

IBM and New York Genome Center to Create Comprehensive, Open Cancer Data Repository to Tap Cognitive Insights from Watson

Washington, D.C. - 25 Feb 2016: At today's White House Precision Medicine Initiative Summit, the New York Genome Center and IBM (NYSE: [IBM](#)) announced that they are collaborating to create a comprehensive and open repository of genetic data to accelerate cancer research and scale access to precision medicine using cognitive insights from IBM Watson. Analyzing this data alongside the medical community's growing knowledge about cancer could help accelerate the ability of doctors to deliver personalized treatment to individual patients.

IBM and New York Genome Center are working together to build the capacity to house the contributed data, train Watson's cognitive computing capabilities for genomic analysis and enable the Center's member institutions and other research collaborators to sequence and analyze DNA and RNA from patients' tumors.

In the first phase of the project, the two organizations will examine genetic information from 200 cancer patients to compare how different types of sequencing might impact possible treatment options — examining whole genome and whole exome sequencing as well as clinical panels currently in wide use. Sequencing and clinical data will be fed into Watson to accelerate and focus reviews of massive amounts of medical evidence to help identify existing drugs that may be candidates to target patients' cancer-causing mutations. Clinically relevant insights will be returned to each individual patient's physician to potentially support the physician's treatment decisions.

The organizations seek to expand this collaboration with funding from additional partners to further the data repository's growth and adoption.

Robert B. Darnell, MD, PhD, New York Genome Center's Founding Director and CEO, said, "Our vision is to create a comprehensive cancer data repository that combines whole genome, exome, targeted panel and phenotypic data in an open platform that will empower researchers and clinicians. We believe that iterative analysis of the data and integration with our growing knowledge of cancer will allow doctors to provide better, personalized treatment."

Whole genome sequencing can play an important role in informing cancer research and treatment. Access to and interpretation of this type of genomic data, however, is currently limited. By combining genetic and

clinical information from patients, IBM and New York Genome Center plan to pool resources and talent while also collaborating with a variety of IBM partners and New York Genome Center members, philanthropic partners, and New York State supporters.

“Data is quickly becoming one of the most valuable resources in the fight against cancer,” said John Kelly III, PhD, Senior Vice President, Cognitive Solutions and IBM Research. “By amassing this contributed data and applying cognitive insights to the challenge of analyzing cancer data, we believe we can soon scale access to precision medicine worldwide.”

All contributed data will be maintained in a HIPAA enabled repository, in de-identified form.

The effort was announced as part of President Obama’s Precision Medicine Initiative on Thursday at a White House Summit.

About IBM Watson Health

Watson is the first commercially available cognitive computing capability representing a new era in computing. The system, delivered through the cloud, analyzes high volumes of data, understands complex questions posed in natural language, and proposes evidence-based answers. Watson continuously learns, gaining in value and knowledge over time, from previous interactions. In April 2015, the company launched IBM Watson Health and the Watson Health Cloud platform. The new unit will help improve the ability of doctors, researchers and insurers to innovate by surfacing insights from the massive amount of personal health data being created and shared daily. The Watson Health Cloud will allow this information to be de-identified, shared and combined with a dynamic and constantly growing aggregated view of clinical, research and social health data. For more information on IBM Watson, visit: ibm.com/watson. For more information on IBM Watson Health, visit: ibm.com/watsonhealth.

Check out the IBM Watson press kit. Join the conversation at #ibmwatson and #watsonhealth. Follow Watson on Facebook and see Watson on YouTube and Flickr.

About the New York Genome Center

The New York Genome Center (NYGC) is an independent, nonprofit at the forefront of transforming biomedical research and clinical care with the mission of saving lives. As a consortium of renowned academic, medical and industry leaders across the globe, NYGC focuses on translating genomic research into clinical solutions for serious disease. Our member organizations and partners are united in this unprecedented collaboration of technology, science, and medicine. We harness the power of innovation and discoveries to improve people’s lives — ethically, equitably, and urgently. Member institutions include: Albert Einstein College of Medicine, American Museum of Natural History, Cold Spring Harbor Laboratory, Columbia University, Cornell University/Weill Cornell Medicine, Hospital for Special Surgery, The Jackson

Laboratory, Memorial Sloan Kettering Cancer Center, Icahn School of Medicine at Mount Sinai, New York-Presbyterian Hospital, The New York Stem Cell Foundation, New York University, Northwell Health (formerly North Shore-LIJ), The Rockefeller University, Roswell Park Cancer Institute, Stony Brook University and IBM.

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