



life's code. **uncovered.**

SEQUENCING + GENOTYPING + GENE EXPRESSION

dear fellow shareholders:



In 2008 Illumina celebrated its tenth anniversary with record revenues, profits, and cash flow. Our innovative product portfolio has produced leading market share in the large and rapidly growing areas of next-generation sequencing and high complexity genotyping, two of the most important applications in the field of genetic analysis.

Our Company was founded to create revolutionary products that decipher the relationship between genetics and disease, with the ultimate goal of improving human health. After ten years, this vision remains our core focus. Around the world, scientists use Illumina's technology to understand the molecular basis of diseases such as cancer, heart disease and diabetes. In fact, in 2008 alone Illumina technology was used to help generate more than 670 scientific publications.

However, this endeavor is in its earliest stages. As we continue to drive down the costs of genetic analysis, exciting new applications and markets are emerging. For example, in 2008 we saw the initial development of the consumer genetics market, which for the first time is empowering individuals to explore the mysteries of their own genetic code. In the not too distant future, it will become commonplace for an individual's genetic profile to be used to tailor medical practice, ushering in the era of personalized medicine.

2008 ACHIEVEMENTS

In 2008, we achieved record results across all our key metrics. We grew revenue by 56% to \$573 million, and generated \$142 million in operating cash flow and while dropping \$0.931 of earnings per share to the bottom line. We dramatically expanded our infrastructure and added nearly 500 new employees, many of whom are

located outside of the US. Our markets are truly global and we now have the scope to take advantage of opportunities virtually anywhere in the world.

Our record financial performance was driven by significant growth in each of our core market segments: genotyping, sequencing, and gene expression. During the year, we launched more than 70 products, including major revisions of nearly all of our platform technologies. These new products contributed over 60% of our 2008 revenue. The strength of our product portfolio has led us to maintain leading share in our core markets.

In our microarray business, we launched 10 new BeadChips and shipped more than 1 million samples of Infinium® genotyping products. In the second quarter, we began shipping an entirely new microarray architecture and assay called Infinium HD. The new architecture enabled us to substantially increase the number of markers on an individual BeadChip, which has given us the ability to offer products with more samples per chip. This makes our products easier to use and more affordable. Additionally, the Infinium HD format provides us with the ability to develop products with additional content as researchers demand BeadChips with more genetic markers per sample. In addition to Infinium HD, we launched iScan, a new analytical instrument that scans the higher density BeadChips nearly six times faster than our previous system, the BeadArray™ Reader. As a result, the average consumable revenue generated per installed system grew by more than \$50,000 to over \$700,000 per year.

We also made tremendous progress in our sequencing business during 2008. In February 2008, we launched the Genome AnalyzerII, a significant upgrade that improved both the performance and

robustness of the system. Over the course of the year, we improved the throughput of our platform more than 15-fold. This pace of innovation is dramatically faster than Moore's law and a key contributor to the total reduction of sequencing costs. Throughput improvements resulted from modifications to nearly all aspects of our platform including the hardware, sequencing chemistry, and related software. The new platform, coupled with numerous workflow, application, and protocol improvements, has established Illumina as the leader in the next-generation sequencing revolution.

We were delighted to learn that our 2008 achievements were recognized outside of the Company. In December, Illumina was added to the NASDAQ-100 Index, comprised of the 100 largest non-financial stocks on the NASDAQ stock market based on market capitalization. Illumina shares were also added to the PowerShares QQQ Trust (NasdaqGM:QQQ), which aims to provide investment results that, before expenses, correspond with the NASDAQ-100 Index performance. Additionally, in early 2009, Forbes magazine ranked Illumina #1 on its 2009 list of Fastest-Growing Technology Companies in the United States. After being ineligible for last year due to the charges associated with our acquisition of Solexa, Illumina returned to the number one spot on the Forbes list for the second time in the past three years.

INVESTING IN OUR FUTURE GROWTH

In order to support our rapid growth, we grew the Illumina team by nearly 50% during 2008. In particular, we greatly expanded our manufacturing, global sales, and support infrastructure. As a result, we believe we are positioned well to take advantage of the global opportunities

ahead. In 2008, we also brought on additional senior leadership to guide critical functions. Dr. Mostafa Ronaghi joined Illumina in July as Senior Vice President and Chief Technology Officer as part of our acquisition of Avantome. Having founded four life sciences companies, Dr. Ronaghi brings a wealth of experience to lead Illumina's technology development effort. Toward the end of 2008, Mark Lewis joined Illumina from Becton Dickinson as Senior Vice President of Development to oversee Illumina's global product development initiatives. Finally, early this year, Bill Bonnar joined Illumina from KLA-Tencor as Senior Vice President of Operations responsible for Illumina's global manufacturing and supply chain efforts.

Our growth has required us to make significant investments in our global facilities. In July, we significantly expanded our corporate headquarters by completing construction of an 84,000 square foot facility. In October, we completed the qualification of our new Singapore manufacturing facility. In the fourth quarter alone, we produced approximately 34,000 BeadChips out of this site. Our Singapore operation enables us to increase our BeadChip production capacity and as well as reduce our total income tax expense. In 2009, we also expect to complete a new state of the art research and development facility located in the United Kingdom.

Over at least the next ten years, we believe that the demand for sequencing data will be insatiable, constrained only by the cost to complete a sequence. As such, it is imperative for Illumina to continue to invest in new sequencing technologies that will deliver, and go beyond, the \$1,000 genome. In August, we completed the acquisition of Avantome, Inc., a privately

held company developing a long-read, low-cost, next-generation sequencing technology that complements the Genome Analyzer. Avantome technology fits directly into our vision of a segmented sequencing market that includes multiple technologies to address the diversity of applications, price requirements and throughput needs. We also expect the Avantome technology to constitute an important platform in our emerging molecular diagnostics business.

In early 2009, we made a strategic equity investment in Oxford Nanopore Technologies, Ltd. (ONT), which includes a global commercialization agreement under which Illumina will market, sell, distribute, and service ONT's BASE technology products for DNA sequencing. ONT's nanopore sequencing technology eliminates the requirement for fluorescent labels and expensive lasers, cameras, and optics, providing the potential to achieve the \$1000 genome, if successfully developed.

OPPORTUNITIES ON THE HORIZON

Innovation has been and will continue to be the key driver of Illumina's growth. As we rapidly reduce the costs of sequencing and genotyping, we expect the use of our technologies in the agricultural, industrial and consumer markets will quickly expand. Additionally, lower costs enable life science researchers to perform experiments and answer questions that were previously out of reach. Ultimately, we believe our products will enable researchers to affordably interrogate the genomes of all living organisms over the full range of complexity from the full genome to the screening of a single variant.

Additionally, there are several global initiatives that have been facilitated by advances in our technology. For example, large-scale sequencing programs such

as the 1,000 Genomes Project and The International Cancer Genome Consortium have been started to greatly advance our understanding of genetic variation. These projects capture the imagination of the scientific community, answer increasingly complex questions, and stimulate demand to drill even deeper into the genetic determinants of disease. A new wave of content for our microarrays will result, catalyzing the next round of genome-wide association studies with vastly greater disease association power. The overarching goal of these projects is to provide researchers, clinicians, physicians, and consumers the knowledge required to realize the goals of personalized medicine.

Our opportunities in the research markets are significant. However, the potential to utilize our technologies to develop molecular diagnostic products could ultimately prove to be the largest market opportunity ahead. In November, we began to map out our diagnostic strategy which includes three core components. The first focuses on creating partnerships around our BeadXpress® platform. This will help us enter the diagnostic markets quickly and will build the installed base of our systems, a necessary requirement for wide-spread diagnostic adoption. The second is centered on creating a CLIA-certified services business that will offer complex genetic tests based primarily on sequencing. The third component is an aggressive oncology discovery program with the goal to sequence 50 cancer and 50 normal tissues during 2009. This work is expected to generate a wealth of biomarkers as targets for future diagnostic tests.

The combined application of our sequencing and microarray technologies has also opened significant market opportunities in the agricultural and livestock markets. By applying low-

cost sequencing technology to discover key markers and incorporating those markers onto microarrays, Illumina is changing how researchers approach the breeding challenges of feeding a growing global population. We anticipate agricultural opportunities in both research and screening applications will grow dramatically for us in the future as we build on the \$54 million in agricultural-based orders we received in 2008.

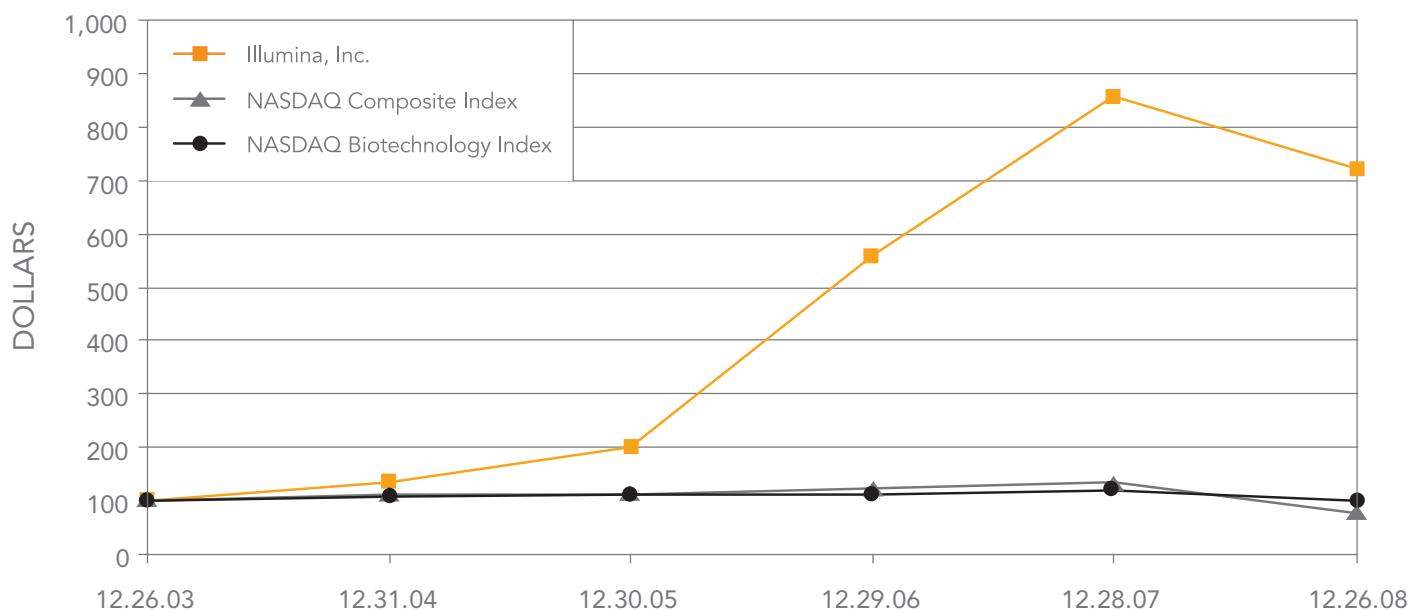
In conclusion, I would like to personally thank our incredibly talented team of employees for their contributions to our success. We have the corporate resources and the talent to continue the pace of technological innovation that is enabling revolutionary science. The investments made in our people, our facilities, and our technology will give us the ability to execute on our objectives in 2009 and beyond. Our markets are healthy in the midst of challenging economic times and we look to benefit from the American Recovery and Reinvestment Act, which has allocated a significant component of stimulus funding to the National Institutes of Health. Finally, Illumina is in outstanding financial condition. We generated over \$140 million of cash in 2008 and we were fortunate to have raised \$350 million through a secondary offering this past August. In all aspects, we are well positioned to execute on the exciting opportunities ahead.

Best regards,



JAY T. FLATLEY
President & Chief Executive Officer

Compare 5-Year Cumulative Total Return Among Illumina Inc., NASDAQ Composite Index and NASDAQ Biotechnology Index



The graph depicted above shows a comparison of cumulative total stockholder returns for our common stock, the NASDAQ Composite Index and the NASDAQ Biotechnology Index, from December 26, 2003 through December 26, 2008. The graph assumes that \$100 was invested on December 26, 2003 in our common stock and in each index. No cash dividends have been declared on our common stock. Stockholder returns over the indicated period should not be considered indicative of future stockholder returns.

corporate information

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FORM 10-K

The Company's Form 10-K can be found on the Investor Relations website in the "financial reports" section at: <http://investor.illumina.com/>

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ANNUAL MEETING

The Company's Annual Meeting of Stockholders will be held at Illumina's corporate headquarters in San Diego, CA at 11:00 a.m. PST on May 8, 2009.

SELECTED COMMON STOCK DATA

The Company's common stock, par value \$0.01, has been traded under the symbol ILMN since July 28, 2000 on The NASDAQ Global Select Market.

"Safe Harbor" Statement under the Private Securities Litigation Reform Act of 1995: this release may contain forward-looking statements that involve risks and uncertainties. Among the important factors that could cause actual results to differ materially from those in any forward-looking statements are Illumina's ability (i) to develop and commercialize further our BeadArray(TM), VeraCode(R), and Solexa(R) technologies and to deploy new sequencing, gene expression, and genotyping products and applications for our technology platforms, (ii) to manufacture robust instrumentation and reagents technology, together with other factors detailed in our filings with the Securities and Exchange Commission including our recent filings on Forms 10-K and 10-Q or in information disclosed in public conference calls, the date and time of which are released beforehand. We disclaim any intent or obligation to update these forward-looking statements beyond the date of this release.

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