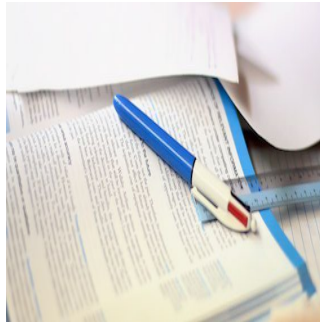

Innovative Collaboration Aims to Expand Science of Heart Studies Towards ‘Personalised Medicine’



A new collaborative research relationship between the American Heart Association, the University of Mississippi and Boston University, representing a bold vision for cardiovascular population science, was announced today at the American Heart Association's Scientific Sessions.

The collaboration has a vision of greatly expanding important population studies by adding more research and diverse subjects, more genetic analysis and deeper new approaches to gathering information in an effort to find more “personalized” treatment and prevention of cardiovascular disease. This project would help to build a “biobank” that researchers could easily access through a larger national network of population studies, including the landmark Framingham and Jackson heart studies.

“We will be transferring that success into 21st century genomics developments and network medicine,” said Joseph Loscalzo, M.D., Ph.D., chairman of the American Heart Association's Science Oversight Group for this collaboration.

While scientists seeking answers to heart disease, stroke and other major problems would have access to this information, protecting the confidentiality of study participants is a top priority. Successful large studies have over the years developed procedures to ensure people cannot be identified through their medical data, and those practices will continue in this new project.

Framingham is the longest-running U.S. heart study and has led to many important discoveries. The Jackson Heart Study is the largest study ever focused on risk factors among African-Americans – who face disproportionate risk for heart disease and stroke. The collaborative group, convened by the American Heart Association, has the temporary working name of “Heart Studies v2.0.”

“The potential here is nothing short of amazing,” said Loscalzo, chairman of the Department of Medicine and Physician-in-Chief at Brigham and Women's Hospital and Editor-in-Chief of the American Heart Association journal *Circulation*. “The vast participant data base from these important studies, plus additional genetic components, puts us on the path to defining specific risk determinants for certain cardiovascular diseases for every person.”

Heart disease is the leading cause of death in the world, and risk factors vary for every person based on a variety of factors.

“Everybody's collection of genes is unique. In addition, how everyone's genes interact with their environment is unique,” Loscalzo said. “Personalized medicine takes all of this complexity into account, and applies unique genomic datasets to careful assessment of clinical features of disease in order to predict accurately the diseases people are likely to develop and to design effective individualized therapies for them.”

“The Framingham Study is an iconic cohort study that has more than proven its value from a public health point of view,” said Karen Antman, M.D., dean of Boston University School of Medicine. “This collaboration with the American Heart Association and University of Mississippi allows Boston University to continue to advance its cardiovascular research mission. We look forward to collaborating with the AHA and with our colleagues at the Jackson Study.”

Dan Jones, M.D., University of Mississippi chancellor and former Jackson Heart Study principal investigator is also excited about this cooperation. “Thanks to the American Heart Association, this collaboration will allow the continued development of the science to better understand the causes of heart disease and stroke,” he said, and concluded that the University of Mississippi Medical Center was proud to work with its partners at Jackson State University and Tougaloo College in the Jackson Heart Study.

The NHLBI funds and supports Framingham and Jackson, in addition to other research. Director Gary Gibbons, M.D., said the new project can significantly advance efforts to prevent cardiovascular disease through emerging technologies and the transformation of population science.

“The advent of ‘big data’ and genomic science will transform clinical medicine in the next decade,” Gibbons said. “This innovative AHA partnership and new resource is an exciting opportunity to create synergy for a large-scale, national network of datasets that build upon the data-sharing biorepositories provided by NHLBI cohort studies.”

Source: [American Heart Association](http://www.heart.org)

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