Clinical and translational applications of advanced MRI in high-grade glioma

Leland Hu, M.D.
Associate Professor of Radiology, Mayo Clinic College of Medicine

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9:00 a.m. - 9:50 a.m., SCOB 210
Faculty Host: Scott Beeman

Abstract This talk will focus on the utility of advanced MRI techniques in the diagnosis and characterization of primary glial neoplasms, specifically high-grade glioma. We will discuss how the biophysical properties of MRI contrast help to resolve the molecular and biological underpinnings of disease, and the various clinical and translational research applications for improving patient care.

Biosketch Dr. Hu holds a primary clinical appointment as Consultant and Associate Professor of Radiology at Mayo Clinic in Arizona, in the Division of Neuroradiology, and holds joint appointments at Mayo Clinic in the Departments of Cancer Biology and Neurological Surgery. Dr Hu also serves as a faculty member for the Center of Clinical and Translational Sciences at Mayo Clinic, and is currently Associate Director of the Mayo Clinic (MD/PhD) Medical Scientist Training Program. He holds dual appointments as Adjunct Professor with the School of Computing, Informatics, Decision Systems Engineering (SCIDSE) and the School of Biological and Health Systems Engineering (SBHSE) at Arizona State University. Dr. Hu's translational research has focused on advanced imaging techniques of human brain tumors, which has centered on the development and validation of image-based biomarkers to quantify histologic and molecular heterogeneity in Glioblastoma (GBM). Dr. Hu has served on national and international committees focused on consensus recommendations for brain tumor imaging, and has been funded for the past decade by the National Institutes of Health (NIH) as Principal Investigator for multiple grants to improve the diagnosis and treatment for patients with brain tumors.