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BIONANOMATRIX AWARDED SUPPLEMENTAL FUNDING TO ACCELERATE COMMERCIALIZATION OF INNOVATIVE SINGLE-MOLECULE ANALYZER

—New Grants of $833,490 Bring NHGRI Phase II Support for Commercial Development of the Company's NanoAnalyzer® Imaging and Analysis Platform to Over $2.8 Million—
—Support Planned Initiation of Beta Site Testing in Second Quarter of 2010—

Philadelphia, PA, October 15, 2009 – BioNanomatrix, Inc., a developer of breakthrough single-molecule genomic analysis technology, today announced receipt of two new supplemental grants totaling $833,490 from the National Human Genome Research Institute (NHGRI) of the U.S. National Institutes of Health (NIH). The funding is intended to support further commercial development of BioNanomatrix's nanoscale whole genome imaging and analysis platform. BioNanomatrix plans to use the funds to prepare for the upcoming beta site launch of its first commercial NanoAnalyzer® system, planned for the second quarter of 2010.

BioNanomatrix is applying its nanoscale technology to develop a unique platform that can rapidly and cost effectively analyze individual ultra-long strands of DNA in a massively parallel format. The benchtop system, currently in alpha evaluation, is designed to allow researchers to scan a human genome in as little as 10 minutes, creating an organizational map of each sample. Researchers at beta sites plan to evaluate the instrument for a wide range of applications, from genome integrity to structural variation mapping. Advanced applications, including epigenetic mapping and sequence analysis, will be added later in development.

"This new funding from NHGRI provides additional support as we ramp up for initiation of beta site testing of our first commercial NanoAnalyzer systems, planned for the second quarter of the new year," said Michael Boyce-Jacino, Ph.D., president and CEO of BioNanomatrix. "Our nanoscale technology is intended to allow researchers to directly image and analyze very long, individual intact strands of DNA at the single-molecule level, at high resolution and with very high throughputs, yielding a great deal of genomic information. We are, in essence, providing an imaging tool for genome analysis linking high-resolution sequence data with clinically important structural data in an easy-to-use and highly accessible way. We believe our technology has the potential to increase the utility of whole genome imaging and analysis for a wide range of research and diagnostic applications, and we are very pleased that NHGRI is continuing to support our progress towards commercialization."

These two new supplemental grants bring the total that BioNanomatrix has been awarded under the Phase II NHGRI grant program to more than $2.8 million. These grants are part of a Small Business Innovation Research (SBIR) program, awarded under the NIH BECON II nanotech initiative, an interdisciplinary, multi-institutes consortium. BioNanomatrix is also the co-recipient of an $8.8 million multi-year grant from the U.S. National Institute of Standards and Technology Advanced Technology Program (NIST-ATP) to develop a system capable of sequencing the human genome in eight hours at a cost of less than $100.

About BioNanomatrix
BioNanomatrix is developing breakthrough nanoscale whole genome imaging and analytic platforms for applications in biomedical research, genetic diagnostics and personalized

medicine. The company's platform technology is designed to allow researchers to directly image and analyze very long, individual intact strands of DNA at the single-molecule level, at high resolution and with very high throughputs. This technology has the potential to increase the utility of whole genome imaging and analysis for a wide range of research and diagnostic applications, providing fast, comprehensive, and low-cost analysis of genomic, epigenomic and proteomic information. Its current development efforts include a NIST-ATP funded project to sequence the human genome at a cost of $100. The company also receives funding from the National Institutes of Health. BioNanomatrix's technologies are licensed exclusively from Princeton University. Founded in 2003, the company is headquartered in Philadelphia, Pennsylvania. For more information, visit: www.BioNanomatrix.com.

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