Alabama launches state-wide genome health initiative

BIRMINGHAM, Ala. – The University of Alabama at Birmingham — Alabama’s leading provider of genomic and personalized medicine — has launched the Alabama Genomic Health Initiative in partnership with HudsonAlpha Institute for Biotechnology to better meet health needs across the state.

The project, funded by a $2 million appropriation from the Alabama legislature to UAB, supports one of the nation’s first statewide efforts to harness the power of genomic analysis to help identify those at high risk for a genetic disease, and provide a basis for continuing research into genetic contributors to health and disease.

The AGHI is recruiting a diverse group of participants from every county in Alabama and is providing genomic analysis and interpretation to this group free of charge. In the first year, the initiative plans on recruiting 2,000 individuals who will provide a DNA sample from a simple blood draw. Over a five-year period, the goal will be to increase the database to include genetic information from more than 10,000 persons.

In the first four months of recruitment, AGHI enrolled more than 1013 genotyping and 19 whole genome participants from 45 of Alabama’s 67 counties. Participants complete health history questionnaires for genetic counselor review, and of the first 177 reviewed, more than 42 percent of participants were flagged to potentially benefit from further communication about their genetic health history.

“Preliminary genomic result data is pending, but we will also present on the process of forming a study of this scope,” said Anna Hurst, M.D., assistant professor in the Department of Genetics and co-chair of the AGHI Genomics Working Group. “The study was carefully designed with an external oversight committee and internal working groups focused on bioethics, education, genomics, data and biobanking, and participant and provider engagement.”

Hurst says patient navigators facilitate participant recruitment and engagement, specifically reaching underserved populations. AGHI engaged community leaders to build ethical trust and address stigma surrounding research participation. The program also provides genomic education to primary care providers and genetic counseling to participants.”

“The AGHI capitalizes on institutions and scientists in Alabama with an extensive history of working together to expand access to genomic testing and research participation to diverse citizens from all across Alabama, including many from groups who have been historically undeserved,” said Greg Cooper, Ph.D., faculty investigator at HudsonAlpha Institute for Biotechnology and co-chair of the AGHI Genomics Working Group. “Individuals with rare diseases will be provided access to whole genome sequencing in an effort to find a precise diagnosis and end lengthy diagnostic odysseys, while healthy individuals may benefit from
genotyping to identify genetic factors that place them at risk for a serious but potentially preventable condition. The research community benefits from the genomic information that we generate and a biobank of samples representing the genetic landscape of Alabama citizens. These resources will create future genetic and biomedical research opportunities. The AGHI also helps to better educate citizens and healthcare providers about the increasingly numerous ways that genetic testing impacts personal health and well-being.”

For more information about the Alabama Genomic Health Initiative, including enrollment information, visit www.aghi.org.

About UAB Medicine
UAB Medicine comprises the School of Medicine and the $3 billion UAB Health System that includes all of the University of Alabama at Birmingham’s patient-care activities and 2,300 licensed beds in six hospitals, one of which is UAB Hospital — the third-largest public hospital in the United States, winner of the Women’s Choice award, and one of U.S. News & World Report’s Best Hospitals. UAB is the state of Alabama’s largest single employer and an internationally renowned research university and academic health center; its professional schools and specialty patient-care programs are consistently ranked among the nation’s top 50. UAB is the largest academic medical center in Alabama and one of the top four largest academic medical centers in the United States. UAB’s Center for Clinical and Translational Science is advancing innovative discoveries for better health as a two-time recipient of the prestigious Center for Translational Science Award. Find more information at www.uab.edu and www.uabmedicine.org.

About HudsonAlpha Institute for Biotechnology
HudsonAlpha Institute for Biotechnology is a nonprofit institute dedicated to innovating in the field of genomic technology and sciences across a spectrum of biological challenges. Opened in 2008, its mission is four-fold: sparking scientific discoveries that can impact human health and well-being; bringing genomic medicine into clinical care; fostering life sciences entrepreneurship and business growth; and encouraging the creation of a genomics-literate workforce and society. The HudsonAlpha biotechnology campus consists of 152 acres nestled within Cummings Research Park, the nation’s second largest research park. Designed to be a hothouse of biotech economic development, HudsonAlpha’s state-of-the-art facilities co-locate nonprofit scientific researchers with entrepreneurs and educators. The relationships formed on the HudsonAlpha campus encourage collaborations that produce advances in medicine and agriculture. Under the leadership of Dr. Richard M. Myers, a key collaborator on the Human Genome Project, HudsonAlpha has become a national and international leader in genetics and genomics research and biotech education, and includes more than 30 diverse biotech companies on campus. To learn more about HudsonAlpha, visit: http://hudsonalpha.org/.

EDITOR’S NOTE: The University of Alabama at Birmingham is a separate, independent institution from the University of Alabama, which is located in Tuscaloosa. Please use University of Alabama at Birmingham on first reference and UAB on subsequent references.
