Biomedical Image Computing and Informatics Seminar

"Smart and Autonomous Medical Imaging"

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Smilow Rubenstein Auditorium & Commons

3400 Civic Center Blvd., 1st floor
Thursday, October 04, 2018 at 1pm
Pizza lunch at 12:45pm

Abstract

Diagnosis and prognostication for patients will require new statistical and computational methods designed to address the vast amounts of imaging data available, automated point-of-care incorporation of imaging analytics, integration of this data with conventional biomarkers and risk factors, and costs of advanced imaging. To address these challenges, we will show our most recent research in the development of smart and autonomous medical imaging systems. This approach has resulted in new deep learning algorithms for reconstruction of accelerated magnetic resonance imaging data, deep cardiovascular image phenotyping, and basic workflow changes in advanced imaging. Combined with novel approaches to myocardial tissue characterization, we will show how this strategy can lead to improved care for patients with heart disease.

Bio

Dr. Witschey is an Assistant Professor in the Department of Radiology at the University of Pennsylvania. He is a fellow in the Penn Cardiovascular Institute and member of the Bioengineering and Biochemistry and Molecular Biophysics graduate groups. Dr. Witschey leads an interdisciplinary research team whose translational interests include imaging physics, analytics, and basic science investigation of ischemic heart disease. He currently leads the Myocardial Reperfusion Injury Imaging Project and Penn Deep Cardiovascular Imaging Phenotyping Program. More information about his research program can be found on his laboratory's website: www.med.upenn.edu/cor.