MIAMS'08

MICCAI Workshop on

"Medical Image Analysis on Multiple Sclerosis (validation and methodological issues)"

September 6th, Kimmel Center, ·New York University ·NYC ·USA

http://miams08.inria.fr

Rational

Multiple Sclerosis is an inflammatory and demyelinating disease that exhibits regions with high demyelinating activity shown as focal lesions on MRI that usually affects young adults. Even in normal appearing brain tissues (NABT) there are alterations often not visible on conventional MRI sequences. While MRI has a low specificity for differentiating between possible pathological changes which could aid in discriminating between the different lesion types, it has a high sensitivity to detect focal and also widespread, diffuse pathology of the normal appearing white and grey matter. The objective of medical image analysis procedures is to define new neuroimaging biomarkers to track the evolution of the pathology from high dimensional data. This workshop will give an overview of new advances of medical image acquisition and analysis in Multiple Sclerosis.

Topics

The objective of this workshop is to bring together researchers in medical image analysis, biologists, radiologists and neurologists working in the field of neuroimaging biomarkers in MS. These methods are key for a better understanding of the different stages of the disease, for a better modelling of the natural history of the pathology, and for efficacy studies in clinical trials.

We solicit papers that use methods of medical image analysis methods in the following domains:

- Focal and diffuse lesion segmentation in MS
- New MRI sequences, molecular imaging, contrast agents in MS
- Atrophy quantification in MS
- Functional imaging in MS
- Myelin imaging
- Grey matter lesion imaging and detection
- Imaging and histological correlation
- Longitudinal data analysis in MS
- Quantitative Imaging in MS (e.g. T2, T2*, MT, MRS, MRSI, Gado…)
- DTI analysis in MS
- New imaging modalities in MS (e.g., PET)
- Spinal cord Imaging
- Tissue segmentation
- Animal models and imaging

Key Dates :

- Submission Deadline: May 2nd
- Notification for acceptation: June 30th
- Final version of papers: July 10th

Organizers

Christian BARILLOT
Unit/Project VisAGeS - U746 INSERM/INRIA
IRISA, CNRS 6074, U. of Rennes1, Rennes, France
http://www.irisa.fr/visages/barillot

D. Louis COLLINS
McConnell Brain Imaging Center
Montreal Neurological Institute, QC, CANADA
http://www.bic.mni.mcgill.ca/~louis

Submission

- Papers in pdf in LNCS format (from 8 to 12 pages)
- Send submission to miams08@irisa.fr before May 2nd, 2008

Publication:

- Papers and multimedia data will be published on a CDROM
- A Special issue of best papers or an Edited book is also under study