

## THE DREAM PROJECT JOINS SAGE BIONETWORKS TO ENABLE COLLABORATIVE SCIENCE

[Sage Bionetworks](#), a non-profit organization announced today that it will merge its efforts with that of the [DREAM Project](#) to run open science computational challenges which foster the broader collaboration of the research community and provide a meaningful impact to both discovery and clinical research.

This collaboration will pair Sage Bionetworks' Synapse, an open compute platform that allows data to be shared and worked on collaboratively by teams of teams, with the experience that the DREAM Project brings from running 24 successful computational challenges over the last five years.

Sage Bionetworks and DREAM are convinced that open computational challenges represent an innovative new method to rapidly share and evolve predictive disease models that would otherwise take years to produce using the usual siloed research paradigms. Their merger provides a collaborative framework that will bring the ideals of open science one step closer to reality.

“The traditional ways of doing science has researchers too focused on being the first to publish.” remarked Dr. Gustavo Stolovitzky, Founder of the DREAM Project. “This has given rise to a culture of secrecy about scientific results and data. By refocusing our efforts on creating a collaborative research environment, we at DREAM and Sage Bionetworks can foster a complementary way of doing science, which will accelerate the pace of discovery with the goal of contributing to a faster reduction of suffering due to disease. This seems to me like an ethical imperative.”

Sage Bionetworks and DREAM's merger builds off of the success of their recent 2012 Sage Bionetworks-DREAM Breast Cancer Prognosis Challenge that for the first time, allowed participants to share code in the context of a computational biology challenge. Participating teams were asked to submit their computational model to Synapse as open source code made viewable to all participants: their models were assessed against a hidden dataset and their scores were reported on a real-time leaderboard. The combination of immediate feedback and code sharing allowed participants to improve their leaderboard ranking by adjusting their own models or by borrowing the code of others to forge new models.

Synapse, is built to meet the needs of the data scientists that participate in DREAM's challenges. It provides an open repository of analysis-ready data that scientific teams can work on in an open, online form accessible by all through a collaborative web portal.

The merger will allow Sage Bionetworks and DREAM to run several challenges similar to the Breast Cancer Prognosis Challenge every year. Dr. Stephen Friend, President and Founder of Sage Bionetworks Bionetworks, remarked, “With the growing affordability of genomic data and wide availability of cloud-based computing, we know it is timely for us to join our efforts to scale and dream beyond the great things that DREAM has already enabled. We want to evolve challenges so that solutions from the last phase become the starting point for a new step towards meaningful validation, and where newly created datasets might allow the answering of important clinical questions. These are the approaches that will bring about the promises of Precision Medicine.”

## **ABOUT THE DREAM PROJECT**

The Dialogue on Reverse Engineering Assessment and Methods (DREAM) project, founded in 2006 by Andrea Califano (Columbia University) and Gustavo Stolovitzky (IBM), was originally conceived as an initiative to advance the nascent field of network biology through the organization of Challenges on network reconstruction and pathway inference. Since the first set of network inference challenges of 2007 (DREAM2) the concept of using collaborative-competitions as a vehicle to carry on a meaningful dialogue in the computational biology community has evolved significantly. In 2012, the last DREAM7 project featured four powerful challenges of which one was on network biology and the other three dealt with three important problems in translational medicine. With the experience gathered by the launching of 24 successful challenges over the past five years, the “Challenge” concept has reached a status of legitimacy and maturity. The DREAM Challenges have brought rigor in the process of verification of computational methods, have enabled the democratization of different kinds of biological data, and have facilitated the collaboration of dozens of research teams. This success has triggered considerable interest by different government institutions and private organizations in working with DREAM to engage distributed teams to solve tough computational problems in biomedical research.

## **ABOUT SAGE BIONETWORKS BIONETWORKS**

Sage Bionetworks is a nonprofit biomedical research organization, founded in 2009, with a vision to promote innovations in personalized medicine by enabling a community-based approach to scientific inquiries and discoveries. Sage Bionetworks Bionetworks strives to activate patients and to incentivize scientists, funders and researchers to work in fundamentally new ways in order to shape research, accelerate access to knowledge and transform human health. It is located on the campus of the Fred Hutchinson Cancer Research Center in Seattle, Washington and is supported through a portfolio of philanthropic donations, competitive research grants, and commercial partnerships. More information is available at <http://SageBionetworksbase.org/>.

### **Media Contacts:**

Stephen Friend  
Tel: 206-667-2101  
Email: [friend@sagebase.eu](mailto:friend@sagebase.eu)

Gustavo Stolovitzky  
Tel: 914-945-1292  
Email: [gustavo@us.ibm.com](mailto:gustavo@us.ibm.com)