



Duke University cardiologist named principal investigator for MURDOCK Study

Dr. Kristin Newby called 'perfect fit' for leadership of study she helped create

KANNAPOLIS, N.C.—March 6, 2015—Eight years after she helped create Duke University's health research project based at the North Carolina Research Campus, Kristin Newby, MD, MHS, has become the lead scientist for the MURDOCK Study.



Kristin Newby, MD, MHS, has been named principal investigator for Duke University's MURDOCK Study, based at the North Carolina Research Campus in Kannapolis.

Newby, Professor of Medicine at Duke and faculty member of the Duke Clinical Research Institute, replaces Rob Califf, MD, as the MURDOCK Study's principal investigator. Califf was recently named deputy commissioner for Medical Products and Tobacco at the U.S. Food and Drug Administration.

Newby's new role comes on the heels of her prestigious induction in January into the Association of University Cardiologists (AUC). AUC members are elected by their peers and gather once a year to share their research and welcome new members. Membership is limited to 125, and those elected are considered among the best academic cardiologists in the U.S.

"Dr. Newby is the perfect fit for filling such a vital and significant leadership role as PI of the MURDOCK Study. Her breadth of experience with the study dates back to its earliest days when she consulted on the study's design, provided the scientific know-how to lead the research on cardiovascular disease for biomarker discovery and implemented the Community Registry and Biorepository," said Victoria Christian, operational founder of the MURDOCK Study and chief operating officer for the Duke Translational Research Institute, which manages the ambitious project.

"She is not only dedicated to developing the MURDOCK Study into a catalyst for precision medicine, she is well-respected by her peers inside and outside of Duke as evidenced by her recent notable award," Christian said.

Newby, who has been involved with the MURDOCK Study since its inception in 2007, helped create the population health research initiative that she says has reached a turning point.



Victoria Christian is chief operating officer for the Duke Translational Research Institute, which manages the MURDOCK Study.

"This is an exciting time for the MURDOCK Study, an exciting time to take this next step in my career," Newby said. "I have nothing but great hope and confidence in the future of the MURDOCK Study and where we are headed."

With more than 11,200 people enrolled in the Community Registry and Biorepository, MURDOCK Study researchers are beginning to generate and analyze data from biological samples, which are stored in Kannapolis, as well

as from health information provided each year by participants. In collaboration with the Dole Nutrition Research Institute, the David H. Murdock Research Institute and other partners at the North Carolina Research Campus, the MURDOCK Study during the next five years will increase its focus on studies of nutrition and the effects on health and illness of food and exercise, Newby said.



In the coming decade, Newby said she expects the MURDOCK Study to make major contributions to understanding the fundamental underpinnings and refined classification of health and disease, contributing to the discovery and development of new treatments and their targeted use. The MURDOCK Study will bring to fruition the promise of "precision medicine," the concept that doctors will know how to use a person's genetic, clinical, social and environmental characteristics to tailor prevention and treatment strategies to that patient's unique characteristics and needs.

The MURDOCK Study has matured to the point that analyses are being initiated with the clinical data and biological samples that have been created. Many research grants have been submitted to use the MURDOCK resources—clinical information and samples contributed by the participants—to better understand such common diseases as high blood pressure, memory loss and Alzheimer's disease, physical function and aging, coronary disease, kidney disease and cancer.

Already, researchers using MURDOCK Study samples have learned about how regional and cultural differences influence the assessment of cognitive function, information that will be important in future wide-scale research in memory loss and Alzheimer's disease. In multiple sclerosis research, MURDOCK Study investigators are discovering how small molecules in the blood called metabolites are related to the disease and how these profiles may be different between women and men with MS.

Newby said the MURDOCK Study is possible thanks to generous participants who have contributed their biological samples and health information not for personal gain but to create a resource that qualified medical researchers can use to learn about health and the illnesses that commonly affect people, ultimately improving the health and well-being of future generations.

"You have committed your time, your blood and your data, and we thank you," she told participants at a recent research update in Kannapolis.

During the AUC annual meeting in January, Newby presented her research on "Moving Cardiovascular Risk Assessment Beyond a Single Biomarker." Her talk chronicled her work on using biomarkers for risk assessment and highlighted recent lessons learned from simultaneously assessing nearly 60 putative biomarkers of risk in 550 people with suspected coronary artery disease from the MURDOCK Horizon 1 Cardiovascular Disease Study. She and her collaborators found that certain smaller clusters of biomarkers and clinical variables that were strongly associated with death or myocardial infarction during a median 2.5 years of follow up could be distilled from the larger pool of information.

"While this reflects an important step forward, these methods and results only scratch the surface of what is needed and soon may be possible to bring the promise of 'stratified medicine' to fruition," Newby said.

Her work in biomarkers for risk stratification began with research on troponin and the first use of a "multimarker strategy" with Magnus Ohman, in the mid-1990s, as a new cardiology faculty member. It extended to broader collaborative efforts through the [MURDOCK](#) Cardiovascular Disease Study and Community Registry and Biorepository.

Newby said she believes the evolving efforts among Duke University, Stanford University, and Google on the [Baseline Study](#) hold great promise to address limitations of research to date and bring integrated clinical and molecular characterization to bear on health care.



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