



Exploring the Human Connectome

HCP Course: June 8–12, Honolulu



Explore the multimodal neuroimaging data and tools of the Human Connectome Project

2015 HCP Course:

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June 8-12, 2015

Marriott Resort Waikiki Beach
Honolulu, Hawaii, USA

For full schedule and to register, visit:

<https://humanconnectome.org/course-registration/>

This 5-day intensive course will provide training in acquisition, analysis, visualization and interpretation of data from four major MR modalities (structural MR, resting-state fMRI, diffusion imaging, task-evoked fMRI) plus magnetoencephalography (MEG) and extensive behavioral data.

Participants will learn how to use methods and informatics tools developed by the WU-Minn HCP consortium, plus data made freely available to the neuroscience community.

Lectures and labs will provide grounding in neurobiological as well as methodological issues involved in interpreting multimodal data, and will span the range from single-voxel/vertex to brain network analysis approaches.

The HCP course is designed for those interested in:

- using data collected and distributed by HCP
- acquiring and analyzing HCP-style imaging and behavioral data at your own institution
- processing your own non-HCP data using HCP pipelines and methods
- learning to use Connectome Workbench tools and the CIFTI connectivity data format
- learning HCP multimodal neuroimaging analysis methods, including those that combine MEG and MRI data
- positioning yourself to capitalize on HCP-style data from forthcoming large-scale projects (e.g., Lifespan HCP and Connectomes Related to Human Disease)

Registration

\$800 for PhD/MSc students

\$1300 for postdocs and faculty

\$2300 for commercial attendees

Registration fees cover lectures, computer practical sessions, coffee/tea breaks, an evening reception on Monday June 8, and a flash drive containing lecture slides. The registration fee does not cover travel, accommodation or meals.

Topics

Day 1: Structural imaging; preprocessing; intersubject registration; parcellation

Day 2: Resting-state fMRI; network analysis

Day 3: Diffusion imaging and tractography

Day 4: Task-fMRI; data mining; disease connectomics

Day 5: Magnetoencephalography; multimodal integration

Teaching Faculty and Tutors

David Van Essen, Steve Smith, Tom Nichols, Jesper Andersson, Dan Marcus, Matt Glasser, Michael Harms, Greg Burgess, Linda Larson-Prior, Alan Anticevic, Gordon Xu, Robert Oostenveld, Jan-Mathijs Schoffelen, Matteo Bastiani, Jenn Elam, Giorgos Michalareas, Francesco Di Pompeo, Tim Brown, Tim Coalson, Donna Dierker, Matt Kelsey