



Hamilton and Bionano Genomics Announce World's First Ultra High Molecular Weight DNA Extraction Automation Solution for OGM

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Automated UHMW DNA extraction can consistently yield ultra-long DNA of outstanding quality and at increased throughput without user intervention

SAN DIEGO, June 09, 2022 (GLOBE NEWSWIRE) -- Hamilton and Bionano Genomics, Inc. (Nasdaq: BNGO) today announced the collaborative development of the Long String VANTAGE for the isolation of Ultra High Molecular Weight (UHMW) DNA for use in optical genome mapping (OGM).

Extraction of UHMW DNA of high quality and quantity is an important prerequisite and first step in Bionano's sample preparation workflow. UHMW DNA extraction is generally performed manually by highly trained and experienced laboratory personnel, limiting volume and application in routine sample preparation.

By combining Hamilton's long-standing expertise in automating genomic workflows through precision engineering of automated liquid handling solutions and consumables, and Bionano's knowledge in extraction, enzymatic treatment and analysis of UHMW DNA molecules, the companies have developed the world's first walk-away automation solution for UHMW DNA extraction.

Hamilton's Long String VANTAGE is the first Assay Ready Workstation solution in Hamilton's Long String Genomics product program and supports extraction of UHMW DNA at increased scale. Running the Bionano Prep SP Blood and Cell Culture DNA Isolation Kit, customers can obtain up to 12 UHMW DNA samples in less than 4 hours with high consistency and reproducibility. This workflow has the potential to double manual output, with increased confidence in sample yields and DNA quality.

The companies plan to collaborate with select clinical research laboratories to test and further develop applications for the use of the Long String VANTAGE and the Bionano Prep SP kits and anticipate commercial release of some of these workflows by the end of 2022.

"Hamilton is highly committed to empowering genomic sciences and diagnostics with innovative products and applications by collaborating with leading kit and technology providers," Dr. Martin Frey, CEO Hamilton Bonaduz AG said in a statement. "Analyzing ultra-long DNA molecules by Optical Genome Mapping or genome sequencing technologies is providing insight into previously unresolved questions about genome biology and structural aberrations of the genome with clinical relevance. We are extremely pleased to partner with Bionano Genomics in addressing this innovation area."

"The outcomes of this partnership with Hamilton are outstanding. They have shown an exceptional ability to improve workflows through the automation of UHMW DNA isolation, which consistently results in extremely long and pure DNA molecules that are suitable for use in OGM. We expect this innovation will significantly reduce time to results, reduce hands-on time and improve OGM performance by standardizing the process of UHMW DNA isolation. Bionano and Hamilton look forward to seeing customers adopt the Long String VANTAGE solution," commented Erik Holmlin, PhD, president and chief executive officer of Bionano Genomics.

About Hamilton

Hamilton is a leading global manufacturer, providing automated liquid handling workstations and laboratory automation technology to the scientific community. With a focus on innovative design, Hamilton products incorporate patented liquid handling technologies into a portfolio that includes liquid handling platforms, standard application-based solutions, small devices, consumables, and OEM liquid handling solutions. Known for advancing life science, clinical diagnostics, forensics and biotechnology industries, Hamilton products offer reliability, performance, and flexibility. Ensuring a continuous commitment to quality, Hamilton utilizes state-of-the-art manufacturing at production facilities in Reno, Nevada and Bonaduz, Switzerland and has earned a global ISO 9001 certification. Privately held, Hamilton maintains headquarters in Reno, Nevada; Franklin, Massachusetts; and Bonaduz, Switzerland, along with subsidiary offices throughout the world. www.hamiltoncompany.com/robotics

About Bionano Genomics, Inc.

Bionano Genomics is a provider of genome analysis solutions that can enable researchers and clinicians to reveal answers to challenging questions in biology and medicine. The Company's mission is to transform the way the world sees the genome through OGM solutions, diagnostic services and software. The Company offers OGM solutions for applications across basic, translational and clinical research. Through its Lineagen business, the Company also provides diagnostic testing for patients with clinical presentations consistent with autism spectrum disorder and other neurodevelopmental disabilities. Through its BioDiscovery business, the Company also offers an industry-leading, platform-agnostic software solution, which integrates next-generation sequencing and microarray data designed to provide analysis, visualization, interpretation and reporting of copy number variants, single-nucleotide variants and absence of heterozygosity across the genome in one consolidated view. For more information, visit www.bionanogenomics.com, www.lineagen.com or www.biodiscovery.com

Forward-Looking Statements of Bionano Genomics

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as "can," "potential," "plan," "expect," and similar expressions (as well as other words or expressions referencing future events, conditions or circumstances) convey uncertainty of future events or outcomes and are intended to identify these forward-looking statements. Forward-looking statements include statements regarding our intentions, beliefs, projections, outlook, analyses or current expectations concerning, among other things, the anticipated benefits and improvements resulting from the use of Hamilton's Long String VANTAGE, or the ability of that system to reliably and consistently isolate high quality and sufficient quantity of UHMW DNA for use with optical genome mapping. Each of these forward-looking statements involves risks and uncertainties. Actual results or developments may differ materially from those projected or implied in these forward-looking

statements. Factors that may cause such a difference include the risks and uncertainties associated with: the impact of the COVID-19 pandemic on our business and the global economy; general market conditions; changes in the competitive landscape and the introduction of competitive technologies or improvements in existing technologies; changes in our strategic and commercial plans; our ability to obtain sufficient financing to fund our strategic plans and commercialization efforts; the ability of medical and research institutions to obtain funding to support adoption or continued use of our technologies; and the risks and uncertainties associated with our business and financial condition in general, including the risks and uncertainties described in our filings with the Securities and Exchange Commission, including, without limitation, our Annual Report on Form 10-K for the year ended December 31, 2021 and in other filings subsequently made by us with the Securities and Exchange Commission. All forward-looking statements contained in this press release speak only as of the date on which they were made and are based on management's assumptions and estimates as of such date. We do not undertake any obligation to publicly update any forward-looking statements, whether as a result of the receipt of new information, the occurrence of future events or otherwise.

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