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**Orion Bionetworks: Developing Predictive Models to Power the Search for Cures
*Unique Cooperative Alliance Launches Effort to Fundamentally Change How
Researchers Find New Treatments for Multiple Sclerosis***

BOSTON, MA, March 4, 2013 –Today we announce the launch of Orion Bionetworks, a multi-institution cooperative non-profit alliance that is unlocking the power of shared data and predictive modeling to help transform our understanding of diseases such as multiple sclerosis (MS) and accelerate the search for cures. Alliance partners include leading organizations in patient care, computational modeling, translational research, and patient advocacy: Accelerated Cure Project for Multiple Sclerosis, the Institute for Neurosciences at Brigham and Women’s Hospital, GNS Healthcare, MetaCell, and PatientsLikeMe. Janssen Research & Development, LLC, a New Jersey-based pharmaceutical company, has provided a \$5.4 million scientific sponsorship as part of its *Healthy Minds* program for the initial phase of this effort.

Orion Bionetworks has been established as a program of the Marin Community Foundation. Its President & CEO, Thomas Peters, Ph.D., hailed the formation of the new alliance. “We are enormously proud to welcome Orion Bionetworks within the Foundation,” said Peters. “We are confident that this blend of expertise and creativity will lead to significant scientific success.”

Key supporting partners include One Mind for Research, Morrison & Foerster, Recombinant Data, and Weber Shandwick.

A Unique Cooperative Alliance

Through Orion Bionetworks, alliance partners contribute to a communal body of knowledge in the pursuit of better disease understanding, prevention and treatment, and gain access to state-of-the-art analytical tools, technologies and inter-disciplinary expertise.

Initially, Orion Bionetworks will focus on integrating clinical, biomarker and imaging data with rich real-world patient data from existing, independent databases of over 7,000 people with MS into a causal computational disease model.

PatientsLikeMe Co-Founder and Chairman Jamie Heywood said, "This silo-breaking initiative allows data from disparate sources, including our patient network of thousands of individuals who monitor their health and share their MS symptom and treatment information, to be analyzed in a way that will transform future discoveries and maximize the benefit for all."

Computational Modeling

Computational modeling, or biosimulation, is an emerging research platform that has the potential to transform our understanding of human biology and predict which individual or environmental factors influence the development and progression of disease. Application of sophisticated modeling and simulation technologies for drug discovery and development could help the healthcare industry overcome the current economic and product pipeline challenges it faces in a number of therapeutic areas including neuroscience.

Orion Bionetworks is creating a framework to advance causal disease models by supporting the creation of new computational tools and communities and facilitating their access to integrated, large-scale, diverse biological and clinical data from registries and repositories.

"By bringing together this multidisciplinary group of collaborators and enabling the sharing of integrated clinical and 'omics data, Orion Bionetworks could help realize the promise of computational modeling in disease research," said Iya Khalil, Executive Vice President and Co-Founder of GNS Healthcare, one of the alliance members. "Causal models learned directly from data will help us understand the biology of the disease and predict which approach to treatment will work for individual patients. This could accelerate the search for cures."

Advancing Understanding of Multiple Sclerosis

Orion Bionetworks' initial focus is multiple sclerosis. MS affects over 2.5 million individuals worldwide. It is an exceedingly complex spectrum of diseases that involves both acute inflammation and chronic, progressive neurodegeneration in the brain and spinal cord. Physicians are challenged with managing patients whose course ranges from mild disease with

modest levels of disability to a small number of treatment-refractory cases with profound disability. Currently, no one can predict an individual patient's course or whether they will respond to a prescribed therapy. Further, while we can suppress the inflammatory component of MS to some extent, there is no treatment for its neurodegenerative component and no treatment that cures a patient. Thus, this unpredictable illness takes a tremendous toll on patients and their families. However, with recent advances in biomedical science and analytic methods, MS is uniquely ready for the new tools of predictive modeling, which can integrate diverse datasets and answer critical questions beyond the reach of individual research efforts.

“The path forward is clear: through Orion Bionetworks, one large dataset of patients can be explored very deeply with all available platforms to create a reference atlas of MS,” said Philip De Jager, MD, PhD, a physician researcher at the Institute for Neurosciences at Brigham and Women's Hospital. “With such an atlas of MS, we can chart a route forward towards the personalization of MS care and the targeting of MS-related neurodegeneration.”

Additional information on the organization and partnership opportunities is available on the organization's website, www.orionbionetworks.org.

About Marin Community Foundation

The Marin Community Foundation (MCF) is based in Novato, Marin County, California. With assets totaling nearly \$1.5 billion, it is one of the largest community foundations in the United States. MCF has a long history of supporting neuroscience research and development, including the establishment and continuing support of the Buck Institute for Research in Aging, the nation's first independent research facility focused solely on understanding the connection between aging and chronic disease.

For more information on Marin Community Foundation, visit <http://www.marincf.org>.

About Our Sponsor

Janssen Research & Development, LLC, the sponsor of Orion Bionetwork's multiple sclerosis project, is focused on the discovery and development of innovative medicines that ease patients' suffering and solve important unmet medical needs. The company identifies the biggest unmet medical needs and matches them with the best science, internal or external, to find solutions for patients worldwide. Janssen is working to bring innovative, effective treatments in five therapeutic areas: cardiovascular and metabolism, immunology, infectious diseases and

vaccines, neuroscience, and oncology. Janssen's interests in integrated care for brain diseases have a direct connection to the Janssen *Healthy Minds* program, launched in 2011 to encourage collaboration among biotechnology, pharmaceutical and public-sector organizations to accelerate the discovery of new therapeutic solutions for neurologic and brain diseases.

About Accelerated Cure Project for Multiple Sclerosis

ACP-MS is a nonprofit organization whose mission is to accelerate research efforts to improve the quality of life for people with multiple sclerosis, to cure the disease and, ultimately, prevent it.

About Institute for Neurosciences at Brigham and Women's Hospital

The Institute for Neurosciences Brigham and Women's Hospital is a world-renowned leader in research into the mechanism of brain diseases and in developing innovative treatments for patients affected by a broad spectrum of neurologic and psychiatric diseases.

About GNS Healthcare

GNS Healthcare is a big data analytics company that has developed a scalable approach for the discovery of what works in healthcare, and for whom. Our analytics solutions are being applied across the healthcare industry: from pharmaceutical and biotechnology companies, health plans and hospitals, to integrated delivery systems, pharmacy benefits managers, and accountable care organizations.

About MetaCell

MetaCell is a systems biology informatics and consulting company operating in the open science space. Its mission is to integrate and organize biophysical information into predictive computational models of living systems. By merging knowledge from different scales, MetaCell enables a greater understanding of complex biological systems through beautiful software interfaces.

About PatientsLikeMe

PatientsLikeMe is a patient network that helps improve lives and a real-time research platform that advances medicine. Through the network, patients connect with others who have the same disease or condition and track and share their own experiences. In the process, they generate

data about the real-world nature of disease that help researchers, pharmaceutical companies, regulators, providers and nonprofits develop more effective products, services and care.