



Bionano Genomics Announces Issuance of Two U.S. Patents for Novel Methods that Expand Patent Protection for Uses of Nanochannel Arrays in Genome Analysis

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SAN DIEGO, April 14, 2022 (GLOBE NEWSWIRE) -- Bionano Genomics, Inc. (Nasdaq: BNGO), pioneer of optical genome mapping (OGM) solutions on the Saphyr[®] system and provider of NxClinical[™] software, the leading solution for visualization, interpretation and reporting of genomic data, today announced that the United States Patent and Trademark Office issued two new US Patents, No. 11,291,999 and No. 11,292,713 on April 5, 2022.

The '999 patent, titled "Photocleavage method and apparatus to clean fluidic devices," claims a novel apparatus and method for using a light source to minimize aggregation of biopolymers in or around a nanochannel. This technology is used by Bionano to enable multiple cycles of DNA loading, imaging, clearing and reloading, making it important to the performance of Bionano's nanochannel arrays. This patent family also includes issued patents in Japan and China.

The '713 patent, titled "Integrated analysis devices analysis techniques," expands upon the company's existing patent protection for its optical genome mapping (OGM) technology. The patent claims methods of identifying genomic sequences or structural genomic variants (SV) by linearizing target DNA molecules through a series of nanochannels within a nanochannel array and detecting of specific signals that correlate with a property of the target DNAs.

Bionano's intellectual property portfolio includes multiple patents covering its core technology issued both in the US and internationally. Additionally, Bionano's portfolio includes patents directed to methods of fabricating nanochannel devices, as well as other technologies for sample processing and analysis related workflows.

"Bionano continues to innovate, adding proprietary capabilities to our OGM systems," commented Erik Holmlin, PhD, president and chief executive officer of Bionano Genomics. "The patents issued last week provide further protection of our intellectual property and is expected to strengthen our global patent portfolio. We continue to strive to create powerful, scalable tools that can provide new insight into structural variants in key areas of clinical research, including cancer and constitutional genetic disease."

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," "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 methods and apparatus described in these patents, and the ability of the tools that we may develop to provide new insight into structural variants in key areas of clinical research, including cancer and constitutional genetic disease. 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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