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“Approaches for Neurovascular Magnetic Resonance Imaging –
Going Beyond BOLD”

Abstract:

Blood oxygen level dependent (BOLD) imaging provided the essential neurovascular MRI data for three decades, and has yielded countless insights into the function of the brain. BOLD images are nearly ubiquitous when attempting to understand neurovasculature using MRI, and will remain pivotal due to their many strengths. But other MRI techniques are ready to translate from their research and development origins into mainstay imaging tools yielding fresh insights into the vascular and metabolic health of the brain. I will talk about both recent imaging advances and underused but trusted imaging methods. I will highlight their strengths for ascertaining information that BOLD by itself does not provide. Finally, I will explore the new clinical and research opportunities that these imaging methods provide.

Biography:

Matthew Borzage is a faculty researcher at the Children’s Hospital of Los Angeles with an interest in the area of neurodevelopment and a focus on flow of cerebrospinal fluid and blood in the brain. He is an assistant professor of research pediatrics at the University of Southern California Keck School of Medicine where he completed his doctoral thesis in biomedical engineering, with a focus on noninvasive methods of for assessing the developing brain.