JOSHUA HUTCHESON, PH.D. joined the Department of Biomedical Engineering at Florida International University in August 2016. He is also an active member of the Biomolecular Science Institute at FIU. Prior to joining FIU, Dr. Hutcheson earned his PhD in the Department of Biomedical Engineering at Vanderbilt University and worked as a research fellow at Brigham and Women’s Hospital and Harvard Medical School within the Center for Interdisciplinary Cardiovascular Sciences. Dr. Hutcheson's research focuses on the mechanical and molecular contributors to cardiovascular disease, and he is working on developing non-invasive techniques to diagnose and treat these pathologies. Dr. Hutcheson’s work has been published in more than 40 peer reviewed publications and 7 book chapters. He has also co-edited a book on Cardiovascular Calcification and Bone Mineralization and serves as an associate editor for Frontiers in Cardiovascular Medicine. In recognition of his efforts in cardiovascular medicine, Dr. Hutcheson was named the “Stop Heart Disease Researcher of the Year” by the Florida Heart Research Foundation in 2018. His work has been funded through grants from the American Heart Association, the Florida Heart Research Foundation, and the National Science Foundation-Engineering Research Center on Precise Advanced Technologies and Health Systems for Underserved Populations (PATHS-UP).

ABSTRACT: Cardiovascular disease remains the leading cause of morbidity and mortality in world, and chronic cardiovascular diseases are often underdiagnosed and untreated in underserved populations. Research in our lab seeks to address this problem in two ways. First, we are developing low-cost point-of-care technologies to diagnose and monitor common cardiovascular diseases. Second, we study the cellular and molecular mechanisms through which cardiovascular tissues form and remodel in order to identify potential therapeutic targets for drug development.