

## Getting Started with Neuroimaging Analysis

Friday, July 25, 2025 | 1-5 p.m.

Westin Harbour Castle- Pier 7&8 — Toronto, Canada

All times are in Eastern Standard Time

*In-person attendance only*

### Overview

The workshop will provide attendees with an interactive hands-on opportunity to view, process, analyse and interpret medical imaging data. These sessions use neuroimaging data both from various magnetic resonance imaging (MRI) modalities as well as positron imaging tomography (PET) from amyloid and tau tracers.

### Organizing Committee

- David M Cash, PhD
- Tobey J. Betthausen, PhD
- Ludovica Griffanti, PhD
- Alexa Pichet Binette, PhD
- Luigi Lorenzini, MSc
- Tavia E Evans, PhD

### Target Audience

This ISTAART immersive workshop is designed for individuals at the beginner and intermediate levels in Clinical Practice, Research, and Teaching, who want to be more involved in using imaging techniques to study Alzheimer's disease, related disorders, and normal aging. Participants from any career stage are encouraged to join, including undergraduate students, graduate students, post-doctoral researchers, and assistant professors engaged in clinical practice, research, or teaching.

### Learning Objectives

1. Distinguish the different elements of imaging data structure and their function
2. Reproduce standard processing methods on various MRI and PET data
3. Interpret results from image processing techniques to assess whether they are successful

## 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. Visit [alz.org/AAIC](http://alz.org/AAIC).

## Requirements

Registrants must bring their own laptops to do the exercises (tablets or smartphones will not be sufficient). You will be provided with this repository and links to the “Basics of Neuroimaging” series of AAIC webinars. To get the most out of this workshop, **we strongly recommend that you watch these webinars ahead of time**. The links to the webinars and the slides are below.

## Agenda: July 25, 2025 | 1:00 pm - 5:00 PM

| Time            | Session Details  | Speakers and Moderator                                  |
|-----------------|--|---|
| 12:00 - 1:00 pm | Lunch<br>( <i>Westin Metropolitan Ballroom</i> )                     |   |
| 1:00-1:10 PM    | Opening Remarks  | David Cash and Tobey Betthausen                         |
| 1:10-1:40 PM    | Image data: Basic Structure and Function                             | Ludovica Griffanti                                      |
| 1:40-2:10 PM    | Structural MRI   | David Cash  |
| 2:10-2:20 PM    | Break  |   |
| 2:20-2:50 PM    | Introduction to Advanced Imaging Analysis Sections (PET, dMRI, fMRI) | Tobey Betthausen, Alexa Pichet Binette, Luigi Lorenzini |
| 2:50-3:40 PM    | Independent working session 1: Diffusion MRI, functional MRI, PET    | Facilitated by all organizers                           |
| 3:40-3:50 PM    | Break  |   |
| 3:50-4:40 PM    | Independent working session 2: Diffusion MRI, functional MRI, PET    | Facilitated by all organizers                           |

|              |                       |                                    |
|--------------|-----------------------|------------------------------------|
| 4:40 5:00 PM | Wrapup, Q&A, feedback | David Cash and Tobey<br>Betthauser |
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