



## **Imaging Microvascular Blood Flow with MRI**

**Dr. Brad Sutton** 

Department of Bioengineering University of Illinois at Urbana-Champaign

Date: Time: Location:

Tuesday, April 26, 2011 12:00 – 1:00 p.m. CDT 1000 MNTL

## **Abstract:**

Blood flow in the brain is an important physiological quantity relating to vitality of brain tissue and performance of cognitive tasks. Current non-invasive methods to measure cerebral blood flow with magnetic resonance imaging (MRI) allow for the measurement of delivery of blood from feeding arteries and may be sensitive to disruptions in flow in pathways between where blood is tagged and where it is measured. Recently we have revived old techniques and developed new techniques for localized imaging of microvascular blood flow in the brain. In addition to flow quantification, our techniques allow for measurement of structural arrangement of microvasculature. In this talk, we will show how microvascular blood flow can be quantified in brain tissues using non-invasive methods of FENSI and diffusion weighted imaging.

## **Seminar Presented by:**

