## bionano

### Bionano Announces Presentation of OGM Utility Across Key Applications at the American Society of Human Genetics (ASHG) Annual Meeting

October 26, 2023

- A sponsored session will feature Dr. Brynn Levy from Columbia University Medical Center, Dr. Roger Stevenson, founder of Greenwood Genetic Center, and Dr. Alex Hastie from Bionano presenting on the utility of optical genome mapping (OGM) across constitutional genetics research applications
- An industry co-lab session led by Dr. Sam Dougaparsad from Bionano will provide attendees with an overview of Bionano's end-to-end OGM workflow, including details of the latest product developments and innovations to enhance, streamline and enable scalability
- Three additional scientific presentations will highlight the use of OGM in neurodevelopmental and prenatal research applications
- Twelve scientific posters will illustrate the application of OGM in research areas including hematological malignancies, genetic disorders, and cell manufacturing and bioprocessing guality control

SAN DIEGO, Oct. 26, 2023 (GLOBE NEWSWIRE) -- Bionano Genomics, Inc. (Nasdaq: BNGO) today announced its participation in the American Society of Human Genetics (ASHG) Annual Meeting 2023 with a broad range of content covering the utility of optical genome mapping (OGM) for cell bioprocessing quality control and constitutional genetic disorder research, including scientific platform and poster presentations from Bionano and researchers from across the genomics landscape.

ASHG's annual meeting brings together industry, medical, and academic professionals to discuss advances in clinical genomics and genetics research. The ASHG conference will be held November 1-5, 2023, in Washington, D.C.

As part of a sponsored session, Dr. Brynn Levy of Columbia University Medical Center, Dr. Roger Stevenson, founder of Greenwood Genetic Center, and Dr. Alex Hastie, Bionano's vice president of clinical and scientific affairs, will share their latest research covering the utility of OGM in constitutional genetic research. Dr. Levy will present findings from the largest multisite study to date comparing OGM to classical cytogenetic methods for postnatal constitutional disorder research. Dr. Stevenson will discuss his research using OGM for the analysis of neural tube defects. The session will take place on Thursday, November 2 at 12:30 PM ET in Room 143C.

As part of a hosted CoLab session, Bionano's senior technical specialist, Dr. Sam Dougaparsad, will host a discussion titled "Optical Genome Mapping as a Comprehensive Workflow for Revealing Structural Variants." In the session, Dr. Dougaparsad will discuss how the OGM workflow offers researchers a transformative technique for high-resolution, genome-wide, comprehensive analysis of structural variation across research in cancer and genetic disease. The presentation will take place Friday, November 3, from 1:05-1:35 PM ET in the CoLab Theatre 1 room.

Three separate scientific presentations highlighting the utility of OGM will be given. Dr. Christopher Grochowksi of Baylor College Medicine will present on the use of OGM in neurodevelopmental disorder research. Dr. Jesse Bengtsson of Pacific Northwest Research Institute will present on the use of OGM to analyze complex genomic rearrangements in *MECP2* duplication syndrome. Dr. Brynn Levy will present findings from the first large-scale study to use OGM instead of conventional cytogenetic methods for prenatal genetic analysis.

In addition, 12 posters featuring results from OGM applications in cytogenetic research will be presented at the conference.

Scientific presentations and poster sessions from Bionano and collaborators include:

Poster Number	Title	Author	Presented
PB3258	Optical genome mapping identified a <i>KMT2C</i> exonic deletion in a Kleefstra syndrome subject resulting from maternal mosaicism	Brassell B.	November 2, 2023 3:00-5:00 PM ET
PB3162	Automated ultra-high molecular weight DNA isolation from various sources enables high-throughput optical genome mapping	Hoischen A.	November 2, 2023 3:00-5:00 PM ET
PB3291	Update to the CLIA diagnostic procedure using optical genome mapping for the diagnosis of facioscapulohumeral dystrophy	Jang J.	November 2, 2023 3:00-5:00 PM ET
PB4978	B-allele frequency-based approach to detecting absence of heterozygosity enables detection of low-level mosaic events using optical genome mapping	Raksi A.	November 2, 2023 3:00-5:00 PM ET
PB3517	Use of long read sequencing and optical genome mapping to solve unsolved rare Mendelian diseases	Wohler E.	November 2, 2023 3:00-5:00 PM ET

PB3383	Genome integrity assessment by optical genome mapping for cell manufacturing/bioprocessing applications	Pang A.	November 3, 2023 3:00-5:00 PM ET
PB5129	Optical genome mapping for genome-wide structural variation analysis in hematologic malignancies: results of a prospective study and impact on diagnosis and management	Sahoo T.	November 3, 2023 3:00-5:00 PM ET
PB2088	Optical genome mapping for detection of chromosomal aberrations in prenatal diagnosis	Zhang Q.	November 3, 2023 3:00-5:00 PM ET
PB3257	Optical genome mapping as a potential routine clinical diagnostic method	Barseghyan H.	November 4, 2023 2:15-4:15 PM ET
PB3444	Novel optical genome mapping algorithm for detection of structural variants in hematological cancers	Muggli M.	November 4, 2023 2:15-4:15 PM ET
PB2089	Optical genome mapping versus chromosomal microarray analysis and karyotyping in prenatal diagnosis	Ping H.	November 4, 2023 2:15-4:15 PM ET
PB4989	Characterization of cytogenetically cryptic abnormalities in pediatric acute myeloid leukemia by optical genome mapping	Raca G.	November 4, 2023 2:15-4:15 PM ET

Session	Title	Presenter/s	Presented
Platform Presentation	Break-induced replication mediated by inverted repeats underlie formation of pathogenic inverted triplications	Grochowski C.	November 2, 2023
			9:15-9:30 AM ET
			Conv. Center/Room 207A/Level 2
Platform Presentation	<i>MECP2</i> copy number variants studied by multiple approaches reveal impact of genomic structure to disease variability	Bengtsson J.	November 2, 2023
			9:15-9:30 AM ET
			Conv. Center/Ballroom B/Level 3
Sponsored Session	Revolutionizing Cytogenomics with Optical Genome Mapping: Clinical Research Advancements in Postnatal Conditions and Neural Tube Disorders	Hastie A., Levy B., Stevenson R.	November 2, 2023
			12:30-1:30 PM ET
			Room 143C
Invited Presentation	Optical Genome Mapping: A New Option for Prenatal Diagnosis	Levy B.	November 3, 2023
			9:00-9:16 AM ET
			Conv. Center/Room 206/Level 2
Industry Co-Lab Session	Optical Genome Mapping as a Comprehensive Workflow for Revealing Structural Variants	Dougaparsad S.	November 3, 2023
			1:05-1:35 PM ET
			Co-Lab Theater 1

"We are thrilled to see the incredible variety of presentations and posters at ASHG, which demonstrate the utilization of OGM across genetic disorder research. The scientific presentations are indicative of the growth in OGM studies, with researchers presenting their largest data sets to date for studies using OGM in rare disease, pre-and postnatal and neural tube defect research. The scale of these studies underscores the significance of the robust conclusions made by the research teams. We are proud of the continued evolution and advancement of our workflow and see its impact on the findings that will be presented at the conference," commented Erik Holmlin, PhD, president and chief executive officer of Bionano.

More details on the conference can be found <u>here</u>.

About Bionano

Bionano 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, Inc. d/b/a Bionano Laboratories business, the Company also provides diagnostic testing for patients with clinical presentations consistent with autism spectrum disorder and other neurodevelopmental disabilities. 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. The Company additionally offers nucleic acid extraction and purification solutions using proprietary isotachophoresis (ITP) technology. For more information, visit www.bionano.com, www.bionanolaboratories.com or www.purigenbio.com.

Unless specifically identified, Bionano's OGM products are for research use only and not for use in diagnostic procedures.

#### Forward-Looking Statements of Bionano

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as "potential," "will," 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, OGM's utility for applications in constitutional (including prenatal and postnatal applications) and hematologic genetic disorder research, OGM's utility for cell manufacturing and bioprocessing quality control analysis, and the utility of OGM for research in the areas reported in the presentations given and the posters made available at ASHG's 2023 annual meeting, and the growth and adoption of OGM for use in research applications or cell manufacturing and bioprocessing quality control analysis. 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: global and macroeconomic events, such as the impact of the COVID-19 pandemic, the ongoing Ukraine-Russian conflict and related sanctions, and the ongoing Israel-Hamas conflict, on our business and the global economy; general market conditions; changes in the competitive landscape and the introduction of competitive technologies or improvements to existing technologies; failure of OGM to be adopted or to prove useful for research in areas including constitutional and hematologic genetic disorder research; failure of OGM to be adopted or prove useful for cell manufacturing and bioprocessing quality control analysis; the ability of our OGM solutions to offer the anticipated benefits for and contributions to the areas reported in the presentations given and posters made available at the ASHG's 2023 annual meeting; future study results contradicting the results reported in the presentations given and posters made available at the ASHG's 2023 annual meeting; changes in our strategic and commercial plans; our ability to obtain sufficient financing to fund our strategic plans and commercialization efforts, our ability to effectively manage our uses of cash, and our ability to continue as a "going concern"; 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, 2022 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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