# ISTAART Professional Interest Area (PIA) Day

Saturday, July 27, 2024 | Philadelphia, USA | All times are in US Eastern Time | In-person attendance only

<table>
<thead>
<tr>
<th>Time</th>
<th>Marriott Philadelphia Downtown</th>
<th>Grand Ballroom H</th>
<th>Grand Ballroom E</th>
<th>Grand Ballroom IJ</th>
<th>Grand Ballroom C</th>
<th>Grand Ballroom D</th>
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<tbody>
<tr>
<td>8:30 - 9:30 a.m.</td>
<td>Biofluid Based Biomarkers</td>
<td>PIA to Elevate Early Career Researchers (PEERs)</td>
<td>Design and Data Analytics</td>
<td>Neuropsychiatric Syndromes</td>
<td>9:00 a.m. First-Timers Introduction to ISTAART</td>
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<td>9:45 - 10:45 a.m.</td>
<td>Immunity and Neurodegeneration</td>
<td>Atypical Alzheimer’s Disease</td>
<td>Down Syndrome and Alzheimer’s Disease</td>
<td>Partnering with Research Participants</td>
<td>Sensory Health and Cognition</td>
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<tr>
<td>11 a.m. - noon</td>
<td>Vascular Cognitive Disorders</td>
<td>Subjective Cognitive Decline</td>
<td>Clinical Trials Advancement and Methods</td>
<td>Nonpharmacological Interventions</td>
<td>Neuromodulatory Subcortical Systems</td>
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<td>noon - 1:30 p.m.</td>
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<td>Lunch and Networking</td>
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<td>noon - 1:30 p.m.</td>
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<td>Enjoy lunch and network with colleagues in Franklin Hall B.</td>
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<td>1:30 - 2:30 p.m.</td>
<td>Sex and Gender Differences in Alzheimer’s Disease</td>
<td>Frontotemporal Dementia and Related Disorders</td>
<td>Sleep and Circadian Rhythms</td>
<td>Perioperative Cognition and Delirium</td>
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<td>2:45 - 3:45 p.m.</td>
<td>Diversity and Disparities</td>
<td>Alliance of Women Alzheimer’s Researchers (AWARE)</td>
<td>Electrophysiology</td>
<td>The Eye as a Biomarker for AD</td>
<td>Health Policy</td>
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<td>4 - 5 p.m.</td>
<td>Reserve, Resilience and Protective Factors</td>
<td>Cognition</td>
<td>Nutrition, Metabolism and Dementia</td>
<td>Lewy Body Dementias</td>
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First-Timers' Introduction to ISTAART and PIA Day

New ISTAART members and first-time PIA Day attendees are invited to join us at the start of PIA Day for an introduction to ISTAART and PIAs, highlighting the opportunities available this week and throughout the year.

Alliance of Women Alzheimer's Researchers (AWARE) | PIA Day

Join the AWARE PIA Speed Networking event to foster meaningful connections between mentors and mentees. This dynamic format promotes efficient exchanges, with participants engaging in five-minute, one-on-one interactions before rotating to a new partner. The event provides broad exposure and facilitates the building of multiple mentor-mentee relationships, offering a valuable opportunity for knowledge exchange and professional development within the AWARE PIA community.

Atypical Alzheimer's Disease | PIA Day

Our annual scientific PIA day is back at AAIC2024! This year, we will showcase the top abstracts from early-career researchers focusing on atypical Alzheimer's disease. Expect concise presentations followed by engaging Q&A sessions, providing a platform for in-depth exploration and discussion.

Biofluid Based Biomarkers | PIA Day

Highlighting the year's most impactful publication, the Biofluid Based Biomarker PIA Day meeting will recognize significant contributions to the field. A panel of experts will lead a lively discussion on the latest advancements, sharing insights and future directions. The session also includes case studies on the clinical use of plasma biomarkers in Alzheimer's diagnosis, encouraging multidisciplinary dialogue among neurologists, geriatricians, and family medicine practitioners. Be part of the conversation and help shape the future of Alzheimer's research and treatment.
Clinical Trials Advancement and Methods | PIA Day

Explore the globalization of Alzheimer's Disease and Alzheimer's Disease Related Dementias (AD/ADRD) pharmacological clinical trials in this insightful PIA Day session. As trials expand to include sites in emerging regions such as Eastern Europe, Latin America, Asia, and Africa, we'll discuss the opportunities and challenges of conducting global trials. Key topics include the ethical imperative to deliver affordable and accessible treatments to local populations post-trial, lessons from existing programs, and the feasibility of including low- and middle-income countries (LMIC) in future trials. Expert panelists from the public and private sectors will share their experiences in design, operations, diagnostics, and regulatory aspects of global trials.

Cognition | PIA Day

Dive into the dynamic world of digital technology in cognitive assessment at the Cognition PIA Day. This data blitz session features quick presentations from various research groups showcasing innovative, low-burden, and culturally unbiased methods for assessing neurocognition. Discover the benefits of remote smartphone tasks and passive monitoring methods in capturing cognitive changes across healthy aging and neurodegenerative disorders. Following the presentations, a panel discussion with embedded audience polling will explore the barriers and facilitators of using technology in research and clinical practice. Moderated by the Chair of the PIA Cognition Technology Work Group, this interactive session is open to all Cognition PIA members and nonmembers.

Design and Data Analytics | PIA Day

This year's theme, "Comorbidities and Multimorbidities in Dementia," sets the stage for the Design and Data Analytics PIA Day at AAIC 2024. The session will kick off with an introduction to the PIA and its activities, followed by presentations on the theme. Engaging discussions will delve into the complexities of dementia comorbidities, and dedicated networking time will provide opportunities for professional connections and collaboration.
Diversity and Disparities | PIA Day

Discover the future of Alzheimer's Disease Related Dementias (ADRD) science at the Diversity & Disparities PIA Day session. Join us as we welcome a new Executive Committee and engage in an audience-led panel discussion on the theme: "Considerations for the conduct of just and equity-centering ADRD research using biological data." This multidisciplinary panel will tackle questions around ethical design and dissemination of inclusive ADRD research, focusing on AD biomarkers, ancestry, admixture, and brain structure/function, while avoiding and repairing the harms of biological essentialism and bias. Together, panelists and audience members will explore prevalent issues and synthesize recommendations to advance equity-centered research in ADRD.

Down Syndrome and Alzheimer's Disease | PIA Day

Explore new initiatives and opportunities in the Down Syndrome and Alzheimer's Disease PIA session. Join us as we highlight exciting PIA initiatives and recognize award winners. The session will feature presentations on research priorities related to Alzheimer's Disease in individuals with Down syndrome, presented by researchers and advocates from local Down syndrome organizations. Engage in insightful discussions following the presentations.

Electrophysiology | PIA Day

With the urgent need for more effective treatments to delay Alzheimer's disease (AD) progression, explore novel approaches at the Electrophysiology PIA Day session. Discover how non-invasive brain stimulation is being tested as an intervention, allowing for the quantification of intervention-related changes in brain activation through neurostimulation and electrophysiological recording. Join us as prominent investigators share insights from ongoing clinical trials using this approach in individuals diagnosed with AD. Engage in a discussion on the opportunities and challenges ahead to improve treatment options for AD using non-invasive brain stimulation.
Frontotemporal Dementia and Related Disorders | PIA Day

Join us for a session on the latest updates in frontotemporal dementia (FTD) and related disorders at this PIA event. Discover the work of the PIA and celebrate the PIA Publication of the Year Award. The session will feature six flash talks showcasing cutting-edge research in FTD from early career researchers. Learn about the upcoming International Conference on FTD in Amsterdam, followed by a summary of the session and an invitation to engage in our upcoming program of talks, webinars, prizes, and publications throughout the year.

Health Policy | PIA Day

Immerse yourself in the landscape of dementia health and policy research at AAIC24 through our dynamic Word Café session. Participate in collaborative discussions across three interactive roundtables focused on translating research into policy, evaluating intervention impacts, and addressing disparities in dementia care access. Explore innovative strategies, share experiences, and develop actionable solutions to bridge gaps in dementia health and policy implementation. Connect with peers, foster new collaborations, and brainstorm ideas to advance research and policy in dementia care.

Immunity and Neurodegeneration | PIA Day

Delve into the riveting field at the intersection of immunity and neurodegeneration, crucial for understanding Alzheimer's disease (AD). This PIA Day session provides a platform for collaboration and debate on leveraging immune modalities to combat AD development over the next three decades. Immune mechanisms, central to AD pathology, present a dual-edged sword: while inflammation can exacerbate neuronal damage, immune cells also offer potential for therapeutic intervention. In a pitch-style format, explore novel strategies harnessing immunomodulation for disease prevention, from immunotherapies targeting amyloid-beta clearance to immune cell modulation for neuroprotection. Join us as we rethink interventions to halt or even reverse AD progression through innovative immune therapeutic approaches. This interactive session promises to reshape the landscape of AD prevention.
Lewy Body Dementias | PIA Day
Join us as we celebrate the fifth anniversary of our Lewy Body Dementias PIA, reflecting on its impact in fostering global collaboration within the LBD community. Discover the PIA’s role in supporting international connections among early and mid-career researchers through a presentation of a systematic review led by the Prodromal Work Group. Explore collaborative efforts with the Lewy Body Dementia Association to establish research priorities and overcome participation obstacles. Celebrate the success of the inaugural World Lewy Body Day and discuss its future in raising global awareness of LBD. The PIA Day also highlights groundbreaking research, inviting the best LBD AAIC submission from a low- and middle-income country (LMIC) to be presented.

Neuromodulatory Subcortical Systems | PIA Day
The neuromodulatory subcortical system (NSS), comprised of small subcortical nuclei, plays a pivotal role in supporting essential brain functions. These nuclei are crucial in Alzheimer's disease (AD), often showing early-stage symptoms and changes. Studying NSS in the living brain demands a complex, multi-disciplinary approach. Join us as we highlight groundbreaking multi-disciplinary research within the NSS in the context of AD, shedding light on new insights and approaches in this intricate field at our PIA Day session.

Neuropsychiatric Syndromes | PIA Day
Neuropsychiatric Symptoms PIA Day will feature data-blitz presentations and round-table networking. Key areas of innovation in understanding neuropsychiatric symptoms in Alzheimer’s Disease will be highlighted, including advancements in multi-omics biomarkers, digital biometrics, and multimodal non-pharmacological interventions.
Nonpharmacological Interventions | PIA Day
Join us for this PIA Day session focusing on sleep disturbances in dementia and nonpharmacological interventions (NPI) for managing sleep issues. Explore a talk on effective strategies followed by an open discussion on the challenges and opportunities in utilizing NPI for sleep management. Engage in a networking event where researchers interested in NPI can identify 4 to 6 key interest areas, discuss collaborative opportunities, and brainstorm ideas for future activities in this critical area for career researchers.

Nutrition, Metabolism, and Dementia | PIA Day
Join us for an insightful session exploring the intersection of nutrition, metabolism, and dementia. Discover new mechanisms for limiting mCa2+ overload in Alzheimer's disease, the effects of menopause and metabolic disease, and the impact of ketogenic diets on cognitive outcomes. Learn about the gut microbiome's link to fast food and cerebrospinal fluid biomarkers, the connection between early-age glucose metabolism and amyloid/tau-PET, and the influence of Life's Simple 7 on brain health. We will also delve into the MIND diet's relationship with hippocampal volume, the correlation between fat consumption and Alzheimer's incidence, and epidemiological evidence on chemical exposures. The session concludes with the announcement of the Martha Clare Morris award and closing remarks by the Chairs.

Partnering with Research Participants | PIA Day
Embark on an interactive PIA Day session focused on promoting self-advocacy and amplifying “quiet” voices when partnering with research participants, lived experience experts, and care partners. Discover effective strategies for engaging participants with diverse backgrounds, communication abilities, and disease stages. Hear insights on methods to facilitate communication, idea generation, and meetings. This session will utilize an activity where participants experience changes to their auditory and visual senses. Groups will share their insights and explore approaches to inclusivity, accessibility, and equity in research practices, fostering a network for knowledge exchange and resource sharing.
Perioperative Cognition and Delirium | PIA Day

Attend the Perioperative Cognition and Delirium PIA Day session featuring two main events: a lively debate and the presentation of our Publication of the Year Award. Delve into a longstanding and contentious question: whether delirium causes cognitive decline (e.g., Alzheimer’s disease) or if delirium is an epiphenomenon indicating later cognitive decline and/or Alzheimer’s disease. Conclude the session with insights from the first author of our PIA Publication of the Year award.

PIA to Elevate Early Career Researchers (PEERs) | PIA Day

Join the PEERs PIA and ISTAART team members for "Cultivating Your Online Presence." Discover how to effectively use Twitter, LinkedIn, ResearchGate, Google Scholar, personal and university professional websites, and the ISTAART Community site to curate your online identity. Explore what information to share or withhold online. Attend this interactive learning session and bring your cell phone to create accounts on platforms of interest. We will conclude with time for in-person networking and exchanging social media handles to stay connected with our new colleagues.

Reserve, Resilience, and Protective Factors | PIA Day

Join us for a thought-provoking PIA Day session featuring a panel discussion and debate titled: "Boosting Resilience, Preventing Alzheimer's—What's Missing?" Explore the complexities surrounding lifestyle interventions aimed at reducing cognitive decline and enhancing brain resilience in high-risk groups. Our discussion will delve into factors such as sex/gender disparities, recruitment strategies, cohort diversity, primary outcome measures, effect sizes, and the integration of reserve and resilience indicators within target populations. This engaging session will encourage active participation from panelists and attendees alike. Gain insights into new initiatives and express interest in upcoming papers during this dynamic event.
Sensory Health and Cognition | PIA Day
Welcome to the inaugural PIA Day session on Sensory Health and Cognition. This session aims to provide researchers with an overview of selected open-access datasets relevant to the inter-relationship between sensory function and cognition in older adults. Presenters will detail the availability of sensory measures, cognitive test scores, participant demographics, clinical groups (when relevant), biological, health, and social variables for each dataset discussed. Explore example datasets that cover multiple sensory modalities (hearing, vision, olfaction, taste) from North America (Canada), Europe (Sweden), and South-East Asia. Enhance your familiarity with international research studies, promote the use of multiple datasets, and foster international collaboration in this critical area of research.

Sex and Gender Differences in Alzheimer's Disease | PIA Day
We're thrilled to announce the return of our annual Sex & Gender Differences in Alzheimer's Disease (AD) debate! Engage with the complexities of this research as this year's discussion focuses on the role of socially constructed gender in shaping risk or resilience to AD. Dive into thought-provoking topics that challenge perspectives and underscore the significance of understanding sex and gender differences in AD.

Sleep and Circadian Rhythms | PIA Day
Discover the latest cutting-edge research and network with colleagues in the field of sleep and circadian rhythms in Alzheimer's disease at our PIA Day session. Engage with a scientific data blitz showcasing the work of junior investigators focused on sleep, circadian rhythms, and Alzheimer's disease. Join us as we announce awards, including the prestigious PIA Publication of the Year.
Subjective Cognitive Decline | PIA Day
Join the Subjective Cognitive Decline (SCD) PIA for an exciting scientific session, starting with a keynote on measuring SCD using the Everyday Cognition Scale. Participate in our inaugural “Ask the Expert” panel discussion with leaders in the SCD field, exploring current research, future directions, and professional development opportunities. The session wraps up with the announcement of the PIA Publication of the Year and previews of upcoming SCD highlights at AAIC 2024.

The Eye as a Biomarker for AD | PIA Day
The Eye as a Biomarker for AD PIA will delve into the clinical relevance of ocular biomarkers associated with Alzheimer's disease (AD), including AD pathology markers (Aβ, τ, TDP-43, and α-synuclein), retinal structural changes, cell loss, retinal angiography, and lens pathology. Discussions will encompass structural and functional imaging techniques in animals and humans, exploring their clinical implications for AD diagnosis, assessment, and disease monitoring.

Vascular Cognitive Disorders | PIA Day
Join the Vascular Cognitive Disorders PIA for an exploration into integrating the "V" into the ATN classification for Alzheimer's Disease Related Dementias (ADRD). Discover why adding vascular components is crucial and what this addition means for biomarkers. Explore the landscape of imaging and biofluid biomarkers currently available or in advanced discovery phases. Identify gaps in vascular biomarker research and discuss strategies to fill them. Learn about ongoing initiatives preparing us for future advancements in vascular cognitive disorders. These topics and more will be discussed during this insightful PIA Day session.