



Biomedical Image Computing and Informatics Seminar

“Informatics for Computational Imaging”

Daniel Marcus, PhD

NIAC Director

Department of Radiology

Washington University School of Medicine

Smilow Rubenstein Auditorium & Commons

3400 Civic Center Blvd., 1st floor

Thursday, October 11, 2018 at 1pm

****Pizza lunch at 12:45pm****

Abstract

There's never been a better time for computational imaging applications in research and medicine. There's deep learning, of course, which may or may not be in the process of completely transforming radiology. There's radiomics and radiogenomics, which aim to make radiology a more quantitative, objective practice. There's connectomics, which has the potential to revolutionize diagnostics and treatment of neurological and psychiatric disorders. These advances are all computationally demanding and data hungry. I'll talk about the imaging informatics work underway in my lab at Washington University to tame and feed these unruly beasts. And also, data sharing. I'll talk about data sharing, because it's my favorite thing.

Bio

Dr. Marcus is an Associate Professor in the Department of Radiology at Washington University. He is the chief of the Electronic Radiology Laboratory and director of the Neuroinformatics Research Group (NRG), an interdisciplinary team of engineers, scientists, software developers, and informaticists all contributing towards the common goal of enabling imaging in biomedical research. The laboratory develops XNAT, the world's most widely used imaging informatics platform, and contributes to the international biomedical informatics infrastructure through a portfolio of NIH-funded projects. Dr. Marcus directs imaging informatics operations for a number of large-scale research programs, including the Human Connectome Project, the Connectome Coordination Facility, the Dominantly Inherited Alzheimer Network, and the Neuroimaging Informatics and Analysis Center. Dr. Marcus is also founder and president of Radiologics, Inc., which builds and hosts FDA-compliant versions of the XNAT platform for clinical trials and patient diagnostics.