OpGen Announces Argus® Optical Mapping System Purchase by Wellcome Trust Sanger Institute - See more at: http://opgen.com/news/press-releases#sthash.IZ7mrxlV.dpuf

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Gaithersburg, Md.—January 6, 2011—OpGen, Inc. a commercial phase genomics and DNA analysis company, today announced that the Wellcome Trust Sanger Institute has purchased an ArgusTM Optical Mapping System in order to reduce the time and cost of whole genome sequence assembly.

The Mapping and Archive Sequencing Division at the Sanger Institute plans to begin Optical Mapping of bacteria and parasites in January 2011. "Traditional mapping techniques used to create a physical map of ordered sequence contigs can take 3-6 months to complete for a small eukaryote such as a helminth," stated Carol Churcher, Head of Sequencing Operations, Sanger Institute. "We need a new approach to improve the efficiency of finishing and validating sequence assemblies."

Advances in DNA sequencing continue to drive down the cost and increase the amount of sequence data available. However, these advances still leave much of the genome uncharacterized and unordered. Genome centers that have dramatically increased their sequencing throughput are now finding the sequence finishing process to be the bottleneck in whole genome sequencing.

By utilizing an Optical Map as the whole genome scaffold, researchers are now able to readily identify gaps in the sequence and target specific areas of the genome for additional sequencing. This greatly reduces the need for thousands of cloning, PCR and sequencing reactions involved with traditional finishing techniques. In addition, Optical Mapping provides a sequence independent method for whole genome sequence assembly validation. Sequencing projects can now be completed in weeks instead of months, greatly increasing the throughput while driving down the cost of whole genome sequencing.

"We are excited to have the Sanger Institute as one of the first major genome centers to adopt Optical Mapping technology. We look forward to working with the Sanger team to continue to optimize their sequence assembly workflow and reduce the cost of sequence finishing," commented Doug White, CEO, OpGen, Inc.

About OpGen, Inc.

OpGen, Inc. is a leading innovator and developer of genomic solutions for the analysis of genetic variation and biological function. The company has developed a platform for its proprietary Optical Mapping Technology. The ArgusTM Optical Mapping System and MapItTM Services provide high resolution, whole genome restriction maps 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. Applications to expand Optical Mapping technology to large genomes and clinical diagnostics are currently in development. OpGen's customers include leading genomic research centers, biodefense organizations, academic institutions, clinical research organizations and biotechnology companies. For more information, visit www.gbbetasite.com/opgen.