

In the past, we have had to resequence various genome samples as a result of contamination occurring in the sample preparation and library construction process. The sequencing process is highly sensitive, and the presence of any foreign substances during the preparation of the slide samples can corrupt the results of the sequencing process. The quality of our sequencing runs may also vary for other reasons. Resequencing requires additional expense, time and capacity and delays the recognition of revenue from the service. Samples may be contaminated in the future or the quality of our sequencing results may vary, which may damage our reputation and decrease the demand for our service.

***Mishandling or switching of DNA samples or genomic data may harm our reputation and result in litigation against us.***

We may unintentionally mishandle DNA samples. For example, if customer samples or sequencing results are switched, our customers would receive the wrong sequencing data, which could have significant consequences, particularly if that data is used to diagnose or treat disease. Mishandling customer samples or data could lead to loss of current or future business, harm our reputation and result in litigation against us.

***Reduction or delay in research and development budgets and government funding may adversely impact our sales.***

We expect that for the foreseeable future, our revenue will be derived primarily from selling our genome sequencing service to a relatively small number of academic, governmental and other research institutions, as well as pharmaceutical and other life science companies. Our revenue may decline substantially due to reductions and delays in research and development expenditures by these customers, which depend, in part, on their budgets and the availability of government funding. Factors that could affect the spending levels of our customers include:

weakness in the global economy and changing market conditions that affect our customers;

changes in the extent to which the pharmaceutical and life science industry may use genetic information and genetic testing as a methodology for drug discovery and development;

changes in government programs that provide funding to companies and research institutions;

changes in the regulatory environment affecting pharmaceutical and life science companies and research;

impact of consolidation within the pharmaceutical and life science industry; and

cost-reduction initiatives of customers.

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Also, government funding of research and development is subject to the political process, which is inherently unpredictable. Any reduction in the funding of life science research and development or delay surrounding the approval of government budget proposals may cause our customers to delay or forgo purchases of our services. A reduction or delay in demand for our service will adversely affect our ability to achieve profitability.

***The timing and extent of funding provided by the American Recovery and Reinvestment Act of 2009 could adversely affect our business, financial condition or results of operations.***

In February 2009, the U.S. government enacted the American Recovery and Reinvestment Act of 2009, which we refer to as the Recovery Act, to provide stimulus to the U.S. economy in the wake of the economic downturn. As part of the Recovery Act, over \$10 billion in research funding was provided to the National Institutes of Health, or NIH, through September 2010 to support the advancement of scientific research. A portion of the stimulus funding supported the analysis of genetic variation and biological function and may have a significant positive long-term impact on our business and the industry generally. In the short-term, however,

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potential customers may delay or forgo their purchases of our services as they wait to learn whether, and to what extent, they will receive stimulus funding. If potential customers are unable to obtain stimulus money, they may reduce their research and development budgets, resulting in a decrease in demand for our service. In addition, even if potential customers receive these stimulus funds, they may not purchase our services, and we may not benefit from the Recovery Act.

*Ethical, legal and social concerns related to the use of genetic information could reduce demand for our genome sequencing services.*

Our genome sequencing services are intended to facilitate large-scale human genome studies for a wide variety of diagnostic and discovery applications. However, genetic testing has raised ethical, legal and social issues regarding privacy and the appropriate uses of the resulting information. Governmental authorities could, for social or other purposes, limit or regulate the use of genetic testing or prohibit testing for genetic predisposition to certain conditions, particularly for those that have no known cure. Similarly, these concerns may lead individuals to refuse to use genetics tests even if permissible.

In addition, we do not control how our customers use the genomic data we provide. In most cases, we do not know the identity of the individuals whose DNA we sequence, the reason why their DNA is being sequenced or the intended use of the genomic data we provide. If our customers use our services or the resulting genomic data irresponsibly or in violation of legal restrictions, our reputation could be harmed and litigation may be brought against us.

Ethical and social concerns may also influence U.S. and foreign patent offices and courts with regard to patent protection for technology relevant to our business. These and other ethical, legal and social concerns may limit market acceptance of our technology for certain applications or reduce the potential markets for our technology, either of which could have an adverse effect on our business, financial condition or results of operations.

*We use biological and hazardous materials that require considerable expertise and expense for handling, storage and disposal and may result in claims against us.*

We work with materials, including chemicals, biological agents and compounds and DNA samples that could be hazardous to human health and safety or the environment. Our operations also produce hazardous and biological waste products. Federal, state and local laws and regulations govern the use, generation, manufacture, storage, handling and disposal of these materials and wastes. Compliance with applicable environmental laws and regulations is expensive, and current or future environmental laws and regulations may restrict our operations. If we do not comply with applicable regulations, we may be subject to fines and penalties.

In addition, we cannot eliminate the risk of accidental injury or contamination from these materials or wastes. While our property insurance policy provides limited coverage in the event of contamination from hazardous and biological products and the resulting cleanup costs, we do not currently have any additional insurance coverage for legal liability for claims arising from the handling, storage or disposal of hazardous materials. Further, our general liability insurance and workers' compensation insurance policies do not cover damages and fines arising from biological or hazardous waste exposure or contamination. Accordingly, in the event of contamination or injury, we could be liable for damages or penalized with fines in an amount exceeding our resources and our operations could be suspended or otherwise adversely affected.

*We have limited selling and marketing resources and may b*