

CDMRI '08

MICCAI 2008 WORKSHOP ON
COMPUTATIONAL DIFFUSION MRI

9/10/2008, New York, NY, USA



CALL FOR PAPERS

Over the last decade interest in diffusion MRI has exploded. The technique provides a unique insight into the microstructure of living tissue and enables in-vivo connectivity mapping of the brain. Microstructural changes are often the earliest signs of disease or tissue regeneration. Tractography and connectivity mapping give fundamental new insights in neuroscience and neuroanatomy. The variety of clinical applications is expanding rapidly and includes detection of lesions and damaged tissue, prognosis of functional impairment and neurosurgical planning.

Computational techniques are key to the continued success and development of diffusion MRI and to its widespread transfer into the clinic. New processing methods are essential for addressing issues at each stage of the diffusion MRI pipeline: acquisition, reconstruction, modelling and model fitting, image processing, fiber tracking, connectivity mapping, visualization, group studies and inference. The workshop will give a snapshot of the current state of the art.

WORKSHOP TOPICS

The organizers encourage submissions of papers in areas including, but not limited to, the following topics:

- Acquisition design
- High angular resolution techniques
- Biophysical models
- The microstructure of diffusion in tissue
- Tractography and connectivity mapping
- Network analysis
- Registration and segmentation
- Visualization
- Validation
- Post-processing
- Group studies and statistical analysis
- Clinical applications

Papers submitted to the main conference or other MICCAI workshops may be double-submitted to CDMRI'08.

ORGANIZERS

Daniel Alexander, Ph.D.
James Gee, Ph.D.
Ross Whitaker, Ph.D.

University College London
University of Pennsylvania
University of Utah

IMPORTANT DATES

May 23, 2008:

Paper submission

July 1, 2008:

Notification of acceptance

August 18, 2008:

Camera-Ready Papers

September 10, 2008:

Workshop (8am to 5pm)

PROGRAM

Paper Presentations:

8-12 oral presentations with ample time for questions; a few posters may be accepted.

VENUE

The Kimmel Center
New York University
60 Washington Square South
New York, NY 10012