

SEMINAR SERIES

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Biomechanics, Growth & Remodeling of the Maternal Arterial Tree in Pregnancy and the Lymphatic Vasculature

Featuring Dr. Rudolph Gleason
Georgia Institute of Technology



Friday, Feb. 18 | 12:00 - 1:15 pm | Via Zoom

<https://unomaha.zoom.us/j/92012305734>

PRESENTATION ABSTRACT

Tissue growth and remodeling (G&R) play fundamental roles in maintaining normal physiological function in healthy tissues. Maladaptive G&R mechanisms are key drivers in development and progression of many diseases. Development of experimentally validated computational models of tissue G&R has been an active area of research for several decades. Recent work from the Gleason lab in developing and validating computational G&R models for multiple conditions will be presented, including G&R of the maternal vasculature during pregnancy and in preeclampsia, G&R of lymphatic vessels with lymphedema, and G&R of ascending aortic aneurysms based on longitudinal clinical results. Dr. Gleason will also discuss his active clinical research projects aimed at developing novel devices to address critical maternal and newborn health challenges in Ethiopia.

ABOUT DR. GLEASON

Dr. Rudy Gleason is an Associate Professor in the George W. Woodruff School of Mechanical Engineering and the Wallace H. Coulter Department of Biomedical Engineering at the Georgia Institute of Technology in Atlanta, GA. He received his B.S. and M.S. degrees from the University of Florida and his Ph.D. from Texas A&M University. Dr. Gleason's laboratory develops multi-scaled experimental and computational modeling frameworks for vascular biomechanics and growth & remodeling in health and disease. More recently, the Gleason research and training activities have focus on translating biomechanics and bioengineering innovation to address grand challenges in global health in the developing world.

more info at cobre.unomaha.edu

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