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May News and Product Briefs
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News Briefs

The **Broad Institute of MIT and Harvard** received a $10 million gift from the Gerstner Family Foundation to expand cancer research in collaborations with Dana-Farber/Harvard Cancer Center and Memorial Sloan Kettering Cancer Center. The research will focus on the changes tumors undergo as they become resistant to drugs. The Gerstner Family Foundation gift will support a two-pronged approach to the problem of cancer drug resistance. First, researchers at the Broad Institute plan to identify mechanisms of drug resistance, using CRISPR genome-editing technology to rapidly test which genes are responsible for cancer drug resistance in a lab setting. Second, the Broad Institute will help orchestrate the largest study to date of pre-treatment and drug-resistant tumors. At the same time, a Broad Institute team will build on efforts to develop liquid biopsies. Press release

Rare Genomics Institute (RG) announced the Amplify Hope Initiative, a new study aimed at determining how crowdfunding can promote scientific research to help rare disease patients. RG is an international non-profit providing rare disease patients with access to genomics sequencing technology, connections to scientists and researchers, and help paying for these services through grants, insurance, or crowdfunding. Through a grant from the Templeton Foundation, Amplify Hope will measure the effectiveness of different crowdfunding strategies, the resulting scientific impact and community engagement. Scientific partners include Ambry Genetics and Baylor Miraca Genetics Laboratories. Study page

Fluoresentric announced plans to spin out XCR Dx, a new wholly owned subsidiary focused on developing the XCR chemistry hardware platform. All company instrument development and manufacture will now flow through XCR Dx. XCR assay development, XCR strategic partner relationships, sales and other XCR chemistry activities remain inside Fluoresentric. This spinout is part of the company's plan to first demonstrate the chemistry's flexibility and speed, then couple it with inexpensive instrumentation as a "Portable Diagnostic System" for deployment in near patient settings. Press page

N-of-One, Inc., signed a partner agreement with Affymetrix, a provider of DNA microarrays. N-of-One will provide copy number variation (CNV) interpretation for Affymetrix OncoScan assay customers. The OncoScan assay provides a genome-wide copy number profile from a solid tumor sample. The analysis of copy number aberrations has been shown to inform therapeutic strategies in oncology. N-of-One is working closely with Affymetrix to ensure that data from OncoScan assay combined with N-of-One interpretation optimize for clinicians the value of tumor profiling based on CNV analysis. Press release

Quanterix Corporation is inviting organizations, academics and independent researchers to submit research proposals for the Simoa Accelerator Lab, a laboratory environment for custom assay development and clinical sample testing on the Simoa HD-1 Analyzer. Since its launch in 2014, the Lab has grown from one to four instruments, expanding its capabilities to run up to 2,000 samples a day. Quanterix will award an organization or independent researcher access to the Simoa Accelerator Lab and corresponding assays for exploration of new biomarkers and pathways in a broad array of fields, including oncology, neurology, cardiology and other fields of medicine. The deadline for applications is June 10, 2015. (For more about the Simoa technology, see "Quanterix Aims for Early Clinical Adoption with High-Throughput Protein Assays.") Call for proposals

Edico Genome announced that **PerkinElmer, Inc.** has purchased a DRAGEN Bio-IT processor to expedite the analysis of its customers' next-generation sequencing (NGS) data. According to Edico, applying the DRAGEN to PerkinElmer's NGS workflow accelerates analysis time for whole genome and whole exome sequencing 60 fold, compared to standard industry software, while maintaining greater than 99 percent sensitivity. The processor will be integrated into PerkinElmer's CLIA-certified high-throughput sequencing facility. (For *Bio-IT World's* feature on Edico's first deployment with Sequenom, see "Edico Makes First Sale of NGS Processor.") Press release

New Products

SCIEX released several new LC-MS/MS solutions, including the BioBA Solution, an end-to-end solution for bioanalysis of biologics; the Lipidizer Platform, an all-in-one solution for next-generation lipidomics; and the OneOmics Project, the commercialization of a beta program with Illumina that brings multi-omics data and collaboration to the cloud. Also launching is the ExionLC Series, a new analytical flow liquid chromatography (LC) product family, designed as a companion for SCIEX mass spectrometry (MS) systems. These tools were unveiled during the American Society of Mass Spectrometry (ASMS) conference in St. Louis. (For more on the OneOmics Project, see "Illumina Opens BaseSpace to Proteomics Data.") Press release

QIAGEN launched Biomedical Genomics Workbench, a new bioinformatics platform that provides end-to-end, customizable analysis workflows for the discovery of novel

biomarkers associated with hereditary diseases and cancer. The Biomedical Genomics Workbench replaces the existing CLC Cancer Research Workbench. Biomedical Genomics Workbench builds on the CLC Cancer Research Workbench to provide a next-generation sequencing analysis platform for identifying hereditary and cancer genetic mutations in whole genome, exome, targeted amplicon, transcriptome, and epigenetic sequencing data.

Features include three-dimensional protein structure visualizations, and tools for complete differential gene expression analysis. The Biomedical Genomics Workbench integrates with Ingenuity Variant Analysis. QIAGEN also released a bioinformatics platform for clinical testing labs this month. (See, "QIAGEN Launches NGS Clinical Insights Platform.") Product page

Brooks Automation, Inc., a provider of automated cold-chain sample management for drug discovery and biostorage applications, announced the introduction of the BioStore III Cryo, an automated cryogenic sample management system. BioStore III Cryo incorporates sample monitoring, tracking, and inventory control with the industry's standard cryo storage vessel. The system can access virtually any type of sample within a cryobox format and retrieve a box of samples in less than 60 seconds. The new system was developed in collaboration with Chart Industries. Press release

Sigma-Aldrich Corporation announced that SAFC Commercial, its custom manufacturing services business unit, has introduced ADC Express preclinical development services within its Contract Manufacturing Services portfolio. This ADC (antibody drug conjugate) offering includes rapid preparation of development grade conjugate constructs for clients to use in their target molecule identification. Press release

Quest Diagnostics launched QNatal Advanced, a noninvasive prenatal screening service for detecting chromosomal abnormalities in high-risk pregnancies. QNatal Advanced analyzes cell-free fetal DNA in circulating maternal blood to screen for common and rare chromosomal abnormalities, including those associated with trisomy 21 (Down syndrome), trisomy 18 (Edwards syndrome), trisomy 13 (Patau syndrome) and monosomy X (Turner syndrome), as well as fetal sex aneuploidies and select copy number variants. The company is only promoting QNatal Advanced as a screening service for women defined as high-risk under medical guidelines. Press release