

Friday, May 14th, 2021 at 12 noon

Erin Buckley, PhD

Assistant Professor , Wallace H. Coulter Department of Biomedical Engineering at Georgia Institute of Technology/Emory University and the Department of Pediatrics at Emory University

Title: Illuminating Biomarkers of Stroke with Diffuse Optical Spectroscopies



Abstract:

Our research group specializes in the development and application of diffuse optical spectroscopies to study the brain. These non-invasive, light-based tools enable real-time bedside monitoring of microvascular hemodynamics. In this seminar, I will focus on our recent work that uses these tools to identify biomarkers of stroke risk in two high-risk patient populations; subarachnoid hemorrhage and pediatric sickle cell disease. Moreover, I will talk about how we have advanced the techniques to account for the confounding influences of hematocrit in the sickle cell cohort.

Dr. Buckley is an Assistant Professor in the Wallace H. Coulter Department of Biomedical Engineering at Georgia Institute of Technology/Emory University and the Department of Pediatrics at Emory University. She received her PhD from the Department of Physics and Astronomy from the University of Pennsylvania in 2011 and completed postdoctoral training at the Children's Hospital of Philadelphia and at Massachusetts General Hospital. Her research focuses on the development and validation of diffuse optical spectroscopies.