

can be obtained about dysfunctional brain activity in clinical populations.

Upon conclusion of this course, learners will be able to:

1. Evaluate and critically assess ERP studies of clinical populations that were published over the last decade, making use of advanced recording and analysis methods that are now widely used
2. Evaluate and critically assess ERP studies of clinical populations that have been published recently or will be published in the near future that take advantage of state-of-the-art recording and analysis methods, such as dry electrodes and multivariate pattern analysis
3. Integrate recent and emerging research findings into your research or clinical practice

5 min. break

8:55 - 9:00am

Friday, 3rd February, 2023

Plenary D: (Birch Memorial Lecture) Networking towards a Global Neuropsychology: An Invitation to Action

Presenter: Deborah Koltai

9:00 - 10:00am

Friday, 3rd February, 2023

Pacific Ballroom A

Abstract & Learning Objectives:

This lecture will review the progress that we have made in becoming a global field of clinical practice and research and the challenges that await us to consider ourselves a field with worldwide reach and utility. We will inventory the spread of neuropsychology over the last decades, and highlight geographical areas where we are most under-represented. The challenges of supporting the training and subsequent work of neuropsychologists in developing countries will be discussed, as well as the complexity of instrumentation validation and normative standard development in settings with substantial linguistic and ethnic diversity. Importantly, we will explore avenues that each

participant can consider leaning into to participate effectively in the development of a global neuropsychology.

Upon conclusion of this course, learners will be able to:

1. Describe what we know of neuropsychology clinical practice, research, and teaching in Africa.
2. Assess the challenges of developing neuropsychology as a field that are unique to Africa.
3. Identify multiple ways that they can support the global development of neuropsychology, crossing topics that include cultural humility, instrument development and validation, shared resources, and mentoring.

Coffee Break

10:00 - 10:15am

Friday, 3rd February, 2023

Exhibit Hall - Town & Country Ballroom
A

Invited Symposium 2: The Need for a Highly Individualized Approach to Brain Mapping: Neuroanatomical, Lifespan and Cultural-Language Considerations

Chair: David S. Sabsevitz

**Presenters: Madison Berl, Monika
Połczyńska**

10:15 - 11:40am

Friday, 3rd February, 2023

Pacific Ballroom A

Abstract & Learning Objectives:

Brain mapping is critical in reducing risk for cognitive morbidity in epilepsy and brain tumor surgery. Mapping using functional MRI, and extra- and intraoperative electrical stimulation, requires a high level of expertise in functional neuroanatomy but also an understanding of individual patient characteristics that can impact mapping results and post-operative outcome. Patients can vary considerably with respect to

their cognitive status going into surgery. The neuroanatomy of the disease, age and developmental level, and cultural and language differences can all influence patients' performance during brain mapping and impact surgical decision making. The purpose of this session is to discuss the importance of taking a highly individualized approach to brain mapping, focusing on anatomical considerations and individual patient differences in task selection and data interpretation. We will cover language mapping in patients who speak more than one language. Practical information will be provided to help guide informed task selection through illustrative case presentations that highlight the need for individualized brain mapping. Upon conclusion of this course, learners will be able to:

1. Discuss informed task selection based on cortical and subcortical functional neuroanatomy
2. Explain how functional maps change with normal development and factors that should be considered when interpreting results for presurgical planning
3. Assess differences between the bilingual and monolingual brain, factors that modulate the neuroanatomical representation of language in bilinguals and strategies in mapping multiple languages for surgical planning

Symposium 08: Neuropsychological Considerations for Alzheimer's Disease Clinical Trials

10:15 - 11:40am
Friday, 3rd February, 2023
Town & Country Ballroom B

Chair

Andrew Kiselica
University of Missouri, Columbia, USA

Discussant

Kevin Duff
Oregon Health Science Center, Portland, USA

Summary Abstract:

The 2011 National Institute on Aging and Alzheimer's Association (NIA-AA) criteria for the diagnosis of Alzheimer's disease (AD) focused on clinical signs and symptoms to make a diagnosis of probable or possible AD. Under these criteria, emphasis was placed on gathering objective evidence of cognitive decline, which gave neuropsychologists a central role as diagnosticians in AD clinical trials. The release of the 2018 NIA-AA research framework put greater emphasis on the use of biomarkers, especially measures of amyloid, tau, and neurodegeneration, to define AD. Once AD is defined based on these biomarkers, it is staged via clinical signs and symptoms. Thus, the role of neuropsychologists has shifted from being central to diagnosis to a possibly more ancillary role of staging the disease once it is determined to be present. The move away from clinical signs towards biomarkers only became more prominent with the recent, controversial Food and Drug Administration approval of Aducanumab as an AD treatment based on evidence of change in biomarkers without clear evidence of clinical benefit. In this landscape, the fit of neuropsychologists in AD clinical trial research has become less clear.

This symposium will address the role of neuropsychologists in modern AD clinical trial research. The presenters will highlight varied ways in which neuropsychologists can enrich and improve AD clinical trials. First, Dr. Dustin Hammers from Indiana University will discuss how neuropsychological methods can help us to understand which participants do, and perhaps more importantly, do not get enrolled in clinical trials. Second, Dr. Mirella Diaz-Santos from the University of California Los Angeles will summarize her work to enroll Hispanic individuals in the Human Connectome Project, improving inclusivity. Third, Dr. Tamar Gollan from the University of California San Diego will summarize her work on novel behavioral markers of AD risk discovered from the study of Spanish-English bilingual patients. Fourth, Dr. Andrew Kiselica from the University of Missouri will highlight psychometric considerations in interpreting clinically meaningful change in AD clinical trials using data from the National Alzheimer's Coordinating Center. Fifth, Dr. Samantha John from the University of Nevada at Las Vegas will discuss the influence of