

BGI and OpGen Collaborate on Use of Optical Mapping for Whole Genome Assembly - See more at:
<http://opgen.com/news/press-releases#sthash.IZ7mrxlV.dpuf>

November 4, 2010 4:17 PM ET

Media Contact:

Dan Budwick
Pure Communications, Inc.
(973) 271-6085

Gaithersburg, Md. – November 4, 2010 – BGI, the largest genomics organization in the world, and OpGen, Inc., a commercial phase genomics company and exclusive provider of Optical Mapping Technology, announced their joint effort to expand the use of Optical Mapping for *de novo* sequence finishing in human, plant and animal genomes.

BGI and OpGen have successfully completed a study based on human genome data to close gaps in the existing sequence scaffolds. The groups continue to make very promising progress to complete additional animal and human genomes.

Advances in DNA sequencing continue to drive down cost and increase the amount of sequence data available. However, these advances in sequencing still leave much of the genome uncharacterized and unordered. OpGen's Optical Mapping Technology, when combined with current next generation sequencing technology, will enable the efficient and accurate finishing of assembled contigs into chromosomes.

BGI brings an unmatched sequencing capacity and computing power enabling the generation of thousands of sequences annually. Combined with an emphasis on *de novo* sequencing, this collaboration provides an excellent platform to accelerate whole genome sequencing and genomic discovery.

OpGen has the capability to construct whole genome ordered restriction maps independent of sequence information with reliable assembly accuracy. Optical Mapping has been widely used in genomics studies of microbiology, with applications in areas of comparative genomics, strain typing and whole genome sequence assembly.

“We are very pleased to be working with BGI as we begin to expand the utility of Optical Mapping beyond microbial research. We believe that Optical Mapping will play a significant and complimentary role with current and future sequencing systems as a tool to enable completion of large, complex genomes and reduce the overall cost and time for these projects,” said Doug White, CEO of OpGen.

“Applying the complimentary technologies, we can develop more representative reference genomes at much improved standard. It will allow more accurate and specific genomics research for different groups of people. Furthermore, the potential in human metagenomics research by developing improved microbe assemblies will facilitate the application in human disease studies,” said Xun Xu, Vice President of Research & Development Department of BGI.

About BGI

Beijing Genomics Institute (BGI) was founded in Beijing on Sept 9th, 1999 with the mission of supporting the development of science and technology, building strong research teams, and promoting the development of commercial scientific services. BGI has successfully completed a large number of projects. These include sequencing 1% of the human genome for the International Human Genome Project, contributing 10% to the International Human HapMap Project, carrying out research to combat SARS, being a key player in the Sino-British Chicken Genome Project, and completely sequencing the rice genome, the silkworm genome. In 2007, the headquarters relocated to Shenzhen. BGI-Shenzhen has completed the first Asian diploid genome and the cucumber genome project. Much of those researches have been published in the top international academic journals including Nature and Science. In conjunction with carrying out these projects, BGI-Shenzhen has established its own technical platforms based on large-scale genome sequencing, efficient bioinformatics analyses, and innovative genetic health care initiatives. These distinguished achievements have made a great contribution to the development of genomics in both China and the world.

About OpGen, Inc.

OpGen, Inc. is a leading innovator in the field of microbial genetics. The company has developed a platform for its proprietary Optical Mapping Technology. Optical Mapping is the first technology that bridges strain typing and sequencing to correlate phenotype to genotype for generating advances in fields such as biodefense, outbreak management, agriculture and clinical microbiology. The Argus™ Optical Mapping System and MapIt™ Optical Mapping Services deliver ordered, whole genome genetic maps from single DNA molecules. The platform provides automated, high resolution, whole genome analysis for strain typing, comparative genomics and sequence assembly of microbial genomes to the life sciences market. This de novo technology is free from the limitations of gel, PCR and sequencing-based methodologies and has broad molecular diagnostic applications that are currently in development. OpGen's customers include biodefense organizations, leading genomic research centers, academic institutions, clinical research organizations and biotechnology companies. For more information, visit www.gbbetasite.com/opgen.

Location: Exhibitor Press Briefing Room (located in Room #102A on the first floor of the Walter E. Washington Convention Center)

Time: 2:30 – 3:30 pm 4th November, 2010