



BIONANO GENOMICS AND NEW YORK GENOME CENTER ENTER INTO A STRATEGIC COLLABORATION

SAN DIEGO and NEW YORK—July 8, 2013—[BioNano Genomics](#) and the [New York Genome Center](#) (NYGC) announced today a strategic partnership between the two institutions that includes the purchase of an Irys™ System by NYGC.

“The New York Genome Center is creating one of the largest and most ambitious genomics and bioinformatics facilities in North America, and we are thrilled to have them bring our platform in-house,” said Todd Dickinson, Ph.D., vice president, Global Commercial Operations. “For BioNano, demonstrating the ability to deliver a commercial-ready technology that can address the long-range information needs of a premier genome center like NYGC marks an important milestone. With their Irys System, the NYGC will now provide their direct research community with the most advanced long-read commercial technology to accelerate translational research and ultimately improve human health, consistent with the mission of this new center.”

NYGC was founded in 2010 to speed biomedical research and improve clinical care through a collaborative approach to genomic data and resources. In 2012, NYGC launched its Integrated Genomic Solutions, custom-built services incorporating high-throughput sequencing, bioinformatics analysis, and data management. Later this year, the independent non-profit will open its state-of-the-art facility and permanent headquarters in lower Manhattan. The facility will provide a collective workspace available to researchers to access the most advanced technologies and sequencing and bioinformatics leadership.

“Innovation and cutting-edge technologies are key to our vision of providing high quality genomics sequencing and bioinformatics services to researchers in New York City and beyond,” said Robert B. Darnell, M.D., Ph.D., president and scientific director of NYGC. “Genomics researchers and clinicians need accurate, comprehensive detection of genomic structural variation and to finish genome assemblies to accurately detect and diagnose diseases and improve treatments for patients around the world.”

Genomic sequencing technologies are often described as short-, medium-, or long-read. Short- and medium-read technologies rely on inferring information from short fragments of DNA. Long-read technologies, like the Irys System, preserve the native genomic structure, which provides deeper insights into genome variations. The ability to directly visualize the genome with high-throughput single molecule imaging enables the comprehensive detection of structural variation, significantly improved genome assemblies, and ultimately haplotype phasing.

“At NYGC, we regularly assess new technologies that have significant applications for genomics and bioinformatics and evaluate these systems based on innovation, need, and commercial readiness,” said Kevin V. Shianna, Ph.D., Deputy Scientific Director, Sequencing Operations. “The long-range genomic information from BioNano’s Irys System is highly complementary to



our existing sequencing technologies and allows us to achieve a significantly more complete view of the genome and its variation.”

About the New York Genome Center

Founded in August 2010, the New York Genome Center (NYGC) is an independent, non-profit organization that leverages the collaborative resources of leading academic medical centers, research universities, and commercial organizations. Our vision is to transform medical research and clinical care in New York and beyond through the creation of one of the largest genomics research facilities in North America, while integrating sequencing, bioinformatics, data management, and cutting-edge genomics research. For more information, visit www.nygenome.org.

About Irys

Irys makes it possible to routinely and accurately detect genomic structural variation and to finish genome assemblies. The fully automated Irys benchtop instrument uses the IrysChip to uncoil and confine long DNA molecules in proprietary Nanochannel Arrays™ where they are uniformly linearized in a highly parallel display for high-resolution, single-molecule imaging. Irys does not employ DNA fragmentation or amplification, which are typical with next-generation sequencing. The result is sequence information over extremely long “reads” ranging from hundreds of kilobases to a megabase, where the sample’s valuable structural information is preserved. Irys makes it possible for researchers to directly observe structural variants including replications, deletions, translocations and inversions.

About BioNano Genomics

Headquartered in San Diego, BioNano Genomics is delivering an altogether better way of gaining a fully informed understanding of genomes. The Company’s platform provides researchers and clinicians the most comprehensive, organized and actionable picture of a genome with unprecedented insights into how the individual components of genomes are ordered, arranged, and interact with each other. BioNano Genomics works with institutions in life science, translational research, molecular diagnostics and personalized medicine. The Company is supported by private investors and grant funding from genomics programs at federal agencies, including the NIH and NIST-ATP.

www.BioNanoGenomics.com

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