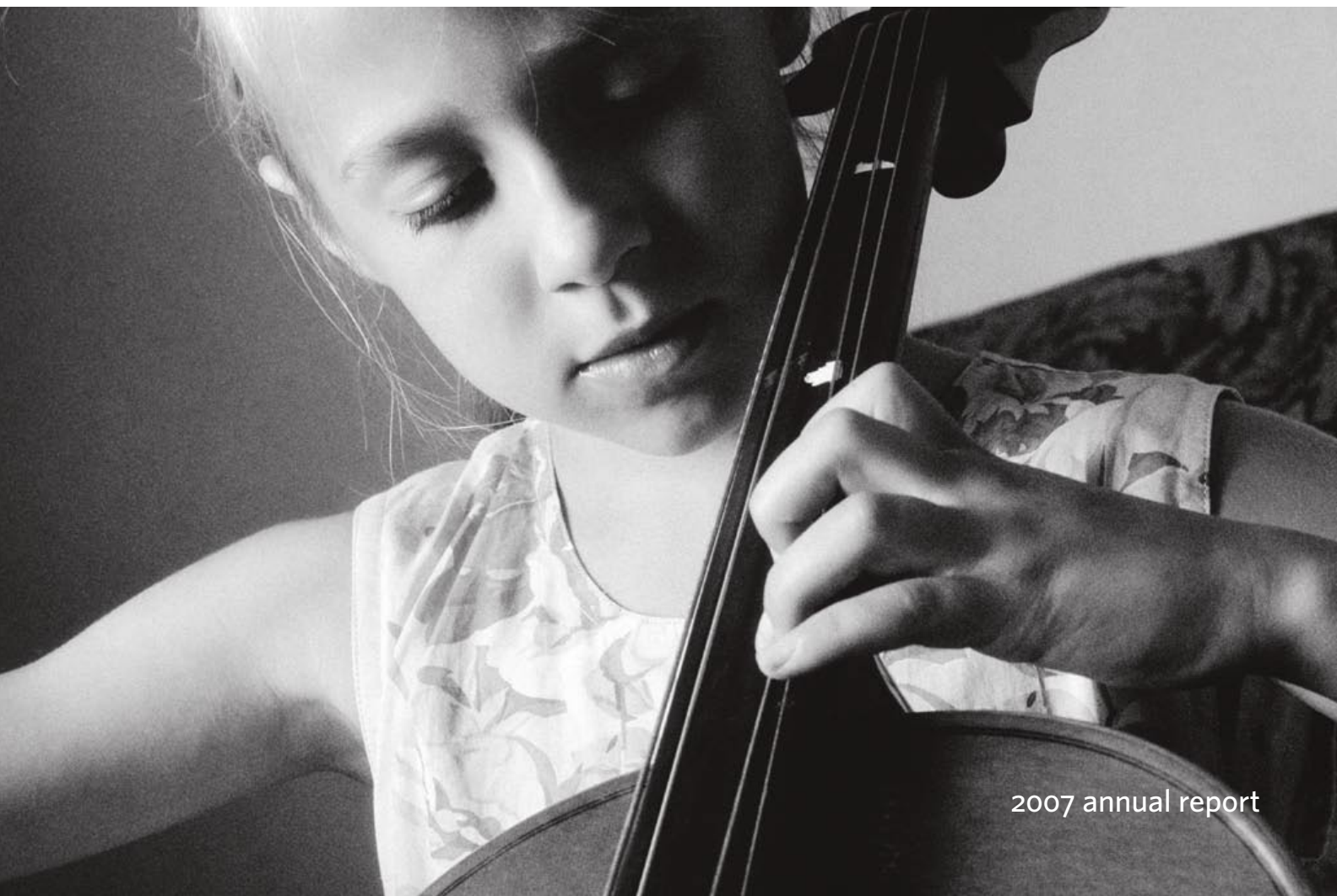


A world where everyone benefits





from understanding their own DNA.

Imagine a world where every person can benefit from the information contained in their DNA. A world where doctors make every treatment decision based on an individual's genetic makeup, saving thousands, even millions, of lives each year. Where all children are born with a chance to realize their full potential.

This is our vision.



To our Shareholders

Imagine a world where inherited diseases are prevented before they begin. Where every person has the knowledge to prepare for, and potentially avoid, conditions that may develop later in life. A world where everyone can benefit from their unique genetic blueprint, and personalized treatments save thousands, perhaps millions, of lives every year.

That world is our vision. By developing innovative genetic technologies and accelerating their advance into clinical applications, Affymetrix aims to make the world a better place for every person on the planet.

Doctors already use our microarray technology to make potentially life-saving treatment decisions for conditions such as breast cancer. In the future, physicians will likely be trained, or even required, to examine a person's genetic information before making medical decisions. Tools such as ours will generate this information, ultimately helping doctors to prevent future diseases, diagnose existing conditions and administer more effective treatments.

Affymetrix continues to lead this revolution in healthcare technology. In 2007, we achieved our revenue goals, significantly reduced operating expenses and returned the company to profitability. We strengthened our management team with seasoned operational expertise and made many operational improvements.

Powering genetic breakthroughs.

We launched more than a dozen products last year, including the groundbreaking Genome-Wide Human SNP Array 6.0. Nearly a year after its launch, the SNP Array 6.0 remains the most powerful microarray on the market, with more than 1.8 million markers for genetic variation. Scientists are using this array to perform the most powerful whole-genome association studies ever, thereby increasing their chances of discovering genes associated with a large number of diseases.

We expanded our portfolio of expression products with the Human, Mouse and Rat Gene Arrays, which enable more

budget-conscious labs to incorporate microarrays into their research. To help our customers deal with large amounts of genetic information, we released the full commercial version of Affymetrix® GeneChip® Command Console® (AGCC) software and upgraded our Genotyping Console™ software.

The Affymetrix Clinical Services Laboratory (ACSL) received certification to offer microarray-based diagnostic testing services. The ACSL will enable clinical labs, research institutes, diagnostic companies and pharmaceutical manufacturers to incorporate microarray-based molecular tests into their clinical practices.

In addition to these technical and commercial innovations, we added a new line of successful products to our portfolio with the acquisition of USB Corporation in January 2008. USB is an established leader in the enzyme and reagent industry, and integrating



these capabilities will result in new high-resolution product lines with enormous implications for large-scale genetic studies.

Even while optimizing the operational and financial aspects of our business, we remained focused on our vision of enabling a better world through genetic technologies. Our customers continue to make significant advances in human health enabled by our technology.

In July, Partners HealthCare announced the commercial availability of an Affymetrix-based test that will help physicians to better diagnose and tailor treatments for individual cardiovascular patients. The team at Partners will initially focus on array-based tests for hypertrophic cardiomyopathy (HCM), a form of heart disease, and will explore a large number of other diseases.

We also launched the European Cytogenetic Research Initiative, a collaboration between Affymetrix and three research institutes. Using our microarray technology, the collaborators will screen clinical samples to identify the genetic causes of childhood developmental disorders.

Affymetrix is also helping doctors in the fight against breast cancer. Using an array based on our technology and developed by Roche, doctors can identify patients who won't benefit from tamoxifen, a common breast cancer drug, because of a specific genetic variation. Treating these patients with other methods could save many lives and avoid countless unnecessary adverse reactions.

These advancements have also been heralded by the broader scientific community. *Science* magazine singled out human genetic variation as the "Breakthrough of the Year" in 2007, citing several projects enabled by Affymetrix technology. The journal highlights a "mammoth analysis" of seven diseases performed by the Wellcome Trust, the United Kingdom's largest charity providing funds to biomedical researchers, and an Affymetrix customer and collaborator. In early 2008, *Fast Company* magazine named Affymetrix one of the World's 50 Most Innovative Companies. We are the only life sciences company on that list.

It is clear that the application of genetic technologies is driving the market and serving unmet medical needs, and we are committed to remaining at the forefront of these endeavors.

In 2008 and beyond, Affymetrix will continue to invest in technologies and programs that will advance the use of genetics in healthcare and society. Through our products, partnerships and the breakthroughs that they enable, we will advance toward the realization of our vision: a world made dramatically better through universal access to genetic information.

Stephen P.A. Fodor, Ph.D.

Founder, Chairman and Chief Executive Officer

Kevin M. King

President

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² Compensation Committee

³ Audit Committee

⁴ Perlegen Oversight Committee

⁵ Term expires June 11, 2008

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SEC Form 10-K

A copy of the Company's Annual Report to the Securities and Exchange Commission on Form 10-K is available without charge upon request.

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As of March 2008

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