

## Getting Started with Neuroimaging Analysis

Friday, July 26, 2024 | 8:00a.m. – noon  
Marriott (Grand Ballroom D) — Philadelphia, USA  
All times are in Eastern Standard Time  
In-person attendance only

### Overview

The Getting Started with Neuroimaging Analysis Workshop is a ½-day immersive organized by the ISTAART Neuroimaging PIA. This workshop provides hands-on training on the basics of neuroimaging, targeting ~30-40 trainees and early-career researchers who are interested in neuroimaging research but have not had much opportunity for formal training working with neuroimaging data. The workshop is coupled with five 'Basics of Neuroimaging' webinars, also organized by the ISTAART Neuroimaging PIA, which cover background information and fundamental neuroimaging concepts and are requisite materials for workshop attendees to view prior to attending. The workshop covers basic concepts in neuroimaging data formats, coordinate systems, data visualization and image processing software. There are lessons in structural, functional, and diffusion magnetic resonance imaging (MRI) and positron emission tomography (PET). The format consists of a general introduction, followed by brief (~5 min) introductions to each of five tutorial lessons offered. Trainees then have three one-hour self-paced working sessions: during the first session all attendees complete tutorials on data visualization and structural MRI, during the last two working sessions, attendees work on the remaining lessons of their choice. All guided tutorials are hosted on a standardized training environment (cloud-based virtual machine) with neuroimaging data and software preloaded. Neuroimaging experts that organize and present the content and tutorials circulate around the room to facilitate training and to answer questions as they arise. Upon completion of the session, a survey is provided to gain feedback about the workshop and ways we can improve in future offerings. This will be the third year this workshop series is offered based on overwhelmingly positive feedback obtained from past offerings and high demand (previous two years have sold out with waitlists).

### Organizing Committee

- Tobey Betthausen, Wisconsin Alzheimer's Disease Research Center
- David Cash, Dementia Research Centre
- Tavia Evans, Erasmus University Medical Center

## Presenters

- Ludovica Griffanti, University of Oxford
- Tobey Betthausen, Wisconsin Alzheimer's Disease Research Center
- David Cash, Dementia Research Centre
- Tavia Evans, Erasmus University Medical Center ([Facilitator](#))
- Alexa Pichet Binette, Lund University
- Luigi Lorenzini, Amsterdam UMC

## Target Audience

This ISTAART Immersive workshop is targeted to attendees who are involved in research and is pitched at a beginner level.

## Learning Objectives

1. Evaluate the different elements of imaging data structure and their respective functions
2. Employ standard processing methods on various MRI and PET data
3. Review results from neuroimaging processing steps and pipelines to ensure data quality and to interpret results in a research context.

## 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.

**Agenda**

Time	Session Details	Speakers and Moderator