INCF
National Node of
Belgium

Imaging the brain at multiple scales

How to integrate multi - scale structural information?

Antwerp, Belgium, 2nd - 6th September 2013

One of the main challenges in the emerging fields of Connectomics and Neuroinformatics is the implementation of interoperable data management platforms enabling the integration of multi-scale structural information into a common framework.

With the support of the INCF program for Teaching and Training, the Belgian Neuroinformatics Node and the University of Antwerp are organizing a unique multi-disciplinary international training course in Neuroinformatics. The course aims to address both the theoretical and practical aspects of cutting-edge image processing techniques used to analyze imaging data at different spatial scales and to provide an introduction to the existing solutions to manage the different types of data and integrate them together in a coherent framework.

This course will focus on 4 different imaging modalities that span multiple spatial scales: electron microscopy, light microscopy, MRI/DTI and MR microscopy. For each of these technical use-cases, we will give an overview of: the standard image processing techniques; the methods used for extracting the brain connectivity and the current solutions for storing, manipulating and annotating large image datasets. Lectures will be supported by practical examples using open-source software and publicly available datasets. Finally, the course will be concluded by a day dedicated to demonstrating different atlasing solutions for multi-scale data integration. **More information can be found at:**
http://www.neuroinformatics.be/NeuroinfCourse/

The program can be found at:
http://www.neuroinformatics.be/NeuroinfCourse/CourseProgram.pdf

Interested researchers are invited to apply. Applications are welcome from both early stage (PhD) and experienced neuroscientists (postdocs, senior researchers) working in fields related to brain imaging or using brain imaging techniques. The course will be held from Monday, September 2nd until Friday September 6th 2013 in the facilities of the Antwerp University city campus (Belgium).

The course will be limited to 50 participants and a registration fee will be asked (150 euros, excluding accommodation, travel and dinners). To support interactions between the attendees and the speakers, attendees are expected to present a poster at the course.

Applications are now open on the Belgian node portal site:
http://www.neuroinformatics.be/NeuroinfCourse/applyhere.php
Deadline for application is April 15th 2013 (12:00PM GMT).

This course, originally proposed by the Belgian, Dutch, French and Polish INCF nodes, is financially supported by INCF (www.incf.org), the Belgian Neuroinformatics node (www.neuroinformatics.be), IMEC (http://www.imec.be), the Benelux Chapter of Engineering in Medicine and Biology of IEEE (http://www.embs-chapter.be), and the Interuniversity Attraction Poles Programme initiated by the Belgian Science Policy Office (IUAP-VII, consortium 11).

For questions, regarding the course, please contact the organizing committee at the following email address: course-organization@googlegroups.com