

Research Forum

Hosted by the Department of Medicine Office for Research

Wednesday, February 5th, 2025

12:00-1:00 pm

Via Zoom Only

Join Zoom Meeting

<https://msu.zoom.us/j/99899924337?pwd=CPTYSOLq9eqSm6XhPvPd1G8cB5UPua.1>

Meeting ID: 998 9992 4337

Passcode: 613779

“Molecular Epidemiology of Cardiovascular Disease: A framework for translational research”

Goals:

1. Describe the non-invasive tools used to assess subclinical cardiovascular disease risk in human studies
2. Outline molecular methods used in human epidemiologic studies
3. Discuss how molecular methods can help to translate between human and basic research

Allison L Kuipers, PhD

Associate Professor of Medicine

Associate Professor of Epidemiology and Biostatistics

Michigan State University



Dr. Kuipers comes to MSU from the University of Pittsburgh where she received her PhD in Epidemiology, was an NHLBI-funded post-doctoral fellow, and built her translational research program as Faculty. Dr. Kuipers' primary research is on the molecular determinants of vascular, cardiac and other chronic diseases. Dr. Kuipers' current research is focused on evaluating the epidemiologic predictors of cardiac structure and function, and other subclinical cardiovascular disease measures in a population-based, longitudinal cohort study on the Caribbean island of Tobago. This represents the first population-based data on cardiac structure and function in African Caribbeans to date and will help establish the risk factors and molecular predictors of these measures in this population subset with a great burden of hypertensive disease. Her overarching aim is to use a variety of banked biospecimen samples to test the association of multiple molecular markers, such as genetic variation, gene expression, and protein concentration, with cardiac and vascular measures in order to better understand the etiology and physiology of cardiovascular disease. At MSU, her long-term research goals are focused on harnessing translational molecular techniques to study cardiac and vascular disease in clinical and population-based settings to identify novel disease mechanisms with an eye toward implementation to impact and improve human health.