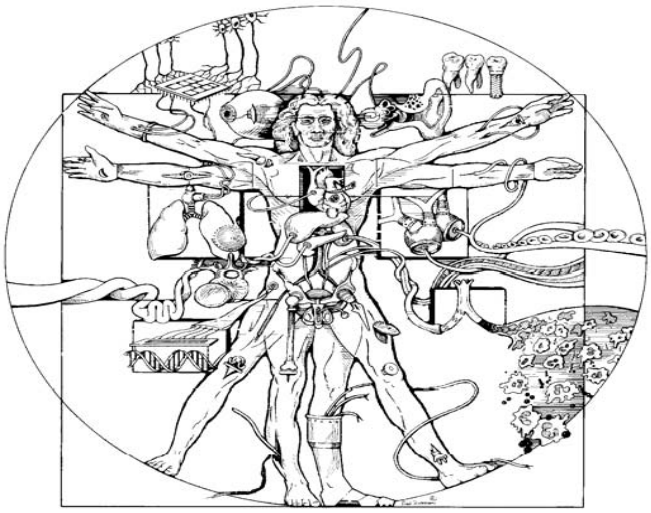
Biomedical Engineering Seminar



Russell Witte, Ph.D.
Assistant Professor, Radiology
University of Arizona

Novel Ultrasound Strategies for Biomedical Imaging

Abstract: Ultrasound has highly desirable attributes as an imaging modality, such as high spatial resolution and 3D capability, but typically suffers from low contrast in biological tissue. The recently founded Experimental Ultrasound and Neural Imaging Laboratory (EUNIL) in the Department of Radiology is dedicated to developing novel approaches to enhance ultrasound contrast with applications especially geared towards neural engineering and brain imaging. In this seminar, I'll describe three separate strategies that dramatically improve spatial contrast compared to traditional ultrasound: 1) Photoacoustic Imaging, 2) Ultrasound Current Source Density Imaging, and 3) Muscle Strain Imaging. Each approach potentially impacts a wide variety of applications in biomedical engineering, from functional brain imaging to tracking motor performance in real-time during treatment of a neuromuscular disorder.

Monday, August 27, 2007
2:00 pm
Keating 103
Host: Urs Utzinger, Ph.D. (626-9281)

Persons with a disability may request a reasonable accommodation by contacting the Disability Resource Center at 621-3268 (V/TTY). Requests should be made as early as possible to allow time to arrange the accommodation.