OpGen Announces Launch of Genome-Builder, a Breakthrough Advance for Sequence Assembly and Structure Variation Analysis in Large Genomes

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Supporting Data Presented at ASHG Annual Meeting Highlights New Argus Whole Genome Mapping Software Module and Faster, More Accurate Project Completion Capabilities

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Gaithersburg, Md.—October 13, 2011— OpGen, Inc. announced today the launch of Genome-Builder, a high performance software module that provides new, powerful capabilities for precision sequence assembly and significantly decreases the time and labor required for human, animal and plant genome sequence assembly. OpGen presented initial studies using Genome-Builder this week with its collaborators at the Sanger Institute during a New Methods Workshop at the joint meeting of the American Society of Human Genetics (ASHG) and the International Congress of Human Genetics (ICHG) in Montreal.

“Genome-Builder expands the functionality of our Argus® Whole Genome Mapping System and provides a significant technology advancement for human genetics research that could lead to detecting clinically important rearrangements missed by current sequencing and array CGH approaches,” said Richard Moore, M.D., Ph.D., chief scientific officer at OpGen. “Using whole genome maps through Genome-Builder provides a high resolution, ordered visual map of the genomic architecture that will allow the detection of structural rearrangements at 10 times the resolution of traditional cytogenetic techniques. This more powerful capability can further help researchers identify important structural changes linked to a broad range of genetic diseases.”

By combining OpGen’s whole genome mapping technology with partially assembled sequences, Genome-Builder quickly and accurately orients long sequence scaffolds to provide a new level of assembly completion, saving the months of effort that can be required by current approaches. In addition, Genome-Builder works seamlessly with OpGen’s Argus Whole Genome Mapping System to enable the high resolution characterization and visual confirmation of very challenging repetitive regions that cannot be resolved by next generation sequencing or other currently available technologies.

Structure variation in human genomes is known to be pervasive, and studies have linked these positional and structural changes in genetic architecture to a number of genetic diseases including cancer, schizophrenia and autism. Despite recent advances in next generation sequencing and other technologies, the accurate detection and resolution of structural variation remains a significant challenge and prevents progress in expanding understanding of genetic disease.

“With the introduction of this new application, OpGen is now able to access and enable the human, animal and plant genome sequencing markets, significantly expanding the market potential for our technology,” said Doug White, chief executive officer of OpGen.

About OpGen, Inc.

OpGen, Inc. is a leading innovator in rapid, accurate genomic and DNA analysis systems and services. The company has developed a platform, the Argus® Whole Genome Mapping System and also offers MapIt® Services that provide high resolution, whole genome restriction maps for sequence assembly and finishing, strain typing and comparative genomics in the life sciences market. This proprietary de novo technology is free from the limitations of gel, PCR and sequencing-based methodologies. Applications to expand whole genome mapping technology to 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.