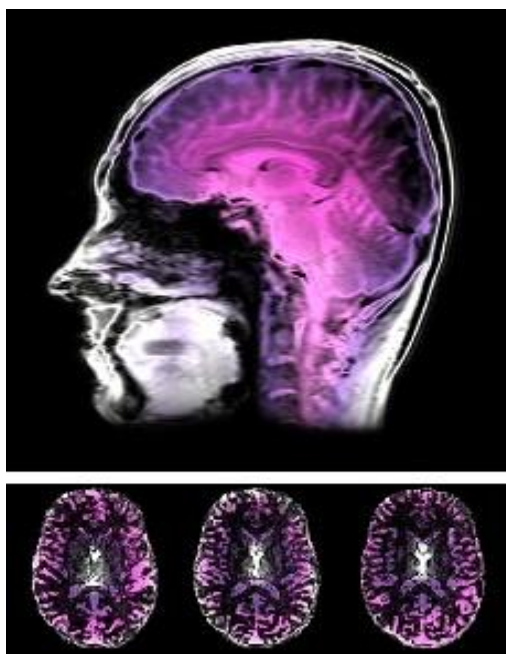


Symposium and Training XIV: **New Frontiers in Metabolic Imaging**



Thursday, April 20, 2006

Presented by
The Advanced Imaging Research Center
and
The National Center for Research Resources in association with

UT SOUTHWESTERN
MEDICAL CENTER

Program Objective

The goal of the NIH funded Research Resource at UT Southwestern is to develop novel Nuclear Magnetic Resonance (NMR) technologies for measuring and understanding intermediary metabolism *in vivo*. One major emphasis is to use ^2H and ^{13}C as metabolic tracers and modern NMR methodologies to unravel the complexities of multi-organ metabolism in animals and humans. A second component of the Research Resource is to develop novel imaging agents that respond to metabolism *in vivo*.

This year's symposium follows an overall theme that intermediary metabolism is critical to understanding countless disorders. The use of high fields, hyperpolarized carbon and paraCEST agents all offer new avenues to monitor metabolism in human patients. Our speakers will discuss their experience and work with imaging methods to offer an overview of potential discoveries and insights into metabolism.

Guest Speakers

Malgorzata Marjanska, PhD, Research Assistant Professor, University of Minnesota
Klaas Pruessman, PhD, Associate Professor, Institute for Biomedical Engineering ETH Zurich
Peter Morris, PhD, Professor, Nottingham University - UK
Ralph Hurd, PhD, GE Medical Systems Molecular Imaging Menlo Park, California
Sylvio Aime, PhD, Chair Professor, Universita delgi Studi di Torino Torino, Italy

UT Southwestern Speakers

Craig Malloy, MD, Medical Director, Advanced Imaging Research Center at UTSW
Hanzhang Lu, PhD, Assistant Professor, Advanced Imaging Research Center at UTSW
A. Dean Sherry, PhD, Director, Advanced Imaging Research Center at UTSW

Program Schedule

8:00 a.m.	On-Site Registration
8:30 a.m.	Metabolism and Medicine Craig Malloy, MD
9:15 a.m.	Measurement of Blood Flow and Blood Volume Hanzhang Lu, PhD
10:00 a.m.	Break
10:15 a.m.	NMR Spectroscopy for Understanding Alzheimer's Disease Malgorzata Marjanska, PhD
11:00 a.m.	Prospects for Human Imaging at 7T Klaas Pruessmann, PhD
12:00 a.m.	Catered Lunch
1:00 p.m.	Human Metabolism at 3T and 7T Peter Morris, PhD
2:00 p.m.	Clinical Applications of Hyperpolarization Ralph Hurd, PhD
3:00 p.m.	Discussion / Break
3:15 p.m.	New Mechanisms in Image Contrast: paraCEST Sylvio Aime, PhD
4:15 p.m.	Metabolic Imaging A. Dean Sherry, PhD
5:00 p.m.	Wine and Cheese Reception, A. W. Harris Faculty Club