

Getting Started with Neuroimaging Analysis

July 29, 2022

Hilton San Diego Bayfront, Sapphire Ballroom A

All times are in Pacific Time (North America)

In-person attendance only

Laptops are required for this workshop.

Overview

The workshop will provide practical information and an enhanced understanding on how to work with and analyze medical imaging data from magnetic resonance imaging (MRI) and positron imaging tomography (PET).

The initial portion of the workshop will focus on the understanding of the basic structure of an image, how to traverse images, data extraction, and how voxels relate to world coordinates. Subsequent lectures will be followed by interactive sessions to demonstrate simple workflows including tissue segmentation, registration, and pre-processing steps of fMRI or DTI. The objective of the workshop is to ensure participants gain an in-depth appreciation of commonly used interpretive clinical and/or research applications for each methodology.

Organizing Committee

- David Cash, UCL Queen Square Institute of Neurology, United Kingdom
- Luigi Lorenzini, Amsterdam University Medical Center, Netherlands
- Alexis Moscoso, University of Gothenburg, Sweden
- Ludovica Griffanti, University of Oxford, United Kingdom
- Tobey James Betthauser, University of Wisconsin–Madison, United States
- Alexa Pichet Binette, Lund University, United States

Target Audience

This hands-on workshop can serve as a beginners' or refresher course for established investigators, clinicians and trainees involved in the use of imaging techniques in the study of Alzheimer's disease, related disorders, and normal aging.

Registrants will be required to bring their own laptops. We will be asking attendees for specifications for the laptops so that we can best manage the workshop. We will all be using a standard environment for this workshop, using a virtual machine (VM), either on your laptop or on the cloud.

Registration

Educational workshops are offered for in-person attendance only. Workshops require a separate registration fee in addition to AAIC full conference registration, or they may be purchased as stand-alone events.

[Register today](#) for Getting Started with Neuroimaging Analysis.

Agenda

Time	Topic	Leader(s)
1 – 1:15 p.m.	Opening Remarks	David Cash
1:15 – 2 p.m.	Getting Started: Command Line and Image Data	Ludovica Griffanti David Cash
2 – 2:45 p.m.	Structural MRI: Bias Correction, Segmentation, Registration	Alexis Moscoso
2:45 – 3 p.m.	Break	
3 – 3:15 p.m.	Q&A / Progress Check	
3:15 – 4 p.m.	Pre-processing: fMRI	Luigi Lorenzini
4 – 4:45 p.m.	Pre-processing: DTI	Alexa Pichet Binette
4:45 – 5 p.m.	Closing Remarks	David Cash

A detailed agenda and summary of the activities can be found on [GitHub](#).