ISTAART Immersives: Shiny Your Research: Interactive Dashboards in R

Friday, July 10, 2026 | 1 p.m. - 5 p.m.
Aurora Ballroom 4, 7 — InterContinental — London, United Kingdom
All times are in British Summer Time
In-person attendance only

Overview

This interactive, hands-on workshop will empower dementia researchers to design, build, and share interactive dashboards using R {shiny}, an open-source framework for creating dynamic web applications directly from R. Participants will gain practical skills to transform static research outputs into engaging, transparent, and reproducible data tools that enhance collaboration and knowledge translation in dementia science. Through a combination of live demonstrations, guided coding practice, hands-on coding exercises, and small-group discussions, attendees will progress from constructing a simple interactive visualization with guides to developing a fully functional Shiny dashboard independently. The workshop emphasizes best practices in reactivity, modular design, and reproducible development workflows to ensure scalability and long-term usability of research tools. To ground the learning in real-world contexts, participants will explore examples drawn from dementia research, including a live demonstration of the Metadata Explorer app from Dementias Platform Australia (DPAU). Hands-on exercises will use openly available Global Burden of Disease (GBD) Alzheimer's disease and other dementias (ADOD) data ensuring accessibility and smooth participation. The session will also introduce emerging applications of large language models (LLMs) in Shiny through the {ellmer} and {querychat} package, illustrating how AI can enhance interactivity, data exploration, and research communication. By the end of the session, participants will have created a working Shiny dashboard, gained reusable coding templates, and developed the confidence to apply interactive visualization methods in their own dementia research projects.

Organizing Committee

- Rory Chen, MSc
- Ana W. Capuano, PhD
- Sarah Bauermeister, PhD
- Graham Bearden, PhD
- Adam Bentvelzen, PhD
- Ashleigh Vella, PhD

- James Lian, PhD

Target Audience

Learning Objectives

- Understand the foundational concepts and features of {shiny} package.
- Create an interactive and dynamic {shiny} dashboard following a guided, step-by-step coding exercise.
- Design reproducible and scalable {shiny} modules using structured development practices.
- Independently apply {shiny} to present own scientific outputs in an engaging, accessible format.
- Test the integration of large language models (LLMs) into Shiny applications using the {ellmer} and {querychat} package.

Registration

Pre-conferences are offered for in-person attendance only. Preconferences 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.

Agenda: Friday, July 10, 2026 | 1 p.m. - 5 p.m.

Time	Session Details	Speakers and Moderator
1:00 p.m. - 1:30 p.m.	Introductions and Scene Setting Welcome remarks, overview of workshop goals, introductions of facilitators and participants, and confirmation of software setup	
1:30 p.m. - 2:00 p.m.	Theory and Real-World Application Demonstration Overview of R Shiny fundamentals, relevant packages and design principles.	
2:00 p.m. - 3:00 p.m.	Guided Practice: Build Your First Shiny App Hands-on,	

	step-by-step coding exercise using Global Burden of Disease (GBD) Alzheimer's disease and other dementias (ADOD) incidence and prevalence data	
3:00 p.m. - 3:30 p.m.		
3:30 p.m. - 4:30 p.m.	Independent Hands-On Exercise: Build Your Own Dashboard	
4:30 p.m. - 5:00 p.m.	Group Sharing and Wrap-Up	