

ISTAART Immersives: Integrating Data Resources for AD/ADRD Research: Biomarkers, Imaging, and NIAGADS Genetics and Genomics Data from the ADSP

Saturday, July 11, 2026 | 1 p.m. - 5 p.m.

Peninsula West — InterContinental — London, United Kingdom

All times are in British Summer Time

In-person attendance only

Overview

Join the National Institute on Aging Genetics of Alzheimer's Disease Data Storage Site (NIAGADS) and Alzheimer's Disease Sequencing Project Phenotype Harmonization Consortium (ADSP-PHC) teams for an in-person workshop exploring harmonized biomarker data along with other rich genetic and genomic data available from the ADSP data ecosystem on NIAGADS. This workshop will leverage the data available on NIAGADS to guide attendees through the recently released biological staging criteria for Alzheimer's disease (AD) using publicly available, harmonized data from the ADSP. Attendees will receive both a deep dive into the current data offerings and open access resources available and how to select data and approach unique challenges such as multi-modal data integration to support participants' own research questions.

This session will provide a practical introduction to amyloid and tau PET biomarkers, plasma and CSF markers, and their roles in staging disease progression in accordance with the biological stage framework from Jack et al. 2024. Participants will gain hands-on experience working with curated datasets that feature harmonized global amyloid PET, region-specific tau PET, and fluid biomarker values. Participants will learn how amyloid PET, tau PET, plasma, and CSF biomarkers can be used to classify individuals into biologically defined Alzheimer's disease states and stages (for example, amyloid-positive/tau-negative) and how these classifications can be combined with genetic and genomic data. Through short presentations and hands-on breakout sessions, attendees will work with curated datasets, practice assigning biomarker-based stages, and explore the Alzheimer's Disease Sequencing Project data on NIAGADS. Throughout the session, participants will have opportunities to engage with subject-matter experts, discuss analytic strategies, and explore how integrated biomarker and genomic data can advance discovery in AD/ADRD research. By the end of the session, attendees will understand how to access and leverage NIAGADS' rich data resources, how to interpret biomarkers and apply PET- or plasma-based biological staging frameworks, and consider implications for disease monitoring and therapeutic targeting.

Organizing Committee

- Li San Wang
- Timothy Hohman
- Amanda Kuzma
- Yuk Yee Leung
- Emily Greenfest-Allen
- Heather White
- Elizabeth Mormino
- Carlos Cruchaga
- Shannon Turner

Target Audience

The workshop is designed to benefit investigators at all career stages. Early-career researchers will gain practical skills for accessing data resources on NIAGADS, working with harmonized AD/ADRD datasets, and implementing modern biomarker frameworks, while senior investigators will learn how to leverage large-scale ADSP resources and cross-cohort harmonized data to support new research directions and collaborative studies. By the end of the workshop, attendees will have a clear understanding of the biological staging framework for Alzheimer's disease, practical experience working with harmonized biomarker and imaging data, and the knowledge needed to access and integrate ADSP genomic resources available through NIAGADS into their own research.

Learning Objectives

- Describe major AD/ADRD data resources for genetics/genomics, neuroimaging, and biomarkers, including those available through NIAGADS and generated by the Alzheimer's Disease Sequencing Project.
- Understand how to access and navigate ADSP genetic and genomic datasets using NIAGADS tools such as the GenomicsDB and Data Sharing Service.
- Identify key AD biomarkers including amyloid PET, tau PET, and plasma biomarkers, and understand how these measures are used to classify biological states and stages.
- Integrate genomic data with biomarker and imaging datasets to support cross-modal analyses and hypothesis generation.
- Apply data integration strategies to investigate participants' own research questions.

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.

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Time	Session Details	Speakers and Moderator
1:00-1:20	Welcome and Workshop Overview <ul style="list-style-type: none"> - Introductions - General overview of ADSP-PHC and NIAGADS - Workshop Goals 	Tim Hohman and Li-San Wang
1:20-1:35	NIAGADS Overview	
1:35-1:45	ADSP-PHC Overview	
1:45-2:00	Biomarker Harmonization Overview	
2:00-2:15	Overview of Biological Staging Framework	
Break		
2:25-2:35	Overview of Breakout Sessions	
2:35-3:45	Breakout Sessions Session 1: Explore ADSP Multi-Omic Data and Integrative Analysis Workflows (NIAGADS) Session 2: Implement Biological Stages with Harmonized PET and Plasma Data Session 3: Implement Biological Stages Using Harmonized PET Visual Reads Session 4: Applying for NIAGADS Data on DSS	
3:45-4:15	Panel Q&A Participant Q&A + Facilitated discussion focusing on integration	

	biomarker-defined biological stages with genomic analyses, designing multi-modal research questions, and addressing challenges in cross-cohort harmonization and biomarker interpretation	
4:15-4:30	Wrap-Up and Resources Summary of key takeaways, resources for accessing ADSP datasets and NIAGADS tools, additional training opportunities, exit survey	