



Ohio State Joins Coriell's Personalized Rx Project to Study Utility of Genomic Data in Patient Care

September 30, 2009

Newsletter: Pharmacogenomics Reporter
Pharmacogenomics Reporter - September 30, 2009

By Turna Ray

Ohio State University will join the Coriell Personalized Medicine Collaborative to study the utility of incorporating genomic information to treat patients at OSU's Medical Center.

OSUMC will enroll patients who agree to join Coriell's personalized medicine project under the guidance of their primary care physician, Coriell Institute for Medical Research said this week.

Under the partnership, OSUMC's patients, as well as their primary care physicians, will receive risk assessments for health conditions, such as age-related macular degeneration, colon cancer, coronary artery disease, hemochromatosis, inflammatory bowel disease, lupus, melanoma, obesity, prostate cancer, rheumatoid arthritis, and type 1 and type 2 diabetes. According to the CPMC, risks for adverse drug reactions and additional health conditions will also be reported.

The CPMC/OSUMC partnership is a five-year agreement and enrollment through OSUMC will occur largely within the first two years.

CPMC was launched in December 2007 with the aim of studying the impact of genome-informed treatment on medical care. CPMC has so far enrolled 4,000 participants, and is planning to enroll 10,000 patients in the study by 2010. Ultimately, CPMC aims to enroll 100,000 participants in the project.

In addition to its collaboration with OSUMC, CPMC has partnered with Cooper University Hospital, Virtua Health, Fox Chase Cancer Center, and Helix Health.

"Each collaborator is unique," Courtney Sill, CIMR's communications director, told *Pharmacogenomics Reporter* this week. "For example, OSUMC enrollment will

concentrate on chronic diseases, whereas enrollment through FCCC is focused on cancer."

In February the CPMC launched a web portal through which participants can answer questions about their family medical history and personal lifestyle. Factoring this information along with individuals' genotypes, CPMC will provide study participants with their risk for various actionable medical conditions, approved by its Informed Cohort Oversight Board.

"The CPMC has a number of genetic variants associated with drug metabolism approved for return through the study, including CYP2D6, CYP2C9, CYP2C19, and VKORC1," Sill said. "In the future, these results will be returned in the context of gene-drug pairs" to CPMC and OSUMC study participants. Coriell is using the Affymetrix SNP Array 6.0 and Drug Metabolizing Enzymes and Transporters panel to genotype participants in the OSUMC partnership, the same technology it uses for the CPMC.

At a time when consumer genomics companies are selling genetic risk information from just under \$400 to more than \$2,000, the CPMC is a non-profit research effort that doesn't charge participants for genotyping or risk analysis. The CPMC currently has \$5 million in funding, drawn from private philanthropy, foundation grants, and institutional support.

Sill said that both OSU and Coriell are providing funds to support enrollment of individuals through OSUMC, but she did not provide more specific details. Coriell also hopes to apply for federal grants with OSUMC for the project.

"Delivering risk assessments to patients and physicians directly will allow the CPMC to study how genome information is best incorporated into health management and clinical decision making," Coriell CEO Michael Christman said in a statement. "The ultimate goal is to give physicians the tools to be able to deliver care that is tailored to meet the needs of each individual."

Commercial consumer genomics firms have been criticized by some industry observers for informing customers that their genetic risk profiles are for informational purposes only on the one hand, but then selling their services through partnerships with doctors to urge the incorporation of this data into medical practice.

Coriell, on the other hand, has tried to set its personalized medicine research efforts apart from these practices.

"The CPMC and the CPMC/OSUMC partnership is a research study and individual study participants are not charged a fee to participate," Sill said. "The goal is to better understand how genome information can be incorporated into routine health management and clinical decision-making.

"Enrollment through OSUMC provides a unique setting in which individuals will be enrolled through their primary care physician," Sill continued. "We are integrating physicians directly into the process, giving them the opportunity to discuss the results with their patients and determine how this information affects clinical management."

OSUMC educates many of the region's physicians, including providing advanced training and continuing education for clinicians.

"Through this collaboration [with the CPMC], we will provide the unique opportunity for our community to participate in this groundbreaking national study and move toward wellness-based care that is predictive, preventive, personalized, and participatory," said Clay Marsh, executive director of Ohio State's Center for Personalized Health Care.