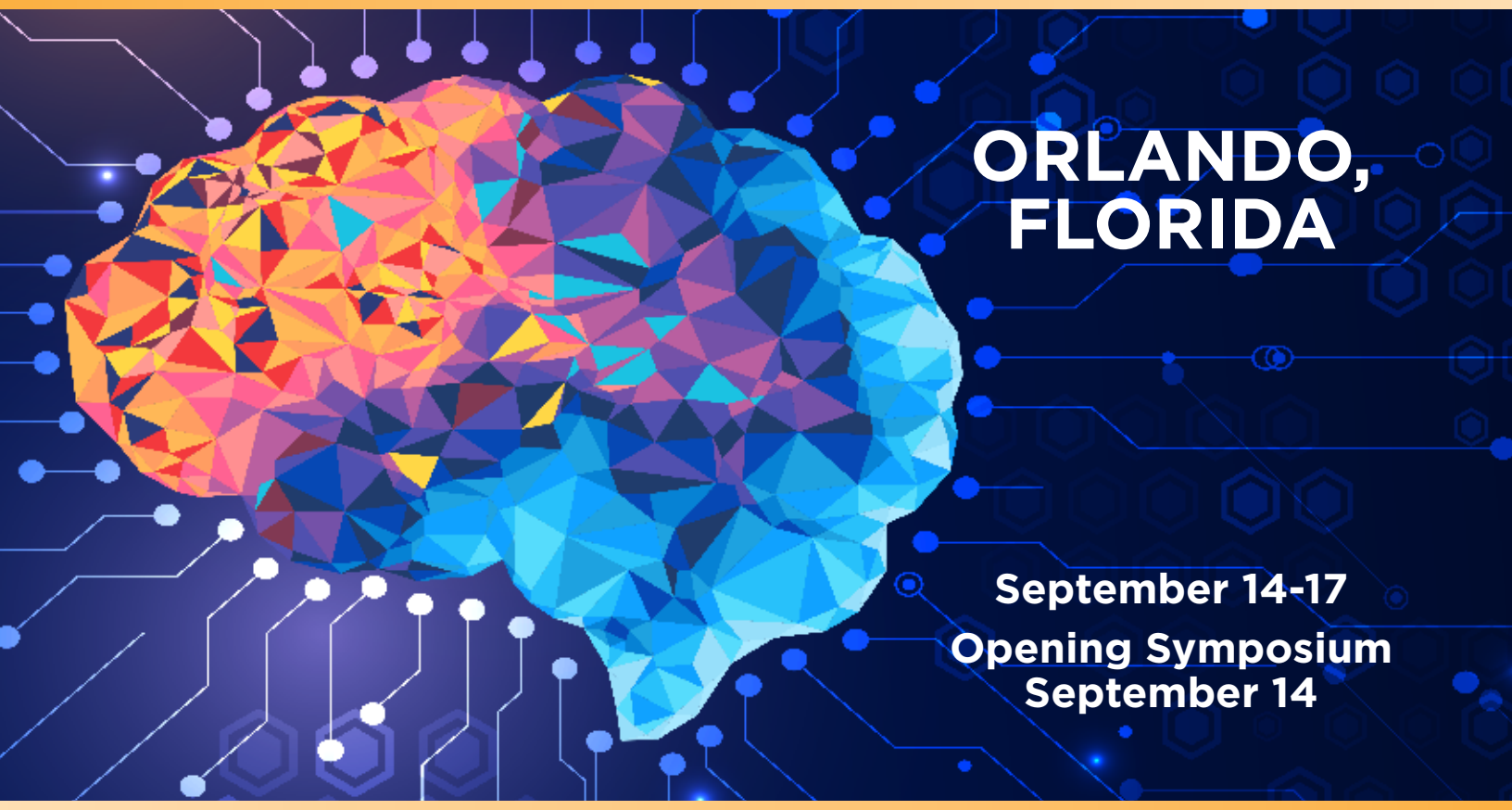
2024.myana.org
#ANA2024

AMERICAN NEUROLOGICAL ASSOCIATION®
INNOVATORS IN DISCOVERY, EDUCATION, AND CARE

FINAL PROGRAM



ORLANDO, FLORIDA

September 14-17

Opening Symposium
September 14

ANA 2024

149th Annual Meeting of the American Neurological Association

JOIN US IN ORLANDO BALLROOM III

Evolving Perspectives in

ALZHEIMER'S DISEASE:

Reaching an Earlier Diagnosis, Understanding Neuroinflammation, and Exploring Therapeutic Advances

This Cases and Conversations™ program will provide an in-depth review of the state of the art in the early diagnosis of Alzheimer disease (AD) through case-based discussions. This engaging satellite symposium will also elucidate the role of neuroinflammation as a therapeutic target in AD and highlight safety and efficacy data for investigational agents targeting neuroinflammation. Ample time will be included for an audience Q&A session.

IN PERSON SATELLITE SYMPOSIUM

September 16, 2024

4:15–5:45 PM ET

Hilton Orlando

To learn more, scan here or visit the link below

gotoper.com/alzheimers24

PROGRAM CHAIR

Alireza Atri, MD, PhD

Chief Medical Officer, Banner Research,
Banner Alzheimer's and Research Institutes
(Phoenix, Sun City, Tucson, AZ)
Director
Banner Sun Health Research Institute
Sun City, AZ

LEARNING OBJECTIVES

- Apply strategies to facilitate early identification of patients who may be at risk of developing AD
- Identify the role of neuroinflammation in the pathophysiology of AD
- Evaluate clinical trial data for investigational agents targeting neuroinflammation in AD

This activity is supported by an educational grant from Novo Nordisk Inc.

ANA 2024

149th Annual Meeting of the American Neurological Association

Enjoy scientific symposia highlighting cutting-edge research in neurology, poster sessions with the latest emerging science, and professional development workshops to help academic neurologists and neuroscientists at all career levels connect and excel at ANA2024.

TABLE OF CONTENTS

An Eisai Inc. Satellite Symposium

Optimizing Alzheimer's Disease Care: The Power of Early Diagnosis in an Evolving Treatment Landscape

Sunday, September 15, 2024
7:00–8:00 PM ET

Orlando III, The Hilton Orlando, Orlando, FL

Light catering will be offered

Susan Steen, MD
Neurologist, Axiom Brain Health
Tampa, FL

Jeff Gelblum, MD, FAAN
Neurologist, First Choice Neurology, LLP
Assistant Clinical Professor of Neurology
Nova Southeast College of Medicine
Miami, FL, and Fort Lauderdale, FL

Experience a dynamic session with a focus on equipping neurologists with the latest knowledge to effectively implement emerging Alzheimer's disease (AD) therapies. Join two neurologists who specialize in AD as they share practical guidance on advances in AD and highlight the benefits of collaborative care teams for optimal patient care.

Be part of an engaging discussion on:

- Why early diagnosis is essential and how it can impact patient outcomes.
- The latest advancements in understanding and diagnosing AD.
- Best practices for treatment implementation and provider responsibilities to optimize the patient care paradigm.

We look forward to an informative session and hope to see you there!

Eisai

hhc
human health care

This symposium is not sponsored or programmed by the American Neurological Association. These speakers are presenting on behalf of and are paid consultants for Eisai. There are no continuing education credits for this symposium.


WHERE ADVANCES BECOME CURES.
The research, the science, the teaching, and the care happening in Dallas are shaping the future of brain treatment. Momentum is on our side. What once was confounding, slow work is now rich in breakthroughs. Every day, new insights into the mind turn into new targets for treatment. New collaborations lead to new findings. And the barriers to treating diseases long thought incurable are falling. The next few years, we're confident, will be nothing short of historic. To the scientists, educators, students, and clinicians who have joined us, and to the patients and families who have trusted us, we thank you. We are in this pursuit of understanding together.
Because understanding becomes healing.
Image of neurons and glia is from the laboratory of O'Donnell Brain Institute Investigator Dr. Lu Sun
UT Southwestern
O'Donnell Brain Institute

SAVE THE DATE

International Brain Health
SYMPOSIUM 2025

When: Thursday, January 30 and Friday, January 31, 2025

Where: AdventHealth Nicholson Center, Celebration, FL

Scan QR Code
To Learn More

AdventHealth

GET THE FREE APP

Download the event app now to get the most from your experience!

GET THE ANA APP HERE ▼

Available on the App Store

Get it on Google play

The American Neurological Association (ANA) is the champion of neurological research and the ally of all physicians and scientists who strive to make a difference through careers that combine discovery, education, and clinical care.

TOP 5 Reasons to Join the ANA

1 Connect

Form personal connections with academic neurologists and neuroscientists from all subspecialties, advancing your research and expanding your network

2 Learn

Earn CME by participating in the ANA's educational programs including webinars, bite-size learning modules, and podcasts

3 Save

Save on registration for the ANA Annual Meeting, the top meeting in academic neurology and neuroscience

4 Discover

Enhance your knowledge with the cutting-edge research in the ANA's peer-reviewed journals

5 Grow

Leverage the ANA's Career Center, a specialized job market specifically for those working in academic neurology and neuroscience

Mission

Advancing science, education, and careers to improve neurologic health for all.

Vision

A world without neurological disease.

Join Today!

Learn more at

myana.org/membership

CITY OF ORLANDO

September 14, 2024

As Mayor of the City of Orlando, I am happy to help welcome you to our community for the 149th Annual Meeting of the American Neurological Association. It's wonderful that this event is being held in Orlando, giving faculty and trainees from academic departments across the country the opportunity to share, learn and network.

Orlando is vibrant, inclusive and welcoming. During your time here for the conference, I invite you to explore our community, which has so much to offer visitors.

I am certain that you know about our world-class theme parks and attractions. They are places where imagination becomes reality. But you may not know that Orlando is also filled with authentic experiences. I am proud of our city's arts and cultural offerings, always growing and diverse food scene, recreational amenities, sports events and thriving small business districts that are located throughout our community.

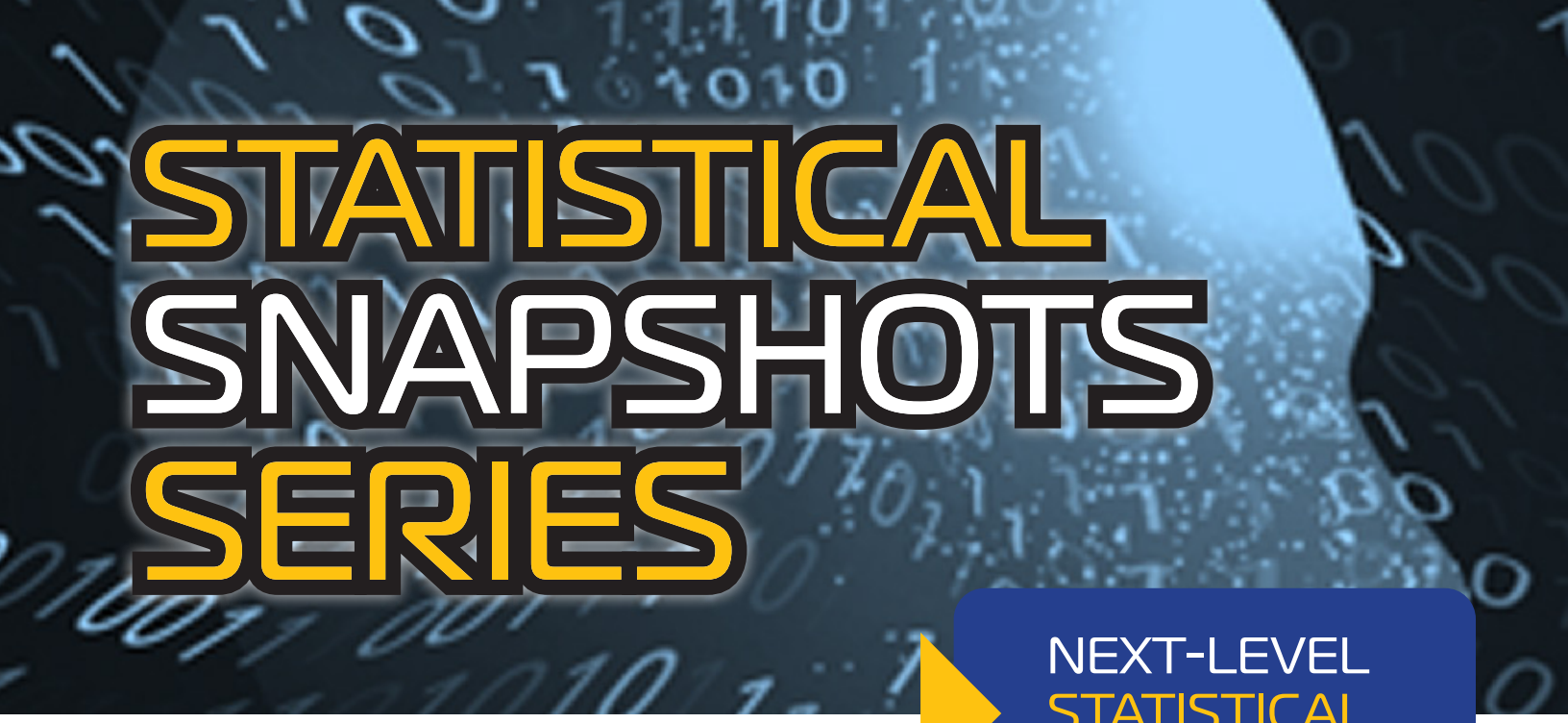
There's something for everyone in Orlando, giving you endless possibilities to have fun and create unforgettable memories.

I hope that you find the conference rewarding and can also create opportunities to enjoy some of the many experiences that help make Orlando unbelievably real.

Sincerely,

Buddy Dyer
Mayor

OFFICE OF THE MAYOR
Orlando City Hall · 400 South Orange Avenue · Third Floor
PO Box 4990 · Orlando, FL 32802-4990
P 407.246.2221 · F 407.246.2842 · orlando.gov



STATISTICAL SNAPSHOTS SERIES

NEXT-LEVEL STATISTICAL CONCEPTS

2.25 *AMA PRA CATEGORY 1 CREDIT™*

MODULES RANGE FROM 10—22 MINUTES

The ANA provides educational programming all year long to ensure our members have access to current information and discovery.

The ANA Highlight's Statistical Snapshots series provides a digestible way to learn next-level statistical concepts, critical Epidemiology terms, and best techniques to apply to research.

In this series of seven modules, ranging from 10-22 minutes, you will find a high-yield overview of critical statistical concepts that go beyond interpretation of p-values to provide a foundation by which to conduct rigorous medical or public health research, regardless of level or training.

> 2.25 *AMA PRA Category 1 Credit™*
> 2.25 Participation
> 2.25 ABPN Self Assessment Credit

HOT TIP

Become a member of the **#AmericanNeurologicalAssociation** and earn CME credits through our year-round online learning platform for free!

WHAT'S OnDEC?

Did you know the ANA offers more than 25 online CME offerings at any given time? Brought to you by the ANA Education Innovation Committee.

Navigate over to the ANA OnDEC catalog.

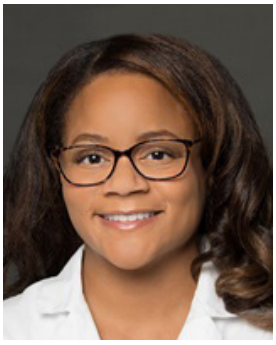
ANA Highlights

Bite Size Learning from the world of academic neurology and neuroscience.

VISIT COURSE WEBSITE

WELCOME

DEAR COLLEAGUES,



ALLISON W. WILLIS
MD, MS, FANA

On behalf of the Annual Meeting Planning and Local Arrangements Committees, the Board of Directors, and ANA President Ross, I welcome you to the 149th Annual Meeting of the American Neurological Association. We are honored to convene academic neurologists and neuroscientists for an event that promises to be intellectually stimulating and professionally rewarding.

Our meeting will feature plenary sessions highlighting our growing understanding of the neurobiology of inherited, degenerative, and inflammatory disorders across the lifespan, and showcase the emerging and future applications of gene therapy, artificial intelligence, and neuromodulation. In addition to our plenary sessions, we have an array of interactive lunch workshops, special interest group sessions, satellite symposia, professional development, and the ANA's celebrated poster session, all designed to foster connection, discovery, learning, and growth. This year's professional development courses offer guidance for academic neurologists of every type and at every career level. Additional sessions underscore the ANA's continued interest in global neurology and international team neuroscience. Throughout our meeting, we demonstrate a persistent dedication to inclusion, diversity, equity, anti-racism, and social justice (IDEAS) as the foundation principles for academic neurology and impactful neuroscience.

The members of the ANA Board of Directors and Executive Committee, the Annual Meeting Programming and Local Arrangements Committees, the Interactive Workshop, ANA-NINDS Symposium, Research Careers Reimagined, Professional Development, IDEAS, Global Engagement, Education Innovation, and Awards Committees invite you to take advantage of all this meeting and city have to offer.

OUR VISION IS AMBITIOUS:
A world without neurological disease.

OUR MISSION IS CLEAR:
Advancing science, education, and careers to improve neurologic health for all.

We look forward to the invaluable exchange of ideas, knowledge, and experiences that will occur during this meeting.

Let's connect, discover, learn, and grow. Welcome to Orlando!

Warmest regards,

A Willis MD, MS

ALLISON W. WILLIS, MD, MS, FANA

Professor, Neurology and Epidemiology
University of Pennsylvania
Chair, AMP, American Neurological Association
Annual Meeting Programming Committee

EDUCATIONAL PROGRAMMING AVAILABLE ALL YEAR!

Brought to you by the ANA Education Innovation Committee

Michelle Johansen, MD, PhD, Chair

ANA Highlights

Bite Size Learning from the world of academic neurology and neuroscience.

ANA Highlights

AVAILABLE PROGRAMS

- ANA Highlights: The Placebo Effect
- ANA Highlights: Neurogenetics
- ANA Highlights: Gene Therapy
- ANA Highlights: Statistical Snapshots

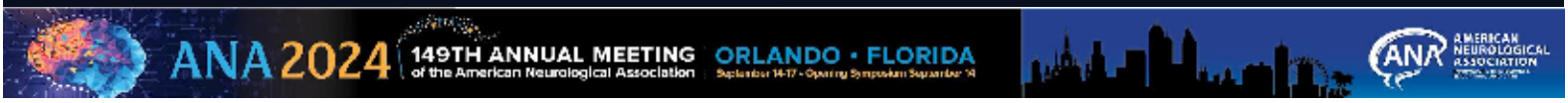
ANA Investigates

Conversations from the world of academic neurology and neuroscience.

SEASON 6 LAUNCHES IN NOVEMBER!
Subscribe on Apple or Spotify to get instant access to new and past episodes.

ANA Investigates

Online CME | Earn ABPN SA credit too!



SCHEDULE AT A GLANCE

Please note all session times are listed in Eastern Daylight Time.

PROGRAM KEY

ANA-NINDS CAREER DEVELOPMENT SYMPOSIUM
LOCATION: Key West A-C

RESEARCH CAREERS REIMAGINED (RCR)
LOCATION: Lake Eola

SATELLITE SYMPOSIA
The ANA values the participation of our corporate partners and is supportive of the role that members of this community continue to play in our efforts to provide neurologists and neuroscientists with quality educational programs. These symposia are not part of the ANA official educational program, and the sessions and content are not endorsed by ANA.

JEC Recommended for Junior and Early Career attendees.

PR Recommended workshops for Program and Residency Directors

* Sessions marked with an asterisk (*) award *AMA PRA Category I Credit(s)™* through the ANA.

Note: The Annual Meeting offers CME to eligible participants. Complete CME information, including a breakdown of the credits offered for each session and the instructions for claiming credit, is available online at **https://2024.myana.org/continuing-medical-education**

The American Neurological Association is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

Schedule Subject to Change: The event's operating hours, schedules, and speakers are subject to change or cancellation without notice. Refunds will be not issued for failure to attend a live session.

Online scheudle at:
https://2024.myana.org/program/schedule-at-a-glance

FRIDAY, SEPTEMBER 13, 2024	
2:00 PM - 9:00 PM	**2024 ANA-NINDS Career Development Symposium (ANA-NINDS)** (By Invitation Only) Key West A-C LINK TO FULL AGENDA: https://2024.myana.org/ana-ninds-career-development-symposium
SATURDAY, SEPTEMBER 14, 2024	
7:00 AM - 5:45 PM	**2024 ANA-NINDS Career Development Symposium (ANA-NINDS)** (By Invitation Only) Key West A-C LINK TO FULL AGENDA: https://2024.myana.org/ana-ninds-career-development-symposium
8:00 AM - 4:15 PM	**Research Careers Reimagined (RCR) Course** (Pre-Registration Required) Lake Eola LINK TO FULL AGENDA: https://2024.myana.org/research-careers-reimagined-rcr-course
10:00 AM - 7:00 PM	**ANA2024 REGISTRATION** Lobby Level
11:00 AM - 4:05 PM	**ANA Futures Program Meeting** (By Invitation Only) Students: Lake Florence Residents: Lake Monroe B
4:00 PM - 5:00 PM	**Program and Residency Directors Networking Reception** *PR* Lake Hart

SATURDAY, SEPTEMBER 14, 2024

5:45 PM - 7:15 PM	**OPENING SYMPOSIUM** **The Dawn of Gene Therapy in ALS*** *JEC* Orlando Ballrooms IV-VI • A Successful RNA-Targeted Therapy for ALS • Human Genetic Therapies for ALS: Current Status and Future Prospects • C9orf72 ALS/FTD: Challenges and New Opportunities in Translational Research • TDP43: A Focal Point for RNA Therapeutics in ALS/FTD
7:30 PM - 8:15 PM	**Global Neurology Networking Reception (By Invitation Only)** Lake Concord
7:30 PM - 9:00 PM	**ANA Junior and Early Career Networking Reception** *JEC* Orange Ballroom E

SUNDAY, SEPTEMBER 15, 2024

7:00 AM - 6:00 PM	**ANA2024 REGISTRATION** Lobby Level
7:00 AM - 9:00 AM	**Grab-and-Go Breakfast** Foyer 1 - Lower Level
7:00 AM - 7:30 AM	**Student & Trainee Breakfast with ANA Board of Directors** (By Invitation Only) Key West A-C
7:30 AM - 9:00 AM	**PROFESSIONAL DEVELOPMENT WORKSHOPS** **Program and Residency Director Level** **Developing the Director*** *PR* Lake Florence • Advocating for Yourself and Your Program • Challenges Facing Program Directors • Starting Out: Becoming an APD and Navigating Promotion **AUPN Chair Level** **Fostering Diversity, Equity, and Inclusion in Today's Neurology Residency Selection*** Lake Lucerne • Incorporating Holistic Review in Residency Recruitment • Integrating Diversity, Equity, and Inclusion in Neurology Residency Selection
7:30 AM - 9:00 AM	**PROFESSIONAL DEVELOPMENT WORKSHOPS** **Early Career & Early to Mid-Career Level** **Optimizing Your ANA2024 Meeting Experience to Build Your Professional Network and Your CV*** *JEC* Lake Nona B • Empowering Progress: Advancing Science, Education, and Careers to Enhance Neurologic Health for All • Unlocking Opportunities: The Benefits of Junior and Early Career Membership in the American Neurological Association • Panel Discussion **View from the NINDS, NIA, DOD, and VA*** Lake Nona A • Career Development Opportunities at the VA • View from NIA • View from NINDS • View from the DOD
9:00 AM - 9:15 AM	**Break** Foyer 1 - Lower Level
9:15 AM - 9:30 AM	**ANA2024 Welcome and Opening Remarks** Orlando IV - VI
9:30 AM - 11:30 AM	**PLENARY SESSION** Orlando Ballrooms IV - VI **Role of Compartmentalized Inflammation in Health and CNS Diseases*** *JEC* • Circadian Regulation of Glial Activation and Neuroinflammation in Alzheimer Disease • Compartmentalized Inflammation as a Target for Remyelination in MS • Targeting Microglia for Neurotherapies • Astrocytic Inflammation in the Post-Stroke Brain **Emerging Scholar Presentions:** • Clues for Pharmacological Approaches for Targeting ADAM10 in Dementias Guided by Novel Neuropathological Endophenotyping • Estrogen-induced NFÎºB activation Mediates IL-1Î production in Murine Optic Glioma
11:30 AM - 12:45 PM	**Grab-and-Go Lunch** Foyer 1 - Lower Level

SCHEDULE AT A GLANCE

Please note all session times are listed in Eastern Daylight Time.

SUNDAY, SEPTEMBER 15, 2024

11:45 AM - 12:45 PM	**INTERACTIVE LUNCH WORKSHOPS** **Optimizing Neurologic Clinical Trial Design and Insuring Equitable Enrollment*** Lake Florence • Diverse Population Considerations for ALS Trials • Measuring Side Effect Burden in Neurology: Development and Application of the Adverse Event Unit (AEU) • Reducing Trial Non-Compliance and Increasing Trial Safety **Game-Based Learning in Neurology*** *JEC* Lake Lucerne • Beyond Jeopardy: Game Design to Teach Neurology and Neuroscience • Diversity and Inclusion in Serious Games • This Lecture is Boring: An Intro to Game-Based Learning **Advances in Pediatric Neurology Research: Genetic and Pharmacologic Therapies for Refractory Pediatric Neurologic Disorders: State of the Art Treatments for Epileptic Encephalopathies, Neuromuscular, Mitochondrial Disorders***JEC* Lake Eola A • Emerging Therapies for Pediatric Neuromuscular Disorders • Potential for Treatment or Reversal of Mitochondrial Disorders • Precision Therapy for Pediatric Epileptic Encephalopathies; Targeting mTOR **Neuro Ethics*** Lake Concord • Disability and Neurotechnology • The Neuro Ethics of Deep Brain Stimulation **Clinical Logic***JEC* Lake Mizell A • A Flashy Case • Alphabet Soup and Phenotype - How Do We Understand This? • What's Up with White Spots **Global Neurology Initiative: Action Plan Update*** Lake Nona A • Extending the Reach and Making a Footprint for Specialist Neurological Care for Underserved Populations in Southern Province, Zambia • ANA Global Neurology Initiative Update - Nigeria • ANA Global Neurology Initiative Update – Ghana • ANA Global Neurology Initiative Update – Uganda
11:45 AM - 12:45 PM	**ADDITIONAL LUNCH WORKSHOPS** **ABPN: Update & Continuing Certification Overview*** Lake Nona B • ABPN: Update & Continuing Certification Overview • Neurology and Child Neurology Article-Based Continuing Certification **Meet the Program & Residency Directors***JEC, PR* Lake Eola B **Women of the ANA: Charting New Horizons: Women Pioneering Leadership and Entrepreneurial Innovation in Academic Neurology*** Lake Hart • Administrative Leadership for Women in Academic Neurology • Entrepreneurship/Innovation in Academic Neurology • Pharmaceutical Research Grants/Funding and Pharmaceutical Consulting While in Academia
12:00 PM - 7:30 PM	**Poster Viewing** Orange Ballrooms A-D *Poster Presenters will be in attendance 5:30 - 7:00 PM*
12:45 PM - 1:00 PM	**Break** Foyer 1 - Lower Level
1:00 PM - 3:00 PM	**PRESIDENTIAL SYMPOSIUM** **Present and Future Applications of AI in Neurological Care and Research***JEC* Orlando Ballrooms IV - VI • AI Applications for Implantable Devices in Neuropsychiatric Diseases • The Power of Informatics and Machine Learning Applications to Personalized Healthcare Delivery • AI for Discovery and Diagnosis of Neurological Diseases using Deep Learning and Large-Scale Neuroimaging • AI-Aided Analyses of Seizure and Interictal Phenotypes and Drug Responses in Epilepsy Models: Possibilities for Clinical Applications
3:00 PM - 3:30 PM	**Break** Foyer 1 - Lower Level

SCHEDULE AT A GLANCE

Please note all session times are listed in Eastern Daylight Time.

SUNDAY, SEPTEMBER 15, 2024

3:30 PM - 5:00 PM	**CROSS-CUTTING SPECIAL INTEREST GROUPS** **Health Services and Health Equity Research: How Do We Engage and Recruit Diverse Populations in Neurological Research*** Lake Lucerne • Health Equity and Representation Science in Neurocritical Care • Promoting Best Practices in Diversity Enrollment in Clinical Studies: An NIH Perspective • Representation in Clinical Trials: Strategies for Study Design and Recruitment **Selected Abstract Presentation** • Influences on Health Preventive Behaviors After Minor Stroke: Understanding Patient Perceptions and Practices in an Urban Underserved Population **Neurodegeneration and Cell Death** Lake Concord • Drug Development in Neurodegenerative Diseases: Challenges and Opportunities • Elucidating Amyloid Fibril Formation using Correlative Cryo-CLEM in situ • Integrating Skin Seeded-amplification Assays into a Personalized Stem-cell Paradigm for Synucleinopathy • New Mechanisms of Neuron-Autonomous Neuroinflammation • Understanding and Treating Enteric Nervous System Disease in a CNS Neurodegenerative Disorder **Selected Abstract Presentation** • Rescuing Alpha-synuclein Toxicity through Neuron-specific Enhancement of Autophagy **Neurodevelopment: The Neurovascular Continuum*** Lake Nona B • The Neurovascular Continuum: Pediatric Stroke • The Neurovascular Continuum: Vulnerabilities in Women and in Aging **Selected Abstract Presentations** • Loss of Function of EIF4A2 Leads to Neurodevelopmental Impairment in Zebrafish • The Timing of Purkinje Cell Silencing Determines Severity of Neurodevelopmental Outcomes
3:30 PM - 5:00 PM	**CROSS-CUTTING SPECIAL INTEREST GROUPS** **Neurogenetics and Gene Therapy: Forget the Mouse: The Future of Pre-Clinical Trials in Neurogenetic Disease*** Lake Concord • A Transgenic Rabbit Model of Pediatric Epilepsy and SUDEP • Fibroblast Models MELAS/LHON Plus to Test Novel Pharmaco-Epigenomic Drugs • Refining TDP-43 Dependent Disease Mechanisms and Therapeutic Approaches in ALS Using Human iPSC Models **Selected Abstract Presentation** • Parvalbumin-positive Interneuron Alterations in a Mouse Model of Pcdh19 Clustering Epilepsy **Neuroinflammation and Neuroinfection: Genetic Underpinnings to Neuroinflammatory and Neuroinfectious Diseases*** Lake Hart • Defining the Path to Disease Modifying Therapy for Genetic Leukoencephalopathy • Neurological Manifestations of Errors of Immunity • The White Matter Rounds Experience: An International Network to Accelerate the Diagnosis of Adult Subjects with Atypical White Matter Diseases **Selected Abstract Presentation** • Utilization of Cerebrospinal Fluid IgM and RT-PCR Testing for Neuro-invasive West Nile Virus **Neurorecovery and Neuroplasticity: Neurostimulation to Improve Recovery After Brain Injury*** Lake Nona A • Modulating Neural Population Dynamics to Improve Motor Recovery • Neurostimulation Tools for Post-Stroke Motor Recovery – Prime Time • Understanding Mechanisms of Aphasia Recovery to Improve Brain Stimulation Treatments **Selected Abstract Presentation** • Parvalbumin Interneurons Regulate Circuit Plasticity in the Healthy and Injured Somatosensory Cortex
3:30 PM - 4:00 PM	**Restorative Music Session** Orange Ballroom F
5:00 PM - 5:30 PM	**Break** Foyer 1 - Lower Level
5:00 PM - 5:30 PM	**Education Innovation Committee Connection** (By Invitation Only) Lake Lucerne

ANA 2024 149th Annual Meeting of the American Neurological Association

SCHEDULE AT A GLANCE

Please note all session times are listed in Eastern Daylight Time.

SUNDAY, SEPTEMBER 15, 2024

5:30 PM - 7:00 PM	**Poster Reception in Exhibit Hall** *JEC* **Orange Ballrooms A-D and Foyer 1** *Poster presenters will be in attendance.*
7:00 PM - 8:00 PM	**SATELLITE SYMPOSIUM** **Optimizing Alzheimer's disease Care: The Power of Early Diagnosis in an Evolving Treatment Landscape** SPONSORED BY EISAI, INC.
7:00 PM - 8:30 PM	**New Member Meet and Greet with ANA Leaders Past, Present, and Future (By Invitation Only)** Lake Monroe A
7:30 PM - 8:30 PM	**Inclusion/Diversity/Equity/ Anti-Racism/Social Justice (IDEAS) Committee Reception** (By Invitation Only) Lake Monroe B

MONDAY, SEPTEMBER 16, 2024

6:30 AM - 7:30 PM	**ANA2024 REGISTRATION** Lobby Level
6:30 AM - 8:30 AM	**Grab-and-Go Breakfast** Foyer 1 - Lower Level
7:00 AM - 8:30 AM	**Editorial Board Breakfast** (By Invitation Only) Key West A-C
7:00 AM - 8:30 AM	**PROFESSIONAL DEVELOPMENT WORKSHOPS** **Early Career & Early to Mid-Career Level** **Communicating Your Science: How to Promote Your Science to Scientists and Non-Scientists*** *JEC* Lake Nona B • Communicating on Social Media • Communicating with Philanthropists • Engaging the Media
7:00 AM - 8:30 AM	**PROFESSIONAL DEVELOPMENT WORKSHOPS** **Early Career & Early to Mid-Career Level** **Early Career Development for International Graduates: Challenges and Opportunities*** *JEC* Lake Nona A • Concerning Visas: An IMG Tale • How Mentorship Matters When Choosing a Career Pathway • Immigrant Neurologists in the Physician-Scientist Pipeline • My Academic Journey as an Immigrant Neurologist **AUPN Chair Level** **AUPN Session: Multitasking for the Neurology Chair: Balancing Multiple Priorities*** Lake Lucerne • A Personal Perspective on Prioritization, Procrastination, and Planning • Keeping All the Balls in the Air: Lessons Learned • How to Win Friends and Influence People as a Neurology Chair? Let Faculty Lead **Program and Residency Director Level Workshop** **Realistic Research in Residency*** *JEC, PR* Lake Florence • Adequate Support And Infrastructure: What An R25 Added? Trainee • Creating A Realistic Research Project- Do You Need An R25? • Transitioning to Fellowship: Can You Actually Get Prelim Data for a K?
8:30 AM - 8:45 AM	**Break** Foyer 1 - Lower Level

Online scheudle at:
https://2024.myana.org/program/schedule-at-a-glance

SCHEDULE AT A GLANCE

Please note all session times are listed in Eastern Daylight Time.

MONDAY, SEPTEMBER 16, 2024

8:45 AM - 10:45 AM	**PLENARY SESSION** **Emerging Applications of Non-Invasive Neuromodulation in Neurology** *JEC* Orlando Ballroom IV - VI • Emerging Focused Ultrasound Techniques for Diagnosis and Treatment of Brain Disorders • Brain Circuit-Targeted Neuromodulation • Non-invasive Approaches to Treating Seizures • Causal Entrainment of Cortical Rhythms Improves Memory in Aging and Alzheimer's Disease **Emerging Scholar Presentions** • Highly Epileptiform EEG Trajectories and Functional Recovery Post-Cardiac Arrest • Insights from Centromedian Thalamic Stimulation Evoked Responses to Improve Brain Stimulation Therapies
10:45 AM - 11:45 AM	**Executive Session of Membership** *JEC* *All ANA members are encouraged to attend* Orlando IV-VI
11:45 AM - 12:45 PM	**Grab-and-Go Lunch** Foyer 1 - Lower Level
12:00 PM - 1:00 PM	**INTERACTIVE LUNCH WORKSHOPS** **Autoimmune Epilepsy: Emerging Trends*** Lake Eola B • Identification of Autoimmune Epilepsy Syndromes • Immunotherapy in Autoimmune Epilepsy: An Experience from Autoimmune Epilepsy Clinic • Navigating the Expanding Spectrum of Neural Specific Antibodies Associated with Autoimmune Encephalitis **Neurosarcoidosis: Evolving Diagnostic and Management Strategies*** Lake Mizell A • Diagnosis and Evolving Philosophies of Care for Patients with Neurosarcoidosis • Updates in our Understanding of Biomarkers and Laboratory Findings in Neurosarcoidosis • Mimics and Approaches in Neurosarcoidosis Myelitis
12:00 PM - 1:00 PM	**INTERACTIVE LUNCH WORKSHOPS** **Advances in Neurologic Devices*** Lake Nona A • Focused Ultrasound For Movement Disorders • Implantable Brain-Computer Interfaces For Restoring Communication and Mobility • Responsive Neurostimulation to Restore Consciousness In Epilepsy **New Trends in Headache Management in Diverse Populations*** Lake Concord • Headache Management In Rural Populations • Headache Treatment and Management in Pediatric Populations • Migraine Management During Pregnancy and in Older Adults **Diversity in the Neurology Workforce in the Post-Affirmative Action Era*** Lake Nona B • Diversifying Neurology Residency and Fellowship Programs: Lessons Learned, Current Strategies, and Future Directions • Fostering Diversity in Academic Neurology Departments • Increasing Diversity in the Neurosciences: A Comprehensive Collaborative Approach • Strategies to Increase Diversity in Medical Schools: How do we go from here?
12:00 PM - 1:00 PM	**ADDITIONAL LUNCH WORKSHOPS** **AUPN Meet the Chairs: Empowering Women Leaders: Successes and Challenges in the Role of Department Chair*** Lake Lucerne • AUPN Meet the Chairs: Empowering Women Leaders: Successes and Challenges in the Role of Department Chair • Women Leaders in Neurology **Neurology in the ChatGPT Era: Artificial Intelligence Advances in Literature-Based Discovery*** Lake Eola A • Cross-Domain Natural Language Processing to Redefine Disease and Drug Targets: A Case Study with Parkinson's • Large Language Models Towards the Automation of Clinical Meta-Analysis: A Case Study with Glioblastoma **Meet the Editors*** *JEC* Key West A-C • Enhancing Biomedical Writing Skills

SCHEDULE AT A GLANCE

Please note all session times are listed in Eastern Daylight Time.

MONDAY, SEPTEMBER 16, 2024

12:00 PM - 7:30 PM	**Poster Viewing** Orange Ballrooms A-D *Poster presenters will be in attendance from 6:00 PM - 7:30 PM.*
1:00 PM - 1:15 PM	**Break** Foyer 1 - Lower Level
1:15 PM - 4:00 PM	**PLENARY SESSION*** Orlando Ballrooms IV - VI **2024 Derek Denny-Brown Young Neurological Scholar Award** • Perinatal Neurodevelopment: Understanding the Dynamic Infant Brain **Derek Denny-Brown Young Neurological Scholar Award: Physician-Scientist: Clinical** • Antithrombotic Treatment Decisions in Patients with Comorbid Hemorrhage-prone Cerebral Small Vessel and Ischemic Vascular Diseases **2024 Audrey S. Penn Lectureship Award** • Exploration of Race, Racism, Race-based Headache Disparities and Professional Ethics **The Grass Foundation – ANA Award in Neuroscience** • Developing CRISPR Gene Therapy for Neurodegenerative Diseases **ANA2024 Wolfe Research Prize** • Blood Neural Barrier Breakdown Drives Mutant TRPV4 Mediated Motor Nerve Degeneration **ANA-Persyst IDEAS Professional Development Award** **ANA2024 Distinguished Neurology Teacher Award** **ANA2024 IDEAS Early Career Member Award** **ANA Award for Excellence: Clinical and Scientific Excellence – Novel Scientific Career Based Contributions (>15 Years)**
4:00 PM - 4:15 PM	**Break** Foyer 1 - Lower Level
4:15 PM - 4:45 PM	**Restorative Music Session** Orange Ballroom F
4:15 PM - 5:45 PM	**TRADITIONAL SPECIAL INTEREST GROUPS** **Neurocritical Care and TBI: Beyond the ICU: Impacting Long-Term Outcomes Following Neurological Critical Illness and TBI*** Lake Nona A • Beyond the ICU: Impacting Long-Term Outcomes Following Neurological Critical Illness and TBI • Long-Term Outcomes after TBI with Special Interest in Women and Marginalized Groups **Selected Abstract Presentations** • Can the Incorporation of Quantitative Markers and Death Improve the Prediction of Post-Ischemic Stroke Epilepsy? • Relationship between Social Determinants of Health (SDOH), Clinical Phenotypes, and Disability in Subacute-Long Term TBI **Autoimmune Neurology & MS: Updates and Advances in the Immunobiology and Approaches in Autoimmune Encephalitis*** Lake Monroe A • CNS Autoimmunity with Immune Checkpoint Inhibitor Cancer Immunotherapy • The Role of Infectious Triggers in Autoimmune Encephalitis • Treatment Approaches in Pediatric Autoimmune Encephalitis **Selected Abstract Presentations** • Paramagnetic Rim Lesion Evolution is Related to Longitudinal Clinical Disease Progression in People with Multiple Sclerosis • Kallikrein-10 Gene Mutations in Patients with Stiff-Person Syndrome (SPS): Extensive Immunogenetic Studies Triggered by a GAD-positive Family **Neuromuscular Disease*** Lake Nona B • Advances in Inclusion Body Myositis • Learnings from Gene Therapy in Pediatric Neuromuscular Disorders • What's on the Horizon for ALS **Selected Abstract Presentation** • Preclinical Overview of CB03-154 (KCNQ2/3 Channel Opener) for Amyotrophic Lateral Sclerosis (ALS)

Online scheudle at:
https://2024.myana.org/program/schedule-at-a-glance

SCHEDULE AT A GLANCE

Please note all session times are listed in Eastern Daylight Time.

MONDAY, SEPTEMBER 16, 2024

4:15 PM - 5:45 PM	**Behavioral Neurology and Dementia: Emerging Diagnostic and Therapeutic Biomarkers in Neurodegeneration*** Lake Monroe B • Cholinergic System Changes and Cognition in Parkinson Disease • Manipulation of Microglial Genes in Alzheimer's Disease: When and in Which Direction? • Update on Performance of Blood-Based Biomarkers in AD **Selected Abstract Presentations** • Deep Learning-Enhanced PRS: A Pioneering Approach for Personalized Alzheimer's Risk Stratification • Self-supervised Convolutional Neural Network Trained on Retinal Digital Color Images Can Identify Pre-symptomatic Alzheimer's Disease **Epileptogenesis: From Basic Mechanisms to Clinical Practice*** Lake Hart • Mechanisms of Epileptogenesis in Status Epilepticus • Traumatic Brain Injury as a Human Model of Epileptogenesis • Tuberous Sclerosis Complex as a Human Model of Epileptogenesis **Selected Abstract Presentation** • Clinical Characteristics and Seizure Outcomes of Temporal and Extratemporal Lobe Epilepsy Surgery at a Single Center in Cape Town, South Africa **Global Neurology: Hot Topics in Global Neurology*** Lake Eola B • Cerebral Malaria Updates: Vaccines, Climate Change, and Beyond • Neurologic Care in Conflict Zones • Neuroscience Research Capacity Building in LMICs **Selected Abstract Presentation** • The Impact of Malaria on the Central Nervous System- Does Coma Really Matter?

Online scheudle at:
https://2024.myana.org/program/schedule-at-a-glance

4:15 PM - 5:45 PM	**SATELLITE SYMPOSIUM** **Evolving Perspectives in Alzheimer's disease: Reaching an Earlier Diagnosis, Understanding Neuroinflammation, and Exploring Therapeutic Advances** SPONSORED BY PHYSICIANS' EDUCATION RESOURCE **SKYCLARYS, the First and Only FDA-Approved Prescription Treatment for Friedreich Ataxia in Adults and Adolescents Aged 16 Years and Older** SPONSORED BY BIOGEN
6:00 PM - 7:30 PM	**Poster Reception in Exhibit Hal** *JEC* Orange Ballrooms A-D and Foyer 1 *Poster presenters will be in attendance.*
7:30 PM - 10:30 PM	**President's Reception** Foyer 2 Lower Level & Orange Ballroom E

TUESDAY, SEPTEMBER 17, 2024

6:30 AM - 11:00 AM	**ANA2024 REGISTRATION** Lobby Level
6:30 AM - 8:30 AM	**Grab-and-Go Breakfast** Foyer 1 - Lower Level
7:00 AM - 8:30 AM	**PROFESSIONAL DEVELOPMENT WORKSHOPS** **Early to Mid-Early to Mid-Career Level** **Building Your Career in Global Neurology*** *JEC* Lake Nona B • Developing a Career in Global Health • Global Neurology: Nuts and Bolts • In-Practice: Life of a Global Neurologist **Landing the Career Track You Want and Career Transitions*** Lake Nona A • Building a Career in Neurology Education • Clinical Career Tracks: Challenges and Strategies for Success • Impacting Neurology Through Research: A Perspective

SCHEDULE AT A GLANCE

Please note all session times are listed in Eastern Daylight Time.

TUESDAY, SEPTEMBER 17, 2024

7:00 AM - 8:30 AM	**PROFESSIONAL DEVELOPMENT WORKSHOPS** **Program and Residency Director Level Workshop** **Navigating Fellowships*** *JEC, PR* Lake Florence • Basic Science: Should MD/PhDs do a Post-Doc Rather than Traditional Fellowship? • Earlier Decisions Tax Programs • Neurohospitalists: Need Even for Those Hospitalists? **AUPN Chair Level** **Navigating Neurotherapeutic Horizons: Managing the Practical Aspects of the Novel Alzheimer's Therapeutics*** Lake Lucerne • Design and Implementation of a Disease Modifying Therapy Program at UAB • Overview of Anti-Amyloid Therapies: Considerations for Prescribing and Monitoring
8:30 AM - 8:45 AM	**Break** Foyer 1 - Lower Level
8:45 AM - 10:45 AM	**PLENARY SESSION** **Autoimmune vs. Infectious Encephalitis: Dilemmas and Solutions*** *JEC* Orlando Ballrooms IV-VI • The Advantages and Pitfalls of Metagenomic Sequencing in Encephalitis • Corticosteroids in Herpes Simplex Encephalitis, and Other Therapeutics in Viral Encephalitis: Lessons Learned • Enhanced Diagnostic Precision in AE to Guide Prognosis and Treatment • Treatments and Trials in Autoimmune Encephalitis: The Urgent Need for Evidence **Emerging Scholar Presentions** • Characterizing Delayed Neurotoxicity Syndromes Following Treatment with Anti-BCMA CAR-T Cell Therapies • Proinflammatory Cytokines in the CSF Aneurysmal SAH Patients are Associated with Shunt Placement
10:45 AM - 11:00 AM	**Break** Foyer 1 - Lower Level
10:45 AM - 12:30 PM	**Grab-and-Go Lunch** Foyer 1 - Lower Level
11:00 AM - 12:30 PM	**ANA Medical Student Forum: A Conversation with the Neurology Chairs*** *JEC* Lake Florence • Careers In Neurology **AUPN Networking Lunch for Small Academic Departments** Champions Gate
11:00 AM - 12:30 PM	**TRADITIONAL SPECIAL INTEREST GROUPS** **Cerebrovascular Disease*** Lake Eola A • Sleep Health Influences Disparities in Stroke Risk and Health Outcomes • Advances in Pediatric Ischemic Stroke • The Impact of Sex and Gender on Stroke Outcomes **Selected Abstract Presentations** • Prevalence and In-Hospital Outcomes Associated with Ischemic Stroke and Concomitant Cardiomyopathy • White Matter Lesion Burden, Blood-Brain Barrier Disruption, and Worse Cognitive Performance in Patients with CADASIL • Tracking Leukocytes to Understand Neutrophil Extravasation and Persistence after Ischemic Stroke and Reperfusion **Headache & Pain*** Lake Monroe A • Clinical Presentation and Pathophysiological Differences of Visual Symptoms • Migraine Pathophysiology: Insights from Functional Imaging **Selected Abstract Presentations** • A Systematic Review Comparing the Strengths and Weaknesses of Neuromodulating Treatments for Pain Management in Fibromyalgia: ECT, TMS, and Psychedelics • Comparison of the Region of Interest (ROI) Selection Methods for Diffusion Tensor Image Analysis Along Perivascular Space (DTI-ALPS) Studies

Online scheudle at:
https://2024.myana.org/program/schedule-at-a-glance

SCHEDULE AT A GLANCE

Please note all session times are listed in Eastern Daylight Time.

TUESDAY, SEPTEMBER 17, 2024

11:00 AM - 12:30 PM	**Movement Disorders** Lake Nona A • Cerebellar Deep Brain Stimulation in Cerebral Palsy • Controversies of Spinal Cord Stimulation for Gait Disturbance in Parkinson's Disease • Skin Synuclein Signature in Diverse Synucleinopathy **Selected Abstract Presentation** • Genome-sequencing in Multiple System Atrophy: Identification of Novel Susceptibility Loci and Generation of a Foundational Resource **Neuro-oncology: Novel Devices for the Treatment of High-Grade Glioma: A Closer Look at Focused Ultrasound, Laser Interstitial Thermal Therapy (LITT), and Tumor Treating Fields*** Lake Eola B • Focused US for BBB disruption • Role of Laser Interstitial Thermal Therapy in Brain Tumors • Tumor Treating Fields Treatment Device for Glioblastoma **Selected Abstract Presentation** • Medical Comorbidities Potentially Modify Survival of Glioblastoma Patients
11:00 AM - 12:30 PM	**Neuro-ophthalmology and Neuro-vestibular Disease*** Lake Nona B • Choroidal Abnormalities and Visual Outcomes in Children with NF1-Associated Optic Pathway Gliomas • Quantifying Induced Nystagmus Using a Smartphone Eye Tracking Application • Updates on the Diagnostic Criteria for MOGAD **Selected Abstract Presentation** • Gaps in Neuro-Vestibular Eye Movement Assessment by Clinical Neurologists in the AVERT Randomized Trial **Sleep Disorders and Circadian Rhythms*** Lake Monroe B • OSA and Stroke Prevention • Sleep Stage Specific Effects of Sleep Apnea on Cerebrovascular Pathology and Memory in Older Adults at Risk for Alzheimer's Disease • Sleep and Multiple Sclerosis **Selected Abstract Presentation** • Sleep Disturbances Induced by TDP-43 Proteinopathy are Rescued by ATXN2 Knockdown in Drosophila and Mouse Models of Sporadic ALS
12:30 PM	**Meeting Adjourned**

NEW

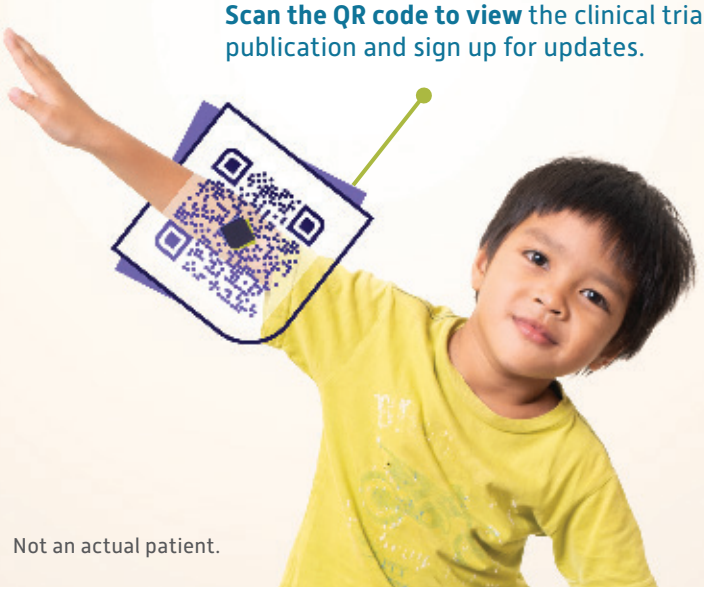
DUVYZAT: NOW AVAILABLE FOR YOUR PATIENTS WITH DMD

DUVYZAT is the first nonsteroidal treatment indicated for ALL patients with DMD 6 years of age or older regardless of genetic mutation or ambulatory status[1,2,*]

DUVYZAT was studied in one of the largest DMD clinical trials to date and was shown to provide protection against disease progression[1,2]

Visit ITF Therapeutics at booth #1 to discover what DUVYZAT can do for your patients

Scan the QR code to view the clinical trial publication and sign up for updates.



Not an actual patient.

The American Neurological Association (ANA) does not endorse the product(s) and/or service(s) advertised or for the company that advertises, manufactures, distributes, or promotes the products and services.

DMD, Duchenne muscular dystrophy.
*The EPIDYS clinical trial did not include non-ambulatory patients.[1]

Indication

DUVYZAT is a histone deacetylase inhibitor indicated for the treatment of Duchenne muscular dystrophy (DMD) in patients 6 years of age and older.

Important Safety Information

Warnings and precautions

- Hematological Changes: DUVYZAT can cause dose-related thrombocytopenia and other signs of myelosuppression, including anemia and neutropenia. Monitor platelets; dosage adjustment or discontinuation may be needed.
- Increased Triglycerides: An increase in triglycerides can occur; dosage modification may be needed. Discontinuation may be needed.
- Gastrointestinal Disturbances: Adjust dosage if moderate or severe diarrhea occurs. Antiemetics or antidiarrheal medications may be considered during treatment with DUVYZAT. Discontinue DUVYZAT if the symptoms persist.
- QTc Prolongation: Avoid use of DUVYZAT in patients who are at an increased risk for ventricular arrhythmias.

Recommended Evaluation and Testing Before Initiation of DUVYZAT:

Obtain and evaluate baseline platelet counts and triglycerides prior to initiation of DUVYZAT. Do not initiate DUVYZAT in patients with a platelet count less than 150 x 10^9/L. Monitor platelet counts and triglycerides as recommended during treatment to determine if dosage modifications are needed.

In addition, in patients with underlying cardiac disease or taking concomitant medications that cause QT prolongation, obtain ECGs when initiating treatment with DUVYZAT, during concomitant use, and as clinically indicated.

Most Common Adverse Reactions:

Most common adverse reactions (≥10% in DUVYZAT-treated patients) are diarrhea, abdominal pain, thrombocytopenia, nausea/vomiting, hypertriglyceridemia, and pyrexia.

To report SUSPECTED ADVERSE REACTIONS, contact ITF Therapeutics LLC at 1-833-582-4312 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

Please visit DUVYZAT.com to view the full Prescribing Information and Medication Guide.

References: 1. Mercuri E, Vilchez JJ, Boespflug-Tanguy O, et al; EPIDYS Study Group. Safety and efficacy of givinostat in boys with Duchenne muscular dystrophy (EPIDYS): a multicentre, randomised, double-blind, placebo-controlled, phase 3 trial. *Lancet Neurol.* 2024;23(4):393-403. **2.** DUVYZAT. Prescribing information. ITF Therapeutics; 2024.

ITF THERAPEUTICS
ITALFARMACO® GROUP

GENERAL INFORMATION

ON-SITE REGISTRATION:
Registration Kiosk (Lobby Level)

Saturday, September 14	10:00 AM – 7:00 PM
Sunday, September 15	7:00 AM – 6:00 PM
Monday, September 16	6:30 AM – 7:30 PM
Tuesday, September 17	6:30 AM – 11:00 AM

POSTER SESSION:
Orange Ballrooms A-D and Foyer 1 (Lower Level)

Sunday, September 15	**12:00 PM–7:30 PM**
	Poster presenters and poster judges will be in attendance from 5:30 PM–7:00 PM
Monday, September 16	**12:00 PM–7:30 PM**
	Poster presenters and poster judges will be in attendance from 6:00 PM–7:30 PM

SPEAKER READY ROOM:
Room - Conway Lake (Main Level)

Friday, September 13	10:00 AM – 7:00 PM EDT
Saturday, September 14	7:00 AM – 7:00 PM EDT
Sunday, September 15	7:00 AM – 7:00 PM EDT
Monday, September 16	6:00 AM – 5:00 PM EDT
Tuesday, September 17	6:00 AM – 12:30 PM EDT

BREAKFAST:
Foyer 1 (Lower Level)

Sunday, September 15	7:00 AM – 9:00 AM
Monday, September 16	6:30 AM – 8:30 AM
Tuesday, September 17	6:30 AM – 8:30 AM

LUNCH:
Foyer 1 (Lower Level)

Boxed Lunches will be distributed in the foyer and attendees are encouraged to bring them to the Interactive Lunch Workshops.

Sunday, September 15	11:30 AM – 12:45 PM
Monday, September 16	11:45 AM – 12:45 PM
Tuesday, September 17	10:45 AM – 12:30 PM

EXHIBIT HALL:
Orange Ballrooms A-D and Foyer 1 (Lower Level)

Sunday, September 15	12:00 PM – 7:30 PM
Monday, September 16	12:00 PM – 7:30 PM

PRESS ROOM:
Room - Turkey Lake (Lobby Level)

Sunday, September 15	7:00 AM – 5:00 AM
Monday, September 16	7:00 AM – 5:00 AM
Tuesday, September 17	8:00 AM – 11:00 AM

WIRELESS CONNECTION

All meeting guests in the designated ANA meeting/conference rooms at the Hilton Orlando, will receive complimentary high-speed wireless internet access during the official meeting dates (Saturday to Tuesday). To connect, look for the network SSID: **ANA2024**. When prompted, enter the passcode **orlando24** (Please note that the password is case sensitive). Opening Symposium and Closing Day WiFi sponsored by Eisai, Inc. Please note, this network is only in the meeting/convention space, not in the guest rooms/lobby/restaurants of the Hilton.

MOBILE APP

GET THE ANA APP HERE ▼

- Download the **ANA Meeting** app from the Apple Play Store or Google Play Store.
- Open the app, click the ANA 2024 event under 'Upcoming Meetings'
- Click 'Download'
- Log-in to access complete app features

GENERAL INFORMATION

DISCLAIMER

Please note that some session titles may have changed since this program was posted online. Please refer to the ANA Mobile App for the most current information.

CONTINUING MEDICAL EDUCATION: ACCREDITATION & DESIGNATION STATEMENT(S)

The American Neurological Association is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians. The Annual Meeting offers CME to eligible participants. Detailed information pertaining to CME can be found in your conference bag and at the following website: **https://2024.myana.org/continuing-medical-education**

ANNUAL MEETING EVALUATIONS

Please look for placards with the QR code at the membership booth and posted in different areas around the meeting to claim CME. If you don't see the code or prefer to wait, you will receive an email with instructions to claim CME credits on the final day of the meeting. People who complete the evaluation will be entered into a drawing for a $100 Starbucks gift card. If you have any questions, please contact the Meetings and Program Coordinator, Ashley McCowan, amccowan@myana.org

CONSENT TO USE OF PHOTOGRAPHIC IMAGES

Registration and attendance at, or participation in ANA meetings and other related activities constitutes attendee's authorization to ANA's use and distribution (both now and in the future) of the attendee's image or voice in photographs, video recordings, electronic reproductions, audio recordings, and other media throughout the world and royalty free.

PHOTOGRAPHY

Photography in the Annual Meeting Poster Area and Exhibit Area is restricted to the official conference photographer.

LANGUAGE

The official language of the Annual Meeting is English. No simultaneous translation is available.

ADA

ANA fully complies with the legal requirements of the Americans with Disabilities Act rules and regulations. If any participant is in need of special accommodations, they should notify the hotel and indicate the type of assistance needed. ANA cannot ensure the availability of appropriate assistance without advance notice.

ALCOHOL CONSUMPTION

Any individual under 21 years old will be prohibited from consuming alcoholic beverages during ANA receptions.

STAY IN THE KNOW AND JOIN IN ON SOCIAL MEDIA

Visit us at Biogen Booth 8

SKYCLARYS®
(omaveloxolone) 50 mg capsules

JOIN US

To Learn more about the clinical efficacy and safety of SKYCLARYS

SCAN the QR code below for more information

hcp.skyclarys.com

This session is not sponsored or programmed by the American Neurological Association (ANA). The speakers are presenting on behalf of and are paid consultants for Biogen. There are no continuing medical education credits for this session. ANA does not endorse the product advertised or Biogen.

225 Binney Street, Cambridge, MA 02142

SATURDAY, SEPTEMBER 14, 2024

ANA2024

Registration Opens

Saturday | 10:00 AM
Registration Kiosk Main Level

Program Directors Networking Reception (By Invitation Only)

Saturday I 4:00 - 5:00 PM
Lake Concord

Opening Reception (Joint with AUPN)

Opening Reception hosted by the Association of University Professors of Neurology (AUPN) and the ANA *JEC*

Saturday | 5:00 - 5:45 PM
Orange Ballroom E

Opening Symposium

The Dawn of Gene Therapy in ALS* *JEC*

Saturday | 5:45 - 7:15 PM
Orlando Ballrooms IV - VI

CHAIR: Clifton Gooch, MD, FANA, University of South Florida

CO-CHAIR: I-Hweii Chen, MD, PhD, FANA, University of South Florida

This program reviews the significant progress in our understanding of the mechanisms of action of the major mutations causing ALS in recent years, as well as the substantial progress in translational research and human therapeutic trials for these disorders, which produced the first FDA approved therapy for hereditary ALS (SOD1) in 2023.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Describe the genetic basis of hereditary ALS.
- Demonstrate how to use newly approved genetic therapies for hereditary ALS.
- Explain the current landscape and timeline for the implementation of genetic therapies to the practice of ALS Care

A Successful RNA-Targeted Therapy for ALS
SPEAKER: Timothy Miller, MD, PhD, FANA, Washington University in St. Louis

C9orf72 ALS/FTD: Challenges and New Opportunities in Translational Research SPEAKER: Laura Ranum, PhD, FANA, University of Florida

TDP43: A Focal Point for RNA Therapeutics in ALS/FTD
SPEAKER: Sami Barmada, MD, PhD, University of Michigan

Human Genetic Therapies for ALS: Current Status and Future Prospects
SPEAKER: Merit Cudkowicz, MD, MSc, FANA, Massachusetts General

ANA Junior and Early Career Networking Reception *JEC*

Saturday | 7:30 - 9:00 PM
Orange E Ballroom

Hosted by the Junior and Early Career Membership Subcommittee

Global Neurology Networking Reception (By Invitation Only)

Saturday | 7:30 - 8:15 PM
Lake Concord

Hosted by the Global Engagement Committee

SUNDAY, SEPTEMBER 15, 2024

Student & Trainee Breakfast with ANA Board of Directors (By Invitation Only) *JEC*

Sunday | 7:00 - 7:30 AM
Key West A-C

Grab-and-Go Breakfast

Sunday | 7:00 - 9:00 AM
Foyer 1 (Lower Level)

Professional Development Workshop
Early Career & Early to Mid Career Level

View from the NINDS, NIA, DOD, AND VA*

Sunday | 7:30 - 9:00 AM
Lake Nona A

CHAIR: Claire Henchcliffe, MD, DPhil, FANA, University of California, Irvine

CO-CHAIR: Ali Ezzati, MD, University of California, Irvine

This is a panel session of the directors of the NINDS, NIA, DOD and the VA, providing information on resources available for research from the institutions, how to apply, and pearls to help new and experienced investigators navigate the funding systems.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Describe opportunities for neuroscience and neurology research at the NINDS, NIA, and the VA.
- Explain the infrastructure of the NIA, NINDS, and the VA as it pertains to neurology and neuroscience research.
- Discuss the training and career development opportunities available for academic neurologists and neuroscientists at the NINDS, NIA, and the VA.

Career Development Opportunities at the VA
SPEAKER: Amanda Hunt, PhD, Biomedical Laboratory Research and Development

View from the DOD
SPEAKER: Nicole Williams, PhD, Department of Defense

View from NINDS
SPEAKER: Walter Koroshetz, MD, FANA, National Institutes of Health

View of NIA
SPEAKER: Eliezer Masliah, MD, National Institute on Aging

Optimizing Your ANA2024 Meeting Experience to Build your Professional Network and your CV* *JEC*

Sunday | 7:30 - 9:00 AM
Lake Nona B

CHAIR: Katherine Carroll, MD, Northwestern University

CO-CHAIR: Lesli Skolarus, MD, MS, FANA, Northwestern University

This interactive session, which takes place near the start of the ANA2024 meeting, will serve as an essential launchpad for a successful ANA meeting, in particular for junior faculty members and newer members to the ANA. The session will provide an overview of the ANA including its executive committee and directors as well as the various opportunities to become more involved in the ANA including involvement in the wide variety of committees and subcommittees. The panel of speakers will include a diverse group of ANA members who will share their personal experiences on how their ANA membership and the ANA annual meeting has advanced their research, their professional network, and their careers. There will be ample time for questions and answers as well as sharing of ideas. Attendees will leave this workshop armed with the tools which are needed to enhance their annual meeting experience and feel better prepared to successfully utilize the benefits of the ANA to strengthen their career trajectory.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Develop a professional network to support career development.
- Utilize the benefits of their ANA membership and their attendance at the ANA annual meeting.
- Learners need to use the ANA Annual Meeting as a platform to enhance their professional network, improve their research potential and heighten their career trajectory.

Unlocking Opportunities: The Benefits of Junior and Early Career Membership in the American Neurological Association
SPEAKER: Wilfreda Lindsey, MD, MS, Kennedy Krieger Institute

Empowering Progress: Advancing Science, Education, and Careers to Enhance Neurologic Health for All
SPEAKER: Lesli Skolarus, MD, MS, FANA, Northwestern University

Panel Discussion
SPEAKER: Letitia Weigand, PhD, National Institute of Neurological Disorders and Stroke

Professional Development Workshop Program and Residency Directors

Developing the Director* *PR*

Sunday | 7:30 - 9:00 AM
Lake Florence

CHAIR: Elisabeth Marsh, MD, FAHA, FANA, FAAN, Johns Hopkins University

CO-CHAIR: Raymond Price, MD, FANA, University of Pennsylvania

This workshop will focus on the challenges facing those dedicated to the medical education within an academic neurology program. How does one begin on the path and ultimately succeed. Speakers will discuss the strategies for becoming a program director and navigating promotion as well as the most common challenges facing academic programs and resources available to the leadership team.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Describe several strategies in navigating a career as an academic medical educator interested in leading residency and fellowship programs.
- Discuss the basic challenges facing academic training programs as well as resources available to help promote success.

Starting Out: Becoming an APD and Navigating Promotion
SPEAKER: Laura Stein, MD, MSEd, University of Pennsylvania

Challenges Facing Program Directors

SPEAKER: Alfred T. Frontera, MD, FANA, University of South Florida

Advocating for Yourself and Your Program
SPEAKER: Leticia Tornes, MD, University of Miami

Professional Development Workshop AUPN Chair Level

Fostering Diversity, Equity, and Inclusion in Today's Neurology Residency Selection*

Sunday | 7:30 - 9:00 AM
Lake Lucerne

CHAIR: Michel Torbey, MD, MBA, MPH, FANA, University of New Mexico

This course is designed to empower residency directors with the knowledge and skills needed to foster a diverse, equitable, and inclusive environment within neurology residency programs.

Participants will delve into the principles and practices of DEI as they apply to the selection of neurology residents. We will explore strategies to ensure a fair and inclusive application process, examine bias in selection criteria, and discuss the

significance of a diverse neurology workforce in providing equitable healthcare. Through case studies, discussions, and expert insights, participants will gain valuable insights into the challenges and opportunities related to DEI in neurology residency selection.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Discuss the importance of Diversity, Equity, and Inclusion (DEI) in Neurology Residency.
- Identify and Mitigate Unconscious Bias in Residency Selection.
- Implement Inclusive Practices in Neurology Residency Selection.

Integrating Diversity, Equity, and Inclusion in Neurology Residency Selection
SPEAKER: Larry Goldstein, MD, FANA, FAHA, FAAN, University of Kentucky

Integrating Diversity, Equity, and Inclusion in Neurology Residency Selection
SPEAKER: Rana Said, MD, University of Texas Southwestern Medical Center

Incorporating Holistic Review in Residency Recruitment
SPEAKER: Annapoorna Bhat Ramachandra, MD, PhD, University of New Mexico

Break

Sunday | 9:00 - 9:15 AM

Welcome and Opening Remarks

Sunday | 9:15 - 9:30 AM
Orlando Ballroom IV - VI

SPEAKER: M. Elizabeth Ross, MD, PhD, FANA, Weill Cornell Medicine

Plenary Session

Role of Compartmentalized Inflammation in Health and CNS Diseases* *JEC*

Sunday | 9:30 - 11:30 AM
Orlando IV-VI

CHAIR: Laura Balcer, MD, MSCE, FANA, NYU Grossman School of Medicine

CO-CHAIR: Jennifer Orthmann-Murphy, MD, PhD, University of Pennsylvania

This program will study the role and therapeutic targets of compartmentalized inflammation (including microglia, oligodendrocytes, and astrocytes) in different neurological diseases.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Explain the concept of compartmentalized inflammation in neurologic disease.
- Describe how microglia, astrocytes and oligodendrocytes contribute to compartmentalized inflammation and repair.
- Identify novel approaches under development that target these inflammatory processes.

Circadian Regulation of Glial Activation and Neuroinflammation in Alzheimer Disease
SPEAKER: Erik Musiek, MD, PhD, Washington University School of Medicine in St. Louis

Compartmentalized Inflammation as a Target for Remyelination in MS
SPEAKER: Jennifer Orthmann-Murphy, MD, PhD, University of Pennsylvania

Targeting Microglia for Neurotherapies
SPEAKER: Mariko Bennett, MD, PhD, Children's Hospital of Philadelphia and School of Medicine

Astrocytic Inflammation in the Post-Stroke Brain
SPEAKER: Amy Gleichman, PhD, University of California, Los Angeles

Estrogen-induced NFÎºB activation Mediates IL-1Î²2 production in Murine Optic Glioma
EMERGING SCHOLAR PRESENTER: Yunshuo Tang, MD, PhD, Washington University in St. Louis

Clues for Pharmacological Approaches for Targeting ADAM10 in Dementias Guided by Novel Neuropathological Endophenotyping
EMERGING SCHOLAR PRESENTER: Shadi Ghourchian, MD, Downstate Neurology at OBH

Lunch (Grab & Go)

Sunday | 11:30 AM - 12:45 PM
Orange Foyer 1

Interactive Lunch Workshop

Optimizing Neurologic Clinical Trial Design and Ensuring Equitable Enrollment*

Sunday | 11:45 AM - 12:45 PM
Lake Florence

CHAIR: Lauren Reoma, MD, National Institute of Neurological Disorders and Stroke

CO-CHAIR: Cassie Mitchell, PhD, Georgia Institute of Technology

Representation and selection of subjects in neurologic trials is of utmost important for successful trial recruitment and retention. Engagement with the target community to ensure trial design that accounts for lived experience, including novel metrics representative of participant burden and potential engagement in trials, considerations for trial design, including site visits and wearable devices, and a focus on equitable representation to more accurately reflect the affected population are all necessary components to the trial landscape. This session will explore these considerations and offer some novel considerations and metrics in this space.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Implement new techniques and metrics for disease community engagement and retention.
- Apply core concepts in participant representation to individual trials targeting the affected population of interest.
- Utilize new metrics and frameworks in trial design.

Measuring Side Effect Burden in Neurology: Development and Application of the Adverse Event Unit (AEU)
SPEAKER: Michael Hehir, MD, University of Vermont College of Medicine

Diverse Population Considerations for ALS Trials
SPEAKER: Justin Kwan, MD, FANA, National Institute of Neurological Disorders and Stroke

Reducing Trial Non-Compliance and Increasing Trial Safety
SPEAKER: Aleksander Videnovic, MD, MSc, FANA, Massachusetts General Hospital

Interactive Lunch Workshop

Game-Based Learning in Neurology* *JEC*

Sunday | 11:45 AM - 12:45 PM
Lake Lucerne

CHAIR: Zachary London, MD, FANA, University of Michigan

CO-CHAIR: Andrew Kayser, MD, PhD, FANA, University of California, San Francisco

Game-based learning is an educational technique that introduces concepts, enhances retention of knowledge, and builds community for learners, while also being enjoyable. Understanding how learner engagement, content format, and other factors promote learning in game-based education is critical for the ongoing development of learning paradigms and the incorporation of new technologies. In this hour-long workshop we will introduce the fundamentals of serious game development for neurologists and explore key principles of game-based learning. We will also discuss issues related to the importance of gender, racial, and ability-based diversity in games and their development. In the second half of the hour, we will lead an interactive workshop for participants to take the first steps in developing their own educational games.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Define the concepts and techniques that underlie the development of effective game-based learning in neurology.
- Apply learning methodologies in didactic sessions and other educational settings.
- Implement game-based learning to enhance teaching.

This Lecture is Boring: An Intro to Game-Based Learning
SPEAKER: Michael Cosimini, MD, Oregon Health and Sciences University

Beyond Jeopardy: Game Design to Teach Neurology and Neuroscience
SPEAKER: Zachary London, MD, FANA, University of Michigan

Diversity and Inclusion in Serious Games
SPEAKER: Alison Christy, MD, PhD, Providence Health and Services

Interactive Lunch Workshop

Clinical Logic* *JEC*

Sunday | 11:45 AM - 12:45 PM
Lake Mizell A

CHAIR: Eric Wong, MD, MA, FANA, FAAN, Rhode Island Hospital

CO-CHAIR: Raymond Price, MD, FANA, University of Pennsylvania

Clinical Logic is the most popular Interactive Lunch Workshop session in the annual meeting of the American Neurological Association where junior neurologists can learn from expert neurologists in the diagnosis of rare neurologic disorders or unusual presentation of common neurologic diseases. This year, we will have 4 senior neurologists from Harvard, Penn, Emory and Brown discussing the fine points of the neurologic diagnosis. Traditionally, the logic behind a neurologist's diagnosis begins with history and the formulation of a number of differential diagnoses. The neurologic examination provides localization of the disease process, or a lack of it. This cognitive process helps to eliminate some of the differential diagnoses. Diagnostic tests will narrow down the differential diagnoses further so that the neurologist can arrive at the most likely diagnosis and prescribe the appropriate treatment. Advances in diagnostic tests and neuroimaging have enabled neurologists to do just that and future AI software may also help. Most importantly, clinical acumen is a learned skill that is cumulative in a neurologist's career.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Recognize the differentiation between logic and intuition.
- Identify the pitfalls of erroneous neurologic diagnoses.
- Demonstrate the logic of arriving at a neurologic diagnosis.

Alphabet Soup and Phenotype - How Do We Understand This?
SPEAKER: Patricia Greenstein, MBBCh, Beth Israel Deaconess Medical Center

What's Up with White Spots?
SPEAKER: Jonathan Cahill, MD, Brown University-Rhode Island Hospital

A Flashy Case
SPEAKER: Rebecca Matthews, MD, Emory University

Interactive Lunch Workshop

Advances in Pediatric Neurology Research: Genetic and Pharmacologic Therapies for Refractory Pediatric Neurologic Disorders: State of the Art Treatments for Epileptic Encephalopathies, Neuromuscular, Mitochondrial Disorders* *JEC*

Sunday | 11:45 AM - 12:45 PM
Lake Eola A

CHAIR: Mark Wainwright, MD, PhD, FANA, Seattle Children's Hospital

CO-CHAIR: Ghayda Mirzaa, MD, Seattle Children's Hospital

There is an unmet need for pharmacologic or genetic therapies which target the molecular mechanisms of early onset progressive neurologic disorders. Such treatment might lead to attenuation in the progression of these disorders, a decrease in their severity, improved quality of life or greater responsiveness to medications currently used for treatment. Advances in in genetic testing have identified a diverse range of mechanisms leading to early onset epileptic encephalopathies, mitochondrial and pediatric neuromuscular disorders. These discoveries have led to new pharmacologic and gene-based therapies which have transformed the care of children with some of these disorders, such as spinal muscular atrophy. This session will focus on recent developments in therapies aimed at gene regulation, as well as the development of novel drugs or repurposed extant drugs for treatment of these conditions. This session will be of value to adult neurologists as children with chronic neurologic disorders survive to adulthood but many adult neurologists may have limited exposure to these complex disorders.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Discuss the long-term outcomes and complications of pediatric epileptic encephalopathies, neuromuscular and mitochondrial disorders.
- Discuss the mechanisms of action and potential benefits of emerging therapies for these disorders.
- Assess the risks and benefits of new treatments for these disorders.

Emerging Therapies for Pediatric Neuromuscular Disorders
SPEAKER: Dimah Saade, MD, University of Iowa

Potential for Treatment or Reversal of Mitochondrial Disorders
SPEAKER: Melissa Walker, MD, PhD, Massachusetts General Hospital

Precision Therapy for Pediatric Epileptic Encephalopathies; Targeting mTOR
SPEAKER: Ghayda Mirzaa, MD, Seattle Children's Hospital

Interactive Lunch Workshop

Neuro Ethics*

Sunday | 11:45 AM - 12:45 PM
Lake Concord

CHAIR: Albert (Gus) Davis, MD, PhD, Washington University School of Medicine in St. Louis

CO-CHAIR: Winston Chiong, MD, PhD, University of California, San Francisco

Advances in knowledge of basic and clinical neuroscience as well as breakthroughs in technology have enabled novel and increasingly sophisticated opportunities for both understanding and interacting with the human nervous system. Harnessing these emerging capabilities presents tremendous opportunity for treating disease and improving well-being, but it also raises serious ethical con-

siderations that have real impact on individual and societal priorities. This session will describe some of the ethical challenges presented by advances in cellular and organoid models, neural networks, behavior surveillance, and neuromodulation.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Discuss the opportunities presented by advances in technology as they relate to normal brain function and disease states.
- Apply technology to enhance our understanding of brain function, improve symptoms of brain illness, and protect confidentiality and autonomy.

Disability and Neurotechnology
SPEAKER: Winston Chiong, MD, PhD, University of California, San Francisco

The NeuroEthics of Deep Brain Stimulation
SPEAKER: Joshua Wong, MD, University of Florida

Additional Lunch Workshop

Women of the ANA: Charting New Horizons: Women Pioneering Leadership and Entrepreneurial Innovation in Academic Neurology*

Sunday | 11:45 AM - 12:45 PM
Lake Hart

CHAIR: Shilpi Mittal, MD, Thomas Jefferson University Hospital

CO-CHAIR: Janhavi Modak, MBBS, MD, MPH, Baptist Health Medical Center

This theme emphasizes the evolving role of women as leaders and entrepreneurs in the academic neurology landscape. It highlights the dual aspects of leadership and business acumen within the academic context, focusing on how women are redefining what success looks like in this traditionally male-dominated field.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Identify systemic barriers to leadership and entrepreneurship in academic neurology.
- Explain the process of securing funding and grants, including identifying opportunities and writing successful proposals.
- Utilize leadership styles and strategies that are effective within academic neurology's unique hierarchies and challenges.
- Apply business acumen in translating neurology research into successful entrepreneurial ventures.
- Utilize networking strategies to build supportive professional relationships and collaborations across disciplines and institutions.
- Develop and implement strategies to ascend to leadership positions within their institutions and the wider academic neurology community.

Pharmaceutical Research Grants/Funding and Pharmaceutical Consulting While in Academia
SPEAKER: Pushpa Narayanaswami, MD, FAAN, Beth Israel Deaconess Medical Center

Entrepreneurship/Innovation in Academic Neurology
SPEAKER: Neha Dangayach, MD, MSCR, FAAN, FCCM, FCCP, FNCS, FANA, Icahn School of Medicine at Mount Sinai

Administrative Leadership for Women in Academic Neurology
SPEAKER: Uma Menon, MD, MBA, FANA, Ochsner Neuroscience Institute

Interactive Lunch Workshop

Global Neurology Initiative: Action Plan Update*

Sunday | 11:45 AM - 12:45 PM
Lake Nona A

CHAIR: Elizabeth Ross, MD, PhD, FANA, Weill Cornell Medical College

CO-CHAIR: Omar Siddiqi, MD, MPH, Beth Israel Deaconess Medical Center

This session will provide an update on the association's Global Neurology Initiative led by the Global Engagement Committee. Speakers will provide information on the progress made to advance academic neurology through education, mentorship, and research.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Discuss the current state of neurology research Ghana, Nigeria, Uganda, and Zambia.
- Identify opportunities to conduct research in Low- and Middle-income Countries (LMICs).
- Discuss strategies to advance academic neurology in Low- and Middle-income Countries (LMICs).

Extending the Reach and Making a Footprint for Specialist Neurological Care for Undeserved Populations in Southern Province, Zambia
SPEAKER: Frighton Mutete, MBChB, Livingstone University Teaching Hospital

ANA Global Neurology Initiative Update - Nigeria
SPEAKER: Oladotun Olalusi, MD, FWACP, University College Hospital Ibadan

ANA Global Neurology Initiative Update – Ghana
SPEAKER: Priscilla Abrafi Opare-Addo, MD, Komfo Anokye Teaching Hospital

ANA Global Neurology Initiative Update – Uganda
SPEAKER: Salvatore Ssemmanda, MBChB, MMED,FCNEUROOL(SA), C-Care International Hospital, Kampala, Uganda

Additional Lunch Workshop

ABPN: Update & Continuing Certification Overview*

Sunday | 11:45 AM - 12:45 PM
Lake Nona B

CHAIR: Jeffrey Lyness, MD, American Board of Psychiatry & Neurology

CO-CHAIR: Nina Schor, MD, PhD, FANA, National Institutes of Health

Our patients expect that their physicians are demonstrating their expertise as determined by some kind of external judgment. That is the key function of specialty board certification and therefore the mission of the ABPN: to credibly reassure patients, families, and the public by giving neurologists and psychiatrists the chance to demonstrate our expertise via, in part, independent assessments. With this mission in mind, this session will provide an update from the American Board of Psychiatry & Neurology, including its Continuing Certification program. Dr. Lyness, the ABPN President and CEO, will provide an overview of the ABPN's primary goals and activities, and the rationale for its Continuing Certification program. Dr. Schor, a neurology director who became ABPN Board Chair in July 2024, will describe the key elements of the ABPN Continuing Certification program, and offer perspectives on meeting its requirements in the course of a career in academic neurology. The session also will allow ample time for discussion with attendees.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Describe how the mission of the ABPN, as a certifying body, is distinct from yet complementary to the roles of academic institutions, professional societies, and the ACGME.
- Describe the rationale for and key elements of the ABPN's Continuing Certification program.
- Identify activities that one is already doing that help satisfy the ABPN's requirements for Continuing Certification.

Neurology and Child Neurology Article-Based Continuing Certification
SPEAKER: Nina Schor, MD, PhD, FANA, National Institutes of Health

ABPN: Update & Continuing Certification Overview
SPEAKER: Jeffrey Lyness, MD, American Board of Psychiatry & Neurology

Additional Lunch Workshop

Meet the Program & Residency Directors* *JEC PR*

Sunday | 11:45 AM - 12:45 PM
Lake Eola B

CHAIR: Elisabeth Marsh, MD, FAHA FANA FAAN, Johns Hopkins University

CO-CHAIR: Ray Price, MD, FANA, University of Pennsylvania

There are many challenges associated with training the physician-scientist ranging from navigating the integration of research and scholarship into a schedule filled with busy clinical service, to finding a path to promotion for educators inspiring the next generation of trainees. Both internal and external pressures can threaten to disrupt the delicate training balance and relationship between residents and program leadership. The goal of this course is to bring together program directors of academic neurology programs to discuss the challenges of training physician-scientists and to establish a network for support and future collaboration. Over the 3 days, we will begin by focusing on the infrastructure supporting those building a career on the medical educator track, and then focus specifically on two of the current challenges of running successful training programs: facilitating research during training; successfully navigating the ever changing fellowship landscape.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Network and establish new relationships for mentoring or collaboration.

Poster Viewing

Sunday | 12:00 - 7:30 PM
Orange Ballrooms A-D, & Foyer 1 (Lower Level)

Break

Sunday | 12:45 - 1:00 PM

Presidential Symposium

Present and Future Applications of AI in Neurological Care and Research* *JEC*

Sunday | 1:00 - 3:00 PM
Orlando Ballrooms IV-VI

CHAIR: M. Elizabeth Ross, MD, PhD, FANA, Weill Cornell Medical College

CO-CHAIR: Cassie Mitchell, PhD, Georgia Institute of Technology

Recent advances in artificial intelligence are challenging our concepts of applied predictive medicine in clinical and research settings. Computer science can enhance the speed and efficiency of human directed data processing. It raises the prospect of achieving what approximates human thought in order to expedite, prioritize, and better assist in neurological clinical care and research decisions. In order to make best use of this incredible power and avoid unintended negative consequences, it is critically important that the path to AI output is understood. Data utilized by AI systems are accurate and robust when properly validated and applied by clinical or research end users. Speakers will present perspectives on current capabilities

and future promise of computational tools for the application of implantable devices and the integration of multi-omics, imaging, and clinical data toward understanding the causes, prognosis and treatment of neurological disease.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Assess current approaches to neurological treatment, diagnostics.
- Describe how to apply medical data access and organization in ways that safely connect multiple medical institutions while preserving data privacy and intellectual property.
- Discuss issues surrounding the use of AI in neurological care and research.

AI Applications for Implantable Devices in Neuropsychiatric Diseases
SPEAKER: Brian Litt, MD, PhD, FANA, University of Pennsylvania

The Power of Informatics and Machine Learning Applications to Personalized Healthcare Delivery
SPEAKER: Lucila Ohno-Machado, MD, MBA, PhD, FANA, Yale University School of Medicine

AI for Discovery and Diagnosis of Neurological Diseases using Deep Learning and Large-Scale Neuroimaging
SPEAKER: Paul Thompson, PhD, University of Southern California

AI-Aided Analyses of Seizure and Interictal Phenotypes and Drug Responses in Epilepsy Models: Possibilities for Clinical Applications
SPEAKER: Ivan Soltesz, PhD, Stanford University

Break

Sunday | 3:00 - 3:30 PM

Cross-Cutting Special Interest Group

Neurodevelopment: The Neurovascular Continuum*

Sunday | 3:30 - 5:00 PM
Lake Nona B

CHAIR: Miya Asato, MD, Kennedy Krieger Institute

CO-CHAIR: Eboni Lance, MD, PhD, Kennedy Krieger Institute

The neurovascular unit represents a complex and tightly controlled system of vascularization. Throughout the lifespan, diseases that compromise the neurovascular system impact development and other important functions. The critical balance of vascular and neuronal interactions can be compromised throughout development and are susceptible to environmental, infectious, inflammatory, genetic, traumatic, and other complex mechanisms. Alterations in the blood-brain barrier and changes in cerebral blood flow are increasingly recognized as systemic vulnerabilities that can lead to developmental disorders, impact cognition, and contribute to dementia. This session will focus on cerebral vascular disorders and will highlight mechanisms that can have ramifications throughout the lifespan including in childhood, women, and during aging.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Identify specific developmental or sex-based risk factors for vascular disease across the lifespan.
- Categorize potential candidate mechanisms that endanger neurovascular health at particular stages of development for different populations.
- Recognize important features that may advance understanding of neurovascular coupling that could inform potential preventative and therapeutic targets

The Neurovascular Continuum: Pediatric Stroke
SPEAKER: Lori Jordan, MD, PhD, Vanderbilt University

The Neurovascular Continuum: Vulnerabilities in Women and in Aging
SPEAKER: Louise McCullough, MD, PhD, FANA, University of Texas Health Science Center at Houston

The Timing of Purkinje Cell Silencing Determines Severity of Neurodevelopmental Outcomes
SELECTED ABSTRACT PRESENTER: Jason Gill, MD, PhD, Baylor College of Medicine

Loss of Function of EIF4A2 Leads to Neurodevelopmental Impairment in Zebrafish
SELECTED ABSTRACT PRESENTER: Anna Duncan, MD, MHS, Massachusetts General Hospital

Cross-Cutting Special Interest Group

Neurodegeneration and Cell Death

Sunday | 3:30 - 5:00 PM
Lake Eola A

CHAIR: Vikram Khurana, MD, PhD, Brigham & Women's Hospital

CO-CHAIR: Albert A. (Gus) Davis, MD, PhD, Washington University in St. Louis

This session will present basic and translational science regarding mechanisms in neurodegeneration.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Discuss recent basic research findings related to the mechanisms of neurodegeneration.
- Describe translational research relevant to the neurodegeneration.
- Explain how communication between basic and translational scientists, academicians, and industry scientists could be improved.

Understanding and Treating Enteric Nervous System Disease in a CNS Neurodegenerative Disorder
SPEAKER: Ewa Ziolkowska, PhD, Washington University in St. Louis

Elucidating Amyloid Fibril Formation using Correlative Cryo-CLEM in situ
SPEAKER: Sarah Shahmoradian, PhD, University of Texas Southwestern Medical Center

Drug Development in Neurodegenerative Diseases: Challenges and Opportunities
SPEAKER: Azad Bonni, MD, PhD, La Roche University

Integrating Skin Seeded-amplification Assays into a Personalized Stem-cell Paradigm for Synucleinopathy
SPEAKER: Alain Ndayisaba, MD, Harvard Medical School

New Mechanisms of Neuron-Autonomous Neuroinflammation
SPEAKER: Brian Wainger, MD, PhD, Massachusetts General Hospital

Rescuing Alpha-synuclein Toxicity through Neuron-specific Enhancement of Autophagy
SELECTED ABSTRACT PRESENTER: Jason Chua, MD, PhD, Johns Hopkins University School of Medicine

Cross-Cutting Special Interest Group

Neuroinflammation and Neuroinfection: Genetic Underpinnings to Neuroinflammatory and Neuroinfectious Diseases*

Sunday | 3:30 - 5:00 PM
Lake Hart

CHAIR: Kiran Thakur, MD, FAAN, Columbia University Irving Medical Center

CO-CHAIR: Felicia Chow, MD, MAS, University of California, San Francisco

While there is growing recognition of the genetic underpinnings to many neuroinfectious and neuroinflammatory conditions, the biological mechanisms and clinical presentations require knowledge sharing amongst academic neurologists. Here, we will learn from national and international leaders in the field of genetics as it relates to neuroinfectious and neuroinflammatory conditions to understand when, how and why to consider genetic testing

in our patients and recent scientific advances in this rapidly evolving field. Here, we will highlight the latest basic science, translational and clinical research in genetic disorders and neuroinfectious and neuroinflammatory diseases.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Diagnose and consider a genetic cause of neuroinfectious and neuroinflammatory conditions.
- Apply genetic testing in the evaluation of patients with presumed and definitive neuroinfectious and neuroinflammatory conditions.
- Define how to target immune mediated genetic defects which may predispose individuals to these conditions.

Defining The Path to Disease Modifying Therapy for Genetic Leukoencephalopathy
SPEAKER: Jennifer Orthmann-Murphy, MD, PhD, University of Pennsylvania

The White Matter Rounds Experience: An International Network to Accelerate the Diagnosis of Adult Subjects with Atypical White Matter Diseases
SPEAKER: Roberta La Piana, MD, PhD, The Neuro Montreal Neurological Institute-Hospital

Neurological Manifestations of Errors of Immunity
SPEAKER: Farinaz Safavi, MD, PhD, National Institutes of Health

Utilization of Cerebrospinal Fluid IgM and RT-PCR Testing for Neuro-invasive West Nile Virus
SELECTED ABSTRACT PRESENTER: Carson M. Quinn, MD, Massachusetts General Hospital

Cross-Cutting Special Interest Group

Neurorecovery and Neuroplasticity: Neurostimulation to Improve Recovery After Brain Injury*

Sunday | 3:30 - 5:00 PM
Lake Nona A

CHAIR: Steven Cramer, MD, MSc, FAAN, FAHA, FANA, University of California, Los Angeles

CO-CHAIR: Karunesh Ganguly, MD, PhD, FANA, University of California, San Francisco

Presentation and discussion of cutting-edge topics in neurorecovery and neuroplasticity from top experts, as well as oral presentation of three excellent scientific submissions to this meeting.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Describe the effects of neurological diseases on CNS function, and models of therapeutic interventions to improve outcomes in humans and in animal models.
- Utilize a wide range of tools employed to measure CNS structure and function in the setting of neuroplasticity research.

Neurostimulation Tools for Post-Stroke Motor Recovery – Prime Time
SPEAKER: Wayne Feng, MD, MS, FANA, Duke University

Modulating Neural Population Dynamics to Improve Motor Recovery
SPEAKER: Karunesh Ganguly, MD, PhD, FANA, University of California, San Francisco

Understanding Mechanisms of Aphasia Recovery to Improve Brain Stimulation Treatments
SPEAKER: Peter Turkeltaub, MD, PhD, Georgetown University Medical Center

Parvalbumin Interneurons Regulate Circuit Plasticity in the Healthy and Injured Somatosensory Cortex
SELECTED ABSTRACT PRESENTER: William Zeiger, MD, PhD, University of California Los Angeles

Cross-Cutting Special Interest Group

Neurogenetics and Gene Therapy: Forget the Mouse: The Future of Pre-Clinical Trials in Neurogenetic Disease

Sunday | 3:30 - 5:00 PM
Lake Nona A

CHAIR: Andrea Gropman, MD, FANA, Children's National Medical Center

CO-CHAIR: Gemma Carvill, PhD, Northwestern University

This program planned by the Neurogenetics special interest group focuses on advancing biomedical research beyond traditional mouse models. While mice have long been the cornerstone of preclinical studies, it's becoming increasingly evident that many mouse models fail to accurately recapitulate human phenotypes. This disparity poses significant challenges in drug development and biomedical research, especially considering the pivotal role mice play in FDA regulatory processes. This session aims to spearhead a paradigm shift towards embracing alternative model organisms and innovative approaches that better mimic human biology and pathophysiology. By fostering collaboration and advocating for the adoption of more diverse models, we aspire to revolutionize biomedical research, ultimately leading to more effective treatments and therapies for human diseases. Join us in reshaping the future of scientific inquiry and therapeutic development.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Critically assess various preclinical systems to determine their efficacy in replicating human biology accurately.
- Present data derived from alternative preclinical models as sufficient evidence for Investigational New Drug (IND) applications and eventual drug approval processes.
- Independently evaluate preclinical systems for their ability to accurately recapitulate human biology, demonstrating proficiency in selecting appropriate models and assessing their suitability for specific research objectives.
- Effectively communicate findings and present data derived from alternative preclinical models in a compelling manner, demonstrating competence in preparing documentation necessary for Investigational New Drug (IND) applications and contributing to successful drug approval processes.

Fibroblast Models MELAS/LHON Plus to Test Novel Pharmaco-Epigenomic Drugs
SPEAKER: Anne Chiaramello, PhD, George Washington University School of Medicine

A Transgenic Rabbit Model of Pediatric Epilepsy and SUDEP
SPEAKER: Lori Isom, PhD., FANA, University of Michigan Medical School

Refining TDP-43 Dependent Disease Mechanisms and Therapeutic Approaches in ALS Using Human iPSC Models
SPEAKER: Evangelos Kiskinis, PhD, Northwestern University

Parvalbumin-positive Interneuron Alterations in a Mouse Model of Pcdh19 Clustering Epilepsy
SELECTED ABSTRACT PRESENTER: Julie Ziobro, MD, PhD, University of Michigan

Cross-Cutting Special Interest Group

Health Services and Health Equity Research: How do we Engage and Recruit Diverse Populations in Neurological Research*

Sunday | 3:30 - 5:00 PM
Lake Lucerne

CHAIR: Neha Dangayach, MD, MSCR, FAAN, FCCM, FCCP, FNCS, Icahn School of Medicine at Mount Sinai

CO-CHAIR: Charlene Gamaldo, MD, FAAN, FAASM, FANA, Johns Hopkins University

The global burden of neurological diseases is increasing and these disease continue to disproportionately impact underserved and under-represented populations. It is exciting to see therapeutic breakthroughs for several previously untreatable neurological diseases. However, several clinical trials that have helped bring new therapeutic options to our clinical practice have been unsuccessful in engaging and recruiting diverse patient populations. Underserved and under-represented populations have been excluded from neurologic research for a variety of reasons. Diversity in clinical trial enrollment and retention; with representative groups from diverse racial, ethnic, gender, age, disability, socioeconomic, religious backgrounds is imperative to ensure that we fully understand the impact of our research and the clinical translation of research, that no groups of patients are systematically excluded from research or from clinical access to new therapies and innovations. Advances in digital health, artificial intelligence, machine learning can have several promising applications to bridge gaps in access to health for promoting neurological health. But if these innovations exclude specific populations, then the models and algorithms that they will be trained on will further worsen healthcare disparities. Funding agencies need to encourage researchers to think about effective strategies for recruiting and retaining diverse patient populations similar to other aspects of scientific rigor. Scientific journals should encourage authors to publish their work with specific attention to sharing their approaches for recruiting and retaining diverse patient populations.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Explain how HSR approaches can improve the recruitment and retention of diverse patient populations in neurologic research.
- Discuss the role of funding agencies and peer reviewed journals in bridging healthcare disparities for neurologic research.
- Discuss how digital health/AI can be leverage to bridge the digital divide for promoting neurologic health.

Health Equity and Representation Science in Neurocritical Care
SPEAKER: Nirupama Yechoor, MD, MSc, Mass General Brigham

Promoting Best Practices in Diversity Enrollment in Clinical Studies: An NIH Perspective
SPEAKER: Richard Benson, MD, PhD, FAAN, National Institute of Neurological Disorders and Stroke, National Institutes of Health

Representation in Clinical Trials: Strategies for Study Design and Recruitment
SPEAKER: Ellen Mowry, MD, MCR, FANA, Johns Hopkins University

Influences on Health Preventive Behaviors After Minor Stroke: Understanding Patient Perceptions and Practices in an Urban Underserved Population
SELECTED ABSTRACT PRESENTER: Imama Naqvi, MD MS, Columbia University

Restorative Music Session

Sunday | 3:30 - 4:00 PM
Orange Ballroom F

Break

Sunday | 5:00 - 5:30 PM

Education Innovation Committee Connection

(By Invitation Only)

Sunday | 5:00 - 5:30 PM
Lake Florence

Poster Presentation and Reception

JEC

Sunday | 5:30 - 7:00 PM
Orange Ballrooms A-D, and Foyer 1 (Lower Level)

Satellite Symposium

Optimizing Alzheimer's Disease Care: The Power of Early Diagnosis in an Evolving Treatment Landscape

Sunday | 7:00 - 8:00 PM
Orlando Ballroom III

SPONSORED BY EISAI

SPEAKER: Susan Steen, MD, First Choice Neurology, Tampa, FL

SPEAKER: Jeff Gelblum, MD, FAAN, First Choice Neurology, Miami, FL

New Member Meet and Greet

(By Invitation Only)

Sunday | 7:00 - 8:30 PM
Lake Monroe A

IDEAS Committee Reception

(By Invitation Only)

Sunday | 7:30 - 8:30 PM
Lake Monroe B

MONDAY, SEPTEMBER 16, 2024

Grab-and-Go Breakfast

Monday | 6:30 - 8:30 AM
Foyer 1 (Lower Level)

Editorial Board Breakfast

(By Invitation Only)

Monday | 7:00 - 8:30 AM

Professional Development Workshop
Early Career Level

Early Career Development for International Graduates: Challenges and Opportunities* *JEC*

Monday | 7:00 - 8:30 AM
Lake Nona A

CHAIR: Jayant Acharya, MD, DM, FANA, Southern Illinois University School of Medicine

CO-CHAIR: Erica Schuyler, MD, FANA, Hartford Healthcare/University of Connecticut

International medical graduates (IMGs) make up approximately a third of neurology trainees and active neurologists in the USA. They play a major role in providing greater access to health care for millions of patients, especially in underserved regions. With the current shortage of neurologists, which is projected to increase in the next

few decades, there is an even greater need for IMG neurologists. In order to remain in the US after training, IMGs face numerous visa-related and other challenges that can limit their scope of practice and range of opportunities in academic medicine. Advocacy and legislation efforts to address immigration complexities, increased recruitment of IMG neurologists in academic departments and a systematic approach to reducing bias and supporting diversity are necessary. During this session, speakers will present the landscape, challenges, and opportunities for in-training and early-career IMGs for a successful academic career in neurology. Greater knowledge and understanding of these issues will also benefit department chairs and other institutional leaders, and encourage them to recruit qualified IMG faculty and provide appropriate counseling to their IMG trainees.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Illustrate visa issues faced by IMG neurologists.
- Discuss challenges and opportunities for IMG neurologists pursuing academic careers.
- Describe recruitment and counseling strategies for IMG neurologists.

Concerning Visas: An IMG Tale
SPEAKER: Abhimanyu Mahajan, MD, MHS, University of Cincinnati

Immigrant Neurologists in the Physician-Scientist Pipeline
SPEAKER: Imama Naqvi, MD, MS, Columbia University

How Mentorship Matters when Choosing a Career Pathway
SPEAKER: Neha Dangayach, MD, MSCR, FAAN, FCCM, FCCP, FNCS, FANA, Icahn School of Medicine at Mount Sinai

My Academic Journey as an Immigrant Neurologist
SPEAKER: Romergryko (Romer) Geocadin, MD, FANA, Johns Hopkins University

Professional Development Workshop
Early Career & Early to Mid Career Level

Communicating Your Science: How to Promote Your Science to Scientists and Non-Scientists* *JEC*

Monday | 7:00 - 8:30 AM
Lake Nona B

CHAIR: Kelly Sloane, MD, MS, University of Pennsylvania

CO-CHAIR: Romergryko (Romer) Geocadin, MD, FANA, Johns Hopkins University

This is an interactive workshop focused on tools for communicating your science to non-scientists. Being able to effectively and concisely describe your science to a non-scientist (e.g. philanthropists, journalists) is an essential part of advancing your career and your research. We will hear from speakers with expertise in public speaking to non-scientists and in social media communication.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Develop a summary to explain verbally their science to non-scientists/clinicians.
- Apply approaches to communicating about their research or clinical interests with non-scientific or clinical audiences in an oral presentation or their social media.
- Create and deliver an “elevator pitch” that can be modified to meet the backgrounds of various audience members.

Engaging the Media
SPEAKER: Bridget Stratton, MA, Public Communications Inc.

Communicating on Social Media
SPEAKER: Stephan Mayer, MD, FANA, Neurological Institute

Communicating with Philanthropists
SPEAKER: Andrew Josephson, MD, FANA, University of California, San Francisco

Professional Development Workshop
AUPN Chair Level

Multitasking for the Neurology Chair: Balancing Multiple Priorities*

Monday | 7:00 - 8:30 AM
Lake Lucerne

CHAIR: Jun Li, MD, PhD, FANA, Houston Methodist

As leaders in academic Neurology, we are often responsible for multiple missions, including clinical care, education, scientific research, finance, and administration. This challenging situation is happening in all healthcare institutions. We are delighted to have three neurology chairs share their experience in accomplishing multitasking amidst many priorities.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Develop and implement time management strategies specific to the role of a Neurology Chair.
- Acquire the skills to effectively set priorities in achieving academic missions.
- Be equipped with the knowledge and passion necessary to inspire and motivate teams to accomplish diverse objectives within the academic Neurology setting.

Keeping all the Balls in the Air: Lessons Learned
SPEAKER: Jayant Acharya, MD, DM, FANA, Southern Illinois University School of Medicine

A Personal Perspective on Prioritization, Procrastination, and Planning
SPEAKER: Justin McArthur, MBBS, MPH, FANA, Johns Hopkins University

How to Win Friends and Influence People as a Neurology Chair? Let Faculty Lead
SPEAKER: Gwenn Garden, MD, PhD, FANA, University of North Carolina

Professional Development Workshop
Program and Residency Director Level

Realistic Research in Residency* *JEC PR*

Monday | 7:00 - 8:30 AM
Lake Florence

CHAIR: Elisabeth Marsh, MD, FAHA, FANA, FAAN, Johns Hopkins University

CO-CHAIR: Raymond Price, MD, FANA, University of Pennsylvania

This workshop will focus on the challenges of supporting a research presence for trainees during a busy clinical residency program. What kind of research questions can be answered during training and how do programs like the NIH R25 Award potentially alter these expectations. Speakers will discuss realistic research questions that may not require a formalized "research track" but still afford the benefits of exposure to clinical or basic science research during training and past trainees will provide examples of how research can be successfully completed both with and without an R25 Award that led to successful K award submissions following training.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Describe strategies for facilitating research over the course of residency.
- Discuss the basic program structures that allow a trainee to conduct research during residency while remaining compliant with ACGME requirements and a sense of reasonable expectations for scholarly productivity during training.

Creating a Realistic Research Project- Do you need an R25?
SPEAKER: Elisabeth Marsh, MD, FAHA, FANA, FAAN, Johns Hopkins University

Adequate Support and Infrastructure: What an R25 Added? Trainee
SPEAKER: Michael Guo, MD, PhD, University of Pennsylvania

Transitioning to Fellowship: Can You Actually Get Prelim Data for a K?
SPEAKER: Sachin Gadani, MD, PhD, Johns Hopkins University

Break

Monday | 8:30 - 8:45 AM

Plenary Session

Emerging Applications of Non-Invasive Neuromodulation in Neurology *JEC*

Monday | 8:45 - 10:45 AM
Orlando Ballrooms IV-VI

CHAIR: Roy Hamilton, MD, MS, FAAN, FANA, University of Pennsylvania

CO-CHAIR: Elisabeth Marsh, MD, FAHA, FANA, FAAN, Johns Hopkins University

Recent years have witnessed the conceptualization of many brain disease as circuit-level and/or network-level disorders. This view of brain diseases as network disorders coincides with and contributes to increased use of neuromodulation approaches which aim to treat certain neurological conditions by altering patterns of activity in dysfunctional neural circuits. Transcranial magnetic stimulation, while commonly employed in psychiatry, has begun to work their way into the armamentarium of therapeutics for neurologists. At the same time, other emerging noninvasive neuromodulation techniques such as focused ultrasound and transcranial electrical stimulation are showing considerable therapeutic promise across a wide range of neurologic disorders. This symposium will address novel approaches to stimulating brain circuits and networks using noninvasive neuromodulation techniques. It will bring together several globally renowned experts in brain networks and neuromodulation and will point toward the future use of brain stimulation for disorders in clinical neurology.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Differentiate between various noninvasive brain stimulation techniques such as transcranial magnetic stimulation (TMS), transcranial electrical stimulation (tES), and focused ultrasound (FUS) and understand their underlying principles and mechanisms of action.
- Explain how noninvasive brain stimulation techniques are being explored to enable the diagnosis and treatment of specific neurological disorders.
- Demonstrate a fundamental understanding of how patient-specific factors such as neuroanatomical targets, stimulation parameters, and individual brain response patterns influence the effects of noninvasive neuromodulation.

Emerging Focused Ultrasound Techniques for Diagnosis and Treatment of Brain Disorders
SPEAKER: Hong Chen, PhD, Washington University in St. Louis

Brain Circuit-Targeted Neuromodulation
SPEAKER: Michael Fox, MD, PhD, Brigham and Women's Hospital

Non-invasive Approaches to Treating Seizures
SPEAKER: Anli Liu, MD, MA, New York University Langone Health

Causal Entrainment of Cortical Rhythms Improves Memory in Aging and Alzheimer's Disease
SPEAKER: Robert Reinhart, PhD, Boston University

Insights from Centromedian Thalamic Stimulation Evoked Responses to Improve Brain Stimulation Therapies
EMERGING SCHOLAR PRESENTER: Thomas Foutz, MD, PhD, Washington University in St. Louis

Highly Epileptiform EEG Trajectories and Functional Recovery Post-Cardiac Arrest
EMERGING SCHOLAR PRESENTER: Edilberto Amorim, MD, University of California, San Francisco

Executive Session of Membership JEC

All ANA members are encouraged to attend

Monday | 10:45 - 11:45 AM
Orlando Ballrooms IV-VI

Grab-and-Go Lunch

Monday | 11:45 - 12:45 PM

Additonal Lunch Workshop

Neurology in the ChatGPT Era: Artificial Intelligence Advances in Literature-Based Discovery*

Monday | 12:00 - 1:00 PM
Lake Eola A

CHAIR: Cassie Mitchell, PhD, Georgia Institute of Technology

CO-CHAIR: David Kartchner, PhD, Georgia Institute of Technology

Keeping up with the latest scientific literature in one's own niche specialty can be daunting – much less keeping up with the millions of other scientific articles that may be important to a cross-cutting field like neurology. Recent advances in natural language processing and large language models, including ChatGPT, have greatly increased the accessibility to large volumes of clinical and scientific research. The ability to integrate, aggregate, extract, and summarize data can greatly expedite the speed and efficiency of neurology research. In particular, natural language processing and the use of knowledge graphs has been exciting for the field of drug repurposing, including finding adjuvant therapies for neurological disease. Large language models like ChatGPT open the door to automating the tedious task of clinical meta-analysis and can potentially provide state-of-the-art, statistics-based guidelines in a fraction of the time. In addition to the two talks, there will be an interactive discussion on related relevant easy-to-access literature-based discovery tools for everyday use by neurologists and neuroscientists.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Provide overview and interactive demonstration of natural language processing (NLP) and large language models (LLM) for applications in neurology research.
- Provide overview and interactive case studies for the use literature based discovery and related text relationship mining tools for neurology research.
- Illustrate how NLP and LLM can be used to extract, organize, and mine large-scale, multi-factorial literature from across domains.
- Use literature-based discovery to demonstrate specific case studies in glioblastoma, Parkinson's Disease, and other neu diseases will be used to show the utility of mining 34+ million PubMed articles for drug repurposing, adjuvant drug discovery, novel drug targets, and spectral disease mechanism identification.
- Provide detailed standard-of-care clinical practice example for automated meta-analysis to determine aggregate effect sizes across multiple cohorts.

Large Language Models Towards the Automation of Clinical Meta-Analysis: A Case Study with Glioblastoma
SPEAKER: David Kartchner, PhD, Georgia Institute of Technology

Cross-Domain Natural Language Processing to Redefine Disease and Drug Targets: A Case Study with Parkinson's
SPEAKER: Cassie Mitchell, PhD, Georgia Institute of Technology

Interactive Lunch Workshop

Autoimmune Epilepsy: Emerging Trends*

Monday | 12:00 - 1:00 PM
Lake Eola B

CHAIR: James Gugger, MD, PharmD, University of Rochester

CO-CHAIR: Rajesh Gupta, MD, MS, FANA, University of Texas Houston

Epilepsy, characterized by recurrent seizures, can have a significant impact on quality of life. While the causes are diverse, recent research has shed light on the intriguing link between autoimmunity and certain types of epilepsy. This workshop aims to investigate the emerging trends in diagnosis and treatment of autoimmune seizures. To understand and manage autoimmune epilepsy effectively, we differentiate between syndromes caused by specific autoantibodies and those mediated by T-cells. We distinguish between acute, symptomatic seizures as a first event and a more chronic tendency towards autoimmune-associated epilepsy. We will delve into the mechanisms by which autoimmunity might trigger seizures, discuss the latest diagnostic tools for identifying these autoimmune epilepsies, and explore promising avenues for treatment strategies. This conference strives to improve diagnosis, treatment options, and ultimately, the lives of individuals living with autoimmune epilepsy.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Describe the seizure semiology and EEG patterns suggestive of autoimmune seizures and learn about common immune mediated encephalitides associated with seizures.
- Utilize appropriate diagnostic tools to detect autoimmune seizures and treat them appropriately with immunotherapy.
- Assess response of therapy and decide escalation if needed.

Immunotherapy in Autoimmune Epilepsy: An Experience from Autoimmune Epilepsy Clinic
SPEAKER: Rajesh Gupta, MD, MS, FANA, University of Texas Houston

Identification of Autoimmune Epilepsy Syndromes
SPEAKER: Shirin Jamal-Omidi, MD, Mayo Clinic

Navigating the Expanding Spectrum of Neural Specific Antibodies Associated with Autoimmune Encephalitis
SPEAKER: Divyanshu Dubey, MD, FANA, Mayo Clinic, Rochester

Interactive Lunch Workshop

Neurosarcoidosis: Evolving Diagnostic and Management Strategies*

Monday | 12:00 - 1:00 PM
Lake Mizell A

CHAIR: Allen Aksamit, MD, FANA, Mayo Clinic, Rochester

CO-CHAIR: Amanda Jagolino-Cole, MD, FANA, The University of Texas Health Science Center at Houston

Improved methods have evolved for the diagnosis and treatment of neurosarcoidosis. Imaging characteristics help clinicians by pointing to the diagnosis of neurosarcoidosis based on more specific MRI findings in the brain and spinal cord. Spinal fluid analysis findings are nonspecific but research delving into biomarker panels in neurosarcoidosis are evolving. Biopsy proof remains important. Treatment options have expanded away from the use of corticosteroids alone avoiding the side effects of steroid excess. Ideas of projecting prognosis and identifying patients needing more aggressive therapy at diagnosis are evolving.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Apply updated consensus statements and imaging and laboratory biomarkers in diagnosing neurosarcoidosis.
- Distinguish neurosarcoidosis and the many mimics that can hinder diagnosis.
- Apply new strategies for treatment to manage patients with neurosarcoidosis.

Diagnosis and Evolving Philosophies of Care for Patients with Neurosarcoidosis
SPEAKER: Barney Stern, MD, FANA, Johns Hopkins University

Updates in our Understanding of Biomarkers and Laboratory Findings in Neurosarcoidosis
SPEAKER: Carlos Pardo-Villamizar, MD, FANA, Johns Hopkins University

Mimics and Approaches in Neurosarcoidosis Myelitis
SPEAKER: Denis Balaban, MD, BS, Massachusetts General Hospital

Interactive Lunch Workshop

Advances in Neurologic Devices*

Monday | 12:00 - 1:00 PM
Lake Nona A

CHAIR: Eric Wong, MD, MA, FANA, FAAN, Rhode Island Hospital

CO-CHAIR: Richa Tripathi, MD, MS, Emory University

Neurologic devices have played an increasingly important role for the management of a variety of neurological disorders. Some of them save lives, while others reverse neurological dysfunctions and make patients whole again. To most neurologists, devices are foreign to them because their training was primarily focused on administering drugs. They learned the fundamentals of organic chemistry in college, principles of pharmacology in medical school, and concepts in drug pharmacodynamics and pharmacokinetics during residency and fellowship. But the basic principles of electromagnetism and physics of sound wave propagation were not in their educational curricula, and therefore the conceptual framework on the basic operation of neurologic devices is lacking, not to mention the biological effects elicited by these physical modalities of treatment. Advances in Neurologic Devices fills this knowledge gap. For example, the particular biological effect on neural tissues depends on the specific frequency band in the electromagnetic spectrum, with alterations in ion channel functions as basis for neuromodulation at low frequencies, disruption of protein-protein interaction resulting in mitosis interference and heating effect at intermediate microwave frequencies, and ionization from radiation at high frequencies. Each year, this session brings 3 important neurologic devices to the annual meeting of the American Neurological Association. The 2023 session brought spinal cord stimulation for pain modulation, deep brain stimulation for movement disorder, and tumor treating electric fields therapy for glioblastoma. This year in 2024, topics covered will include (i) implantable brain-computer Interfaces for restoration of communication and mobility, (ii) responsive neurostimulation to restore consciousness in epilepsy, and (iii) focused ultrasound for movement disorder, all of which are relevant to present or future treatment of neurological disorders.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Explain the basic scientific principles behind the operation of the neurologic devices.
- Identify neurologic disorders that can be treated with neurologic devices.
- Utilize various neurologic devices for specific neurological disorders.

Implantable Brain-Computer Interfaces for Restoring Communication and Mobility
SPEAKER: Leigh Hochberg, MD, PhD, FANA, Massachusetts General Hospital

Responsive Neurostimulation to Restore Consciousness in Epilepsy
SPEAKER: Hal Blumenfeld, MD, PhD, FANA, Yale University

Focused Ultrasound for Movement Disorders
SPEAKER: Wael Asaad, MD, PhD, Brown University

Interactive Lunch Workshop

New Trends in Headache Management in Diverse Populations*

Monday | 12:00 - 1:00 PM
Lake Concord

CHAIR: Richa Tripathi, MD, Emory University

CO-CHAIR: Kristina Lopez, MD, West Virginia University

Headache is a common neurological disorder affecting approximately 40% of the population (per 2021 census). This disorder affects individuals of all age ranges, ethnicities, socio-economic groups and geographical locations (1). This disease is not only painful but can be severely debilitating and affect the quality of life of patients including reduced productivity and economic loss to work-force. With arrival of several newer therapeutics the access to appropriate therapy for headache becomes important. Furthermore, therapy for headache management can change in diverse populations such as pregnant individuals, children as well as geriatric age group. Avoiding therapy associated side effects is of paramount importance. Correctly identifying when one such therapy is indicated can help achieve relief from headaches sooner and prevent loss of work days and economic as well as quality of life impact in such population. Approach and use of different therapies in such populations will be examined during this session which can help neurologist approach therapy in such individuals in a tailored fashion. This session aims to provide audience information regarding headache treatment in such patient groups.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Describe headache treatment modalities and options including pharmacotherapy and device use.
- Discuss when a treatment therapy is appropriate and applicable for an individual based on their clinical condition.
- Implement this knowledge in their patient population when treating headache.

Migraine Management During Pregnancy and in Older Adults
SPEAKER: NIna Riggins, MD, PhD, FANA, FAHS, University of California, San Francisco

Headache Treatment and Management in Pediatric Populations
SPEAKER: Debra O'Donnell, MD, Dayton Children's Hospital

Headache Management in Rural Populations
SPEAKER: Kristina Lopez, MD, West Virginia University

Interactive Lunch Workshop

Diversity in the Neurology Workforce in the Post-Affirmative Action Era*

Monday | 12:00 - 1:00 PM
Lake Nona B

CHAIR: Andrea Schneider, MD, PhD, University of Pennsylvania

CO-CHAIR: Nerissa Ko, MD, MAS, FANA, University of California, San Francisco

In June 2023, the US Supreme Court ended affirmative action in college admissions. In 1996, California voters overturned affirmative action. Since then, colleges and universities in this state have reported decreases in overall student body diversity and also the diversity of the faculty. It is not clear how this may impact the medical force in the US, including diversity in academic neurology. As a field, neurologists are not representative of

the patient diversity in the US. What are ways that institutions can work towards diversification of the field despite the end of affirmative action? This session will include presentations and discussions from neurology faculty directly involved in the recruitment and retention of individuals underrepresented in medicine across the neurology pipeline spectrum (medical school, residency, fellowship, and faculty).

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Identify strategies for increasing diversity across the neurology pipeline spectrum (medical school, residency, fellowship, and faculty).
- Develop strategies to increase diversity across the neurology pipeline spectrum (medical school, residency, fellowship, and faculty).
- Implement strategies for increasing diversity across the neurology pipeline spectrum (medical school, residency, fellowship, and faculty).

Increasing Diversity in the Neurosciences: A Comprehensive Collaborative Approach
SPEAKER: Amanda Brown, PhD, FANA, Johns Hopkins University

Strategies to Increase Diversity in Medical Schools: How Do We Go From Here?
SPEAKER: Sharon Lewis, MD, University of Pennsylvania

Diversifying Neurology Residency and Fellowship Programs: Lessons Learned, Current Strategies, and Future Directions
SPEAKER: Charles Flippen II, MD, FAAN, FANA, University of California, Los Angeles

Fostering Diversity in Academic Neurology Departments
SPEAKER: Jose Romano, MD, FAHA, FAAN, FANA, University of Miami

Additional Lunch Workshop

AUPN Meet the Chairs: Empowering Women Leaders: Successes and Challenges in the Role of Department Chair

Monday | 12:00 - 1:00 PM
Lake Lucerne

CHAIR: John England, MD, FAAN, FANA, Louisiana State University Health Sciences School of Medicine

Prominent chairs of neurology will discuss how they handle their position, including what's involved with being a chair; what the process is for attaining their position, and how to interact with chairs.

This year's focus will be on "Empowering Women Leaders: Successes and Challenges in the Role of Department Chair". The panel of esteemed women Chairs will share their personal journeys and discuss the challenges they've encountered while assuming the role of chair. This interactive session aims to foster a supportive environment for candid conversations, offering valuable perspectives on overcoming obstacles, promoting diversity, and empowering women leaders in the field of neurology.

PANELIST: Laurie Gutmann, MD, FANA, Indiana University

PANELIST: Gwenn Garden, MD, PhD, FANA, University of North Carolina at Chapel Hill

AUPN Meet the Chairs: Empowering Women Leaders: Successes and Challenges in the Role of Department Chair
PANELIST: Alissa Willis, MD, University of Mississippi Medical Center

Women Leaders in Neurology
PANELIST: Page B. Pennell, MD, FANA, University of Pittsburgh School of Medicine

Additional Lunch Workshop

Meet the Editors* (By Invitation Only) *JEC*

Monday | 12:00 - 1:00 PM
Key West A-C

CHAIR: Kenneth Tyler, MD, FANA, University of Colorado

CO-CHAIR: Ahmet Hoke, MD, PhD, FANA, Johns Hopkins University

In this session participants will get to meet the editors of Annals of Neurology, Annals of Clinical and Translational Neurology ("ACTN") and the Annals of the Child Neurology Society (ACNS). Participants will get to better understand the specific areas of interest of the three journals and the process for submitting manuscripts and how they are reviewed.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Describe the process for submitting manuscripts to academic journals.

Enhancing Biomedical Writing Skills
PANELIST: Ahmet Hoke, MD, PhD, FANA, Johns Hopkins University

PANELIST: Kenneth Tyler, MD, FANA, University of Colorado

PANELIST: E. Steve Roach, MD, FANA, The University of Texas at Austin Dell Medical School

Poster Hall Open

Monday | 12:00 - 7:30 PM
Orange Ballrooms A-D, and Foyer 1 (Lower Level)

Break

Monday | 1:00 - 1:15 PM

Plenary Session

Derek Denny-Brown Young Neurological Scholars Symposium* *JEC*

Monday | 1:15 - 4:00 PM
Orange Ballrooms IV-VI

CHAIR: Laurie Gutmann, MD, FANA, Indiana University

CO-CHAIR: Vinita Acharya, MD, FAAN,FANA,FAES, Penn State College of Medicine

The Derek Denny-Brown Young Neurological Scholar Symposium is an opportunity for researchers to share groundbreaking research in the field of Neurology and Neuroscience. This symposium will feature presentations from the 2024 Derek Denny-Brown awardees, and the recipients of the Grass Foundation-ANA Award in Neuroscience, Audrey S. Penn Lectureship and Wolfe Research Prize awardees. Awardees receiving the Distinguished Neurology Teacher Award, the ANA-Persyst IDEAS Professional Development Award, ANA IDEAS Early Career Member Award, and the ANA Awards for Excellence will also be recognized during the symposium.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Recognize the significance of research contributions in the basic and clinical sciences by early and mid-career investigators in neurology and neuroscience.

2024 Derek Denny-Brown Young Neurological Scholar Award
Perinatal Neurodevelopment: Understanding the Dynamic Infant Brain
SPEAKER: Mercedes Paredes, MD, PhD, FANA, University of California San Francisco

Derek Denny-Brown Young Neurological Scholar Award: Physician-Scientist: Clinical
Antithrombotic Treatment Decisions in Patients with Comorbid Hemorrhage-prone Cerebral Small Vessel and Ischemic Vascular Diseases
SPEAKER: Ashkan Shoamanesh, MD, FANA, McMaster University, Canada

2024 Audrey S. Penn Lectureship Award
Exploration of Race, Racism, Race-based Headache Disparities and Professional Ethics
SPEAKER: Larry Charleston IV, MD, MSc, FAHS, Michigan State University

The Grass Foundation – ANA Award in Neuroscience
Developing CRISPR Gene Therapy for Neurodegenerative Diseases
SPEAKER: Claire Clelland, PhD, MD, Mphil, University of California San Francisco

ANA2024 Wolfe Research Prize
Blood Neural Barrier Breakdown Drives Mutant TRPV4 Mediated Motor Nerve Degeneration
SPEAKER: Charlotte Sumner, MD, FANA, Johns Hopkins University

ANA-Persyst IDEAS Professional Development Award
AWARD RECIPIENT: Shawniqua Williams Roberson, MEng, MD, MSCI, Vanderbilt University Medical Center

ANA2024 Distinguished Neurology Teacher Award
AWARD RECIPIENT: Stefano Sandrone, PhD, MEd, Imperial College London

ANA2024 IDEAS Early Career Member Award
AWARD RECIPIENT: Melody Asukile, MBChB, MMED, University of Zambia

AWARD RECIPIENT: Tshibambe Tshimbombu, MD, Barrow Neurological Institute at St. Joseph's Hospital and Medical Center

ANA Award for Excellence: Clinical and Scientific Excellence – Novel Scientific Career Based Contributions (>15 Years)
AWARD RECIPIENT: Clifford Saper, MD, PhD, FANA, Beth Israel Deaconess Medical Center

Break

Monday | 4:00 - 4:15 PM

Restorative Music Session

Monday | 4:15 - 4:45 PM
Orange Ballroom F

Traditional Special Interest Group

Neurocritical Care and TBI: Beyond the ICU: Impacting Long-Term Outcomes Following Neurological Critical Illness and TBI*

Monday | 4:15 - 5:45 PM
Lake Nona A

CHAIR: Danielle K. Sandsmark, MD, PhD, University of Pennsylvania

CO-CHAIR: Julio Furlan, MD, LLB, MBA, PhD, MSc, FRCPC, FAAN, Toronto Rehabilitation Institute and University of Toronto

The session will focus on current clinical and translational research aimed at understanding long-term neurocognitive, psychological, and physical sequelae following neurological critical illness and traumatic injuries of the brain and spinal cord. The long-term impact of critical illness on both survivors and their caregivers has been increasingly recognized in general critical care populations. While initial studies excluded those with neurological insults as the cause of their critical illness, efforts to better understand the effects of neurological critical illness and traumatic injuries of the nervous system have recently begun. While there are many parallels to the general critical care population, there are also distinct considerations in survivors of neurological critical illness, particularly TBI. The impacts on both survivors and caregivers, including emotional distress, psychological impacts, and cognitive functioning, will be discussed. The unique challenges to recovery encountered in marginalized populations will also be explored. The goal of the session is to improve learners' understanding of the long-term impacts of acute neurological injury to ultimately aid in addressing mechanisms of secondary insult and develop

systems of care that lead to improved neurological outcomes and quality of life for survivors and their caregivers.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Identify the risk of long-term neurocognitive, psychological, and physical effects of critical illness and traumatic brain injury.
- Describe the long-term risks of critical neurological illness and traumatic brain injury.
- Discuss the long-term sequelae of neurological critical illness/injury with patients and caregivers.

Long-Term Outcomes after TBI with Special Interest in Women and Marginalized Groups
SPEAKER: Angela Colantonio, PhD, FCAHS, FACRM, University of Toronto

Beyond the ICU: Impacting Long-Term Outcomes Following Neurological Critical Illness and TBI
SPEAKER: Jonathan Rosand, MD, MSc, FANA, Massachusetts General Hospital

Relationship between Social Determinants of Health (SDOH), Clinical Phenotypes, and Disability in Subacute-Long Term TBI
SELECTED ABSTRACT PRESENTER: Maral Sakayan, MD, University of California, Irvine

Can the Incorporation of Quantitative Markers and Death Improve the Prediction of Post-Ischemic Stroke Epilepsy?
SELECTED ABSTRACT PRESENTER: Jennifer Kim, MD, PhD, Yale School of Medicine

Cross-Cutting Special Interest Group

Autoimmune Neurology & MS: Updates and Advances in the Immunobiology and Approaches in Autoimmune Encephalitis*

Monday | 4:15 - 5:45 PM
Lake Monroe A

CHAIR: Amanda Piquet, MD, FAAN, FANA, University of Colorado

CO-CHAIR: Eoin P. Flanagan, MBBCh, Mayo Clinic, Rochester

This session will focus on emerging updates on our understanding of the immunobiology of autoimmune encephalitis and updates in treatment approaches. Topics will highlight recent publications that help advance our understanding of triggers of autoimmune neurologic disorders including infectious triggers and complications from cancer immunotherapy. These topics will highlight recent publications in developing research in the underlying immunobiology of these triggers and recent treatment approaches. Additionally, we will feature topic on additional challenges in the treatment of the Pediatric population with autoimmune encephalitis specifically as this vulnerable group of patients has its own unique set of challenges, particularly in the setting newly available randomized-controlled clinical trials open for recruitment in NMDA receptor autoimmune encephalitis.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Identify common presentations and sequelae of autoimmune neurological diseases.
- Integrate currently available treatment trials into treatment approaches in patients with autoimmune neurological diseases.
- Assess outcomes in treatment approaches in patients with autoimmune neurological diseases to optimize long-term outcomes.

CNS Autoimmunity with Immune Checkpoint Inhibitor Cancer Immunotherapy
SPEAKER: Anastasia Zekeridou, MD, PhD, Mayo Clinic, Rochester

Treatment Approaches in Pediatric Autoimmune Encephalitis
SPEAKER: Grace Yoonheekim Gombolay, MD, MSc, Emory University /Children's Healthcare of Atlanta

The Role of Infectious Triggers in Autoimmune Encephalitis
SPEAKER: Jenny Linnoila, MD, PhD, University of Pittsburgh

Paramagnetic Rim Lesion Evolution is Related to Longitudinal Clinical Disease Progression in People with Multiple Sclerosis
SELECTED ABSTRACT PRESENTER: Jack Reeves, PhD, State University of New York at Buffalo

Kallikrein-10 Gene Mutations in Patients with Stiff-Person Syndrome (SPS): Extensive Immunogenetic Studies Triggered by a GAD-positive Family
SELECTED ABSTRACT PRESENTER: Marinos Dalakas, MD, PhD, Thomas Jeffferson University

Traditional Special Interest Group

Neuromuscular Disease*

Monday | 4:15 - 5:45 PM
Lake Nona B

CHAIR: Hani Kushlaf, MD, FAAN, FANA, FAANEM, University of Cincinnati

CO-CHAIR: Brett Morrison, MD, PhD, Johns Hopkins University

The speakers in this session will cover the following areas: Gene therapy in pediatric neuromuscular disorders, the future of ALS, and advances in inclusion body myositis. Gene therapy in neuromuscular disorders, especially the FDA-approval of gene therapy for Duchenne Muscular Dystrophy and other gene therapies in the pipeline, represents exciting developments in the field; however, practitioners must manage therapy risks and potential adverse effects. There has been continued progress in ALS diagnosis, genetics, and therapeutic development. Inclusion body myositis is the most common myopathy in adults over the age of 50 years; a new IBM xenograft model has been developed and is a platform for testing new therapeutic targets.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Discuss the basics of gene therapy and managing the risk of gene therapy in pediatric neuromuscular disorders.
- Outline the future of ALS diagnosis, biomarkers, and therapeutic development.
- Describe the new IBM xenograft model and other advances in IBM.

What's on the Horizon for ALS
SPEAKER: Jinsy A. Andrews, MD, MSc, FAAN, FANA, Columbia University Irving Medical Center

Advances in Inclusion Body Myositis
SPEAKER: Thomas Lloyd, MD, PhD, FANA, Baylor College of Medicine

Learnings from Gene Therapy in Pediatric Neuromuscular Disorders
SPEAKER: Carsten Bonnemann, MD, FANA, National Institutes of Health

Preclinical Overview of CB03-154 (KCNQ2/3 Channel Opener) for Amyotrophic Lateral Sclerosis (ALS)
SELECTED ABSTRACT PRESENTER: Xiuxiu Liu, PhD, Shanghai Zhimeng Biopharma Inc.

Traditional Special Interest Group

Behavioral Neurology and Dementia: Emerging Diagnostic and Therapeutic Biomarkers in Neurodegeneration*

Monday | 4:15 - 5:45 PM
Lake Monroe B

CHAIR: Lenora Higginbotham, MD, Emory University

CO-CHAIR: Gregg S. Day, MD, MSc, MSCI, Mayo Clinic Florida

The pathophysiology of Alzheimer's disease (AD) and related dementias (ADRD) is extremely complex, extending beyond hallmark proteinopathies to encompass a variety of cellular and molecular systems. Thus, novel diagnostic and therapeutic biomarkers across a wide, heterogenous breadth of pathophysiology will be required to advance precision medicine in neurodegenerative dementia. This session will capture the heterogeneity of biomarker development in AD / ADRD by highlighting advancements across a variety of mechanisms, including amyloid / tau accumulation, neuroinflammation, and cholinergic dysfunction. Plasma biomarkers of phosphorylated tau (p-tau) have demonstrated particularly promising results as diagnostic and prognostic indicators of AD. However, how to best implement these markers in the clinical sphere remains unclear, with questions surrounding screening, access, and cost at the forefront of many debates within the field. Our first guest speaker of this session, Dr. Algeciras-Schimnich, will provide an update on the performance of emerging blood-based biomarkers of AD and the challenges surrounding their clinical implementation. Our next two speakers, Drs. Michelle Ehrlich and Roger Albin, will discuss promising inflammatory and cholinergic dementia targets, respectively. These talks will highlight the diversity of pathophysiology and biomarker development across the dementias.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Describe the sensitivity, specificity, and other performance measures of emerging blood-based biomarkers for AD/ADRD.
- Identify emerging inflammatory targets in AD/ADRD.
- Apply the latest evidence to guide their biomarker assessments of AD/ADRD.
- Implement emerging blood-based biomarkers for AD/ADRD in clinical practice.

Cholinergic System Changes and Cognition in Parkinson Disease
SPEAKER: Roger Albin, MD, FANA, University of Michigan

Manipulation of Microglial Genes in Alzheimer's Disease: When and in Which Direction?
SPEAKER: Michelle Ehrlich, MD, Icahn School of Medicine at Mount Sinai

Update on Performance of Blood-Based Biomarkers in AD
SPEAKER: Alicia Algeciras-Schimnich, PhD, DABCC, FACB, Mayo Clinic, Rochester

Deep Learning-Enhanced PRS: A Pioneering Approach for Personalized Alzheimer's Risk Stratification
SELECTED ABSTRACT PRESENTER: Alokkumar Jha, PhD, Weill Cornell Medicine

Self-supervised Convolutional Neural Network Trained on Retinal Digital Color Images Can Identify Pre-symptomatic Alzheimer's Disease
SELECTED ABSTRACT PRESENTER: Oana Dumitrascu, MD, MSc, Mayo Clinic Arizona

Traditional Special Interest Group

Epileptogenesis: From Basic Mechanisms to Clinical Practice*

Monday | 4:15 - 5:45 PM
Lake Hart

CHAIR: Scott Adney, MD, PhD, Northwestern University

CO-CHAIR: James Gugger, MD, PharmD, University of Rochester

Epileptogenesis is the process by which brain networks are functionally altered in a manner that predispose an individual to spontaneous seizures. This process may occur in individuals with acquired brain injury (e.g., traumatic brain injury, stroke) or a neurogenetic disorder (e.g., tuberous sclerosis complex, Sturge-Weber syndrome). Drivers of epileptogenesis include inflammation, neuron loss, plasticity, and circuit reorganization. Evidence from preclinical models suggests that epilepsy can be prevented by modulation of these targets, but translation to humans remains a challenge. Several large-scale international efforts are underway to uncover mechanisms of epileptogenesis and develop biomarkers to identify and monitor epileptogenesis and eventually carry out clinical trials of antiepileptogenic therapies. In this session we will discuss recent efforts to identify and prevent epileptogenesis in tuberous sclerosis complex as well as preclinical and clinical studies in post-traumatic epilepsy and status epilepticus.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Discuss mechanisms of epileptogenesis relevant to tuberous sclerosis complex, traumatic brain injury, and status epilepticus.
- Identify barriers to identifying and validating biomarkers of epileptogenesis as well as barriers to carrying out feasible clinical trials of anti-epileptogenic therapies.
- Discuss recent efforts in identifying and monitoring the process of epileptogenesis in tuberous sclerosis complex.

Mechanisms of Epileptogenesis in Status Epilepticus
SPEAKER: Jaideep Kapur, MBBS, PhD, FANA, University of Virginia

Tuberous Sclerosis Complex as a Human Model of Epileptogenesis
SPEAKER: Martina Bebin, MD, MPA, FANA, University of Alabama at Birmingham

Traumatic Brain Injury as a Human Model of Epileptogenesis
SPEAKER: James Gugger, MD, PharmD, University of Rochester

Clinical Characteristics and Seizure Outcomes of Temporal and Extratemporal Lobe Epilepsy Surgery at a Single Center in Cape Town, South Africa
SELECTED ABSTRACT PRESENTER: Melody Asukile, MBChB, MMED, University of Zambia

Traditional Special Interest Group

Global Neurology: Hot Topics in Global Neurology*

Monday | 4:15 - 5:45 PM
Lake Eola B

CHAIR: B. Jeanne Billioux, MD, National Institutes of Health

CO-CHAIR: Melody Asukile, MBChB, MMED, University of Cape Town/University of Zambia

Interest in global health in neurology is growing rapidly. The ANA Global Health SIG strives to unify members with common interests in global neurology to create collaborations and initiatives to improve neurology education, training, and research in low and middle-income countries (LMICs). The Global Health SIG focuses on neurology research and clinical care in sub-Saharan Africa, Asia, Latin America, and the Middle East. This year, we hope

to highlight some of the "hot topics" in Global Neurology, including new developments in malaria, aspects of climate change, the challenges faced by investigators and clinicians in conflict zones, and neuroscience research capacity building in LMICs. Specifically, we aim to 1) highlight various new updates regarding malaria, a disease affecting millions in LMICs. Some topics to be covered will include new preventive vaccines, new treatment trials, and the evolving face of malaria in light of climate change. We also hope to address 2) considerations and ethical dilemmas in neurologic care and research in conflict zones. Finally, we will address 3) neuroscience research capacity building in LMICs, a very germaine issue in the ever-expanding field of global neurology. We have invited three speakers who will share their expertise on these timely topics. By highlighting these three important and current issues in global neurology, we hope that our audience will be better informed regarding these current and sometimes controversial issues, and will be able to apply best practices to their own research and clinical care in global neurology.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Explain new advances for the treatment and prevention of malaria.
- Discuss ongoing issues related to neurologic care and research in conflict zones.
- Identify best practices to address gaps in neuroscience research capacity building in LMICs.

Neuroscience Research Capacity Building in LMICs
SPEAKER: Aristea Galanopoulou, MD, PhD, FANA, Albert Einstein College of Medicine

Cerebral Malaria Updates: Vaccines, Climate Change, and Beyond
SPEAKER: Douglas Postels, MD, MS, Children's National Hospital

Neurologic Care in Conflict Zones
SPEAKER: Agnieszka Kielian, MD, Boston Children's Hospital

The Impact of Malaria on the Central Nervous System- Does Coma Really Matter?
SELECTED ABSTRACT PRESENTER: Archana Patel, MD, MPH, MSc, Boston Children's Hospital, Harvard Medical School

Satellite Symposium

Evolving Perspectives in Alzheimer's disease: Reaching an Earlier Diagnosis, Understanding Neuroinflammation, and Exploring Therapeutic Advances

Monday | 4:15 - 5:45 PM
Orlando Ballroom III

SPONSORED BY PHYSICIANS' EDUCATION RESOURCE

CHAIR: Alireza Atri, MD, PhD, Chief Medical Officer, Banner Research Banner Alzheimer's and Research Institutes (Phoenix, Sun City, Tucson, AZ) Director, Banner Sun Health Research Institute

FACULTY:

Erik Musiek, MD, PhD, Charlotte & Paul Hagemann Professor of Neurology Knight Alzheimer's Disease Research Center Memory Diagnostic Clinic Washington University School of Medicine in St. Louis, St. Louis, MO, USA

Malú Gámez Tansey, PhD, Norman and Susan Fixel Chair in Parkinson's Disease Professor of Neuroscience and Neurology Director, Parkinson's Foundation Research Center of Excellence, Editor-in-Chief, *Nature Partner Journal Parkinson's Disease* College of Medicine |University of Florida Gainsville, FL

The First and Only FDA-Approved Prescription Treatment for Friedreich Ataxia in Adults and Adolescents Aged 16 Years and Older

Monday | 4:15 - 5:45 PM
Lake Mizell A

SPONSORED BY BIOGEN SKYCLARYS

CHAIR: Omer A. Abdul Hamid, MD, Attending Physician, Neuromuscular & Electrodiagnostic Medicine/ General Child Neurology, Nemours Children's Hospital, Division of Neurology

Poster Presentation and Reception *JEC*

Monday | 6:00 - 7:30 PM
Orange Ballrooms A-D, and Foyer 1 (Lower Level)

President's Reception *JEC*

Monday | 7:30 - 10:30 PM
Foyer 2 (Lower Level) and Orange Ballroom E

TUESDAY, SEPTEMBER 17, 2024

Grab-and-Go Breakfast

Tuesday | 6:30 - 8:30 AM
Orange Foyer 1 (Lower Level)

Professional Development Workshop
Early Career & Early to Mid Career Level

Landing the Career Track you Want and Career Transitions*

Tuesday | 7:00 - 8:30 AM
Lake Nona A

CHAIR: Midori Yenari, MD, FANA, University of California, San Francisco

CO-CHAIR: Claire Henchcliffe, MD, DPhi, FAAN FANA, University of California, Irvine

This workshop will explore the three major academic tracks of research, clinical and education in neurology. Speakers will share tips, challenges and strategies for each of these areas followed by a breakout question/answer session for each of these areas for more focused discussion.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Navigate the appointments and promotions process at their respective institutions.
- Find opportunities in respective tracks for optimal chances of advancement.
- Discuss criteria for different career tracks.

Impacting Neurology Through Research: A Perspective
SPEAKER: Rajiv Ratan, MD, PhD, FANA, Burke Neurological Institute

Building a Career in Neurology Education
SPEAKER: Joseph Safdieh, MD, FAAN, FANA, Weill Cornell Medical College

Clinical Career Tracks: Challenges and Strategies for Success
SPEAKER: Rimas Lukas, MD , FANA, Northwestern University

Professional Development Workshop
Early Career & Early to Mid Career Level

Building Your Career in Global Neurology* *JEC*

Tuesday | 7:00 - 8:30 AM
Lake Nona B

CHAIR: Christa O'Hana San Luis Nobleza, MD, MSCI, FNCS, Institution University of Tennessee Health Science Center/Baptist Memorial Hospital

CO-CHAIR: Omar Siddiqi, MD, MPH, Beth Israel Deaconess Medical Center

Global Neurology programs around the world support clinicians, researchers and educators in decreasing health care disparities in resource- limited settings and improve patient care for those with neurologic disorders. Their role in public health in Neurological diseases cannot be overstated. There is a need to increase awareness of the field of Global Neurology as well as how to develop budding neurologists and early- and mid-career neurologists on how to navigate a path towards this field if they become interested. The path towards a career in Global Neurology will be discussed in this session. A discussion on the basic terminologies and foundation of the subspecialty of Global Neurology. This discussion will then pave the way for the talk on how to build a Global Neurology career. This topic will cover a range of types of Global Neurology career such as research, education or clinical careers. Ultimately, a discussion on how it is to be a Global Neurologist, the challenges faced and how to mitigate these challenges are going to be presented. These three talks will overall establish a wholistic foundation for any attendee thinking of a career in Global Neurology.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Explain the Global Neurology career track.
- Develop a career in Global Neurology.
- Apply their knowledge of Global Neurology in their practice.

Developing a Career in Global Health
SPEAKER: Monica Maria Diaz, MD, MS, University of North Carolina at Chapel Hill

In-Practice: Life of a Global Neurologist
SPEAKER: Felicia Chow, MD, MAS, University of California San Francisco

Global Neurology: Nuts and Bolts
SPEAKER: Clio Rubinos, MD, MS, University of North Carolina

Professional Development Workshop Program and Residency Director Level

Navigating Fellowships* *JEC PR*

Tuesday | 7:00 - 8:30 AM
Lake Florence

CHAIR: Raymond Price, MD, FANA, University of Pennsylvania

CO-CHAIR: Elisabeth Marsh, MD, FAHA, FANA, FAAN, Johns Hopkins University

This workshop will focus on recent changes in fellowship programming and the effect these changes have had on academic training programs. Speakers will discuss the challenges that arise from earlier match dates, along with a changing landscape that may include additional programming such as neurohospitalist tracks and more traditional postdoc experiences for those interested in returning to the lab following training.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Describe the challenges that arise from earlier application deadlines and have increased knowledge of strategies that may help increase exposure to ambulatory subspecialties for undifferentiated trainees.
- Discuss potential future changes to fellowship programs that will better allow them to prepare and counsel their trainees.

Earlier Decisions Tax Programs
SPEAKER: Christina Wilson, MD, PhD, University of Florida

Basic Science: Should MD/PhDs do a Postdoc Rather than Traditional Fellowship?
SPEAKER: Michael Kornberg, MD, PhD, MS, Johns Hopkins University

Neurohospitalists: Need Even For Those Hospitalists?
SPEAKER: Brian Sauer, MD, PhD, University of Colorado

Professional Development Workshop
AUPN Chair Level

Navigating Neurotherapeutic Horizons: Managing the Practical Aspects of the Novel Alzheimer's Therapeutics*

Tuesday | 7:00 - 8:30 AM
Lake Lucerne

CHAIR: Richard O'Brien, MD, PhD, Duke University

This session will describe the process of setting up an outpatient infusion program for the two new Alzheimer's biologicals Lecanemab and Donanemab. Included in this will be the institution of processes to ensure the safety of patients and the challenges of working with insurers.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Describe appropriate indications for lecanemab.
- Explain common and serious adverse reactions and how to appropriately monitor.
- Discuss the process of working with insurance companies.

Managing the Practical Aspects of the Novel Alzheimer's Therapeutics
SPEAKER: Gwenn Garden, MD, PhD, FANA, University of North Carolina

Design and Implementation of a Disease Modifying Therapy Program at UAB
SPEAKER: David Geldmacher, MD, FACP, FANA, University of Alabama

Overview of Anti-Amyloid Therapies: Considerations for Prescribing and Monitoring
SPEAKER: Kim Johnson, MD, Duke University Medical Center

Break

Tuesday | 8:30 - 8:45 AM

Plenary Session

Autoimmune vs Infectious Encephalitis: Dilemmas and Solutions* *JEC*

Tuesday | 8:45 - 10:45 AM
Orlando Ballrooms IV - VI

CHAIR: Allen Aksamit, MD, FANA, Mayo Clinic, Rochester

CO-CHAIR: Arun Venkatesan, MD, PhD, FANA, Johns Hopkins University

Encephalitis as a rare but devastating neurologic disease presents a challenge for both the clinician and researcher. Recent advances in molecular diagnostics and recent treatment consensus statements have made the approach to recognition and treatment more complex but more satisfying creating more prompt diagnosis and treatment options. However, pitfalls have also been revealed.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Distinguish infectious encephalitis from autoimmune encephalitis.
- Apply the treatments for autoimmune encephalitis and determine whether short-term versus long-term therapy is required.
- Utilize imaging and serological testing to successfully diagnosis the correct illness.

The Advantages and Pitfalls of Metagenomic Sequencing in Encephalitis
SPEAKER: Avindra Nath, MD, FANA, National Institutes of Health

Corticosteroids in Herpes Simplex Encephalitis, and Other Therapeutics in Viral Encephalitis: Lessons Learned
SPEAKER: Michel Toledano, MD, Mayo Clinic, Rochester

Enhanced Diagnostic Precision in AE to Guide Prognosis and Treatment
SPEAKER: Eoin Flanagan, MBBCh, Mayo Clinic, Rochester

Treatments and Trials in Autoimmune Encephalitis: The Urgent Need for Evidence
SPEAKER: Stacey Clardy, MD, PhD, FANA, University of Utah

Characterizing Delayed Neurotoxicity Syndromes Following Treatment with Anti-BCMA CAR-T Cell Therapies
EMERGING SCHOLAR PRESENTERS: Ahmed Abdelhak, MD, University of California, San Francisco

Proinflammatory Cytokines in the CSF Aneurysmal SAH Patients are Associated with Shunt Placement
EMERGING SCHOLAR PRESENTERS: Jessica Magid-Bernstein, MD, PhD, Yale School of Medicine

Grab-and-Go Lunch

Tuesday | 10:45 AM - 12:30 PM
Foyer 1 (Lower Level)

Break

Tuesday | 10:45 - 11:00 AM

Traditional Special Interest Group

Cerebrovascular Disease*

Tuesday | 11:00 - 12:30 PM
Lake Eola A

CHAIR: Peter Kang, MD, MSCI, Washington University in St. Louis

CO-CHAIR: Christoph Stretz, MD, FAAN, FANA, Brown University

The Cerebrovascular Disease Special Interest Group aims to bring important updates of interest to members of the American Neurological Association attending the Annual Meeting. We specifically will be including a cross section of contemporary and cutting-edge issues in Stroke and Brain Health. The areas represented include - Advances in Pediatric Acute Ischemic Stroke; The Impact of Sex and Gender on Stroke Outcomes; The Influence of Sleep Health in Disparities in Stroke Risk and Health Outcomes.

These three areas will represent the research interest of the majority of the academic stroke neurologists attending the ANA. As a result, we anticipate that this session will be well attended, and represent the most updated science from three leading experts in the field. We will also feature the best two abstracts submitted to the ANA in two podium presentations. We will dedicate a third spot for the opportunity for one early career (at the trainee, Instructor or Assistant Professor level) abstract submission author to present their research during the session. This will encourage future early career submissions, and hopefully continued involvement in the ANA across the academic course of the attendees.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Describe recent advances in Neuroimaging advances and stroke care protocols.
- Apply knowledge in the diagnostic evaluation and management of pediatric stroke patients.
- Implement strategies to improve sleep health through addressing disparities in stroke risk.

Sleep Health Influences Disparities in Stroke Risk and Health Outcomes
SPEAKER: Sandeep Khot, MD, MPH, University of Washington/Harborview Stroke Center

Advances in Pediatric Ischemic Stroke
SPEAKER: Kristin Guilliams, MD, MSCI, Washington University in St. Louis

The Impact of Sex and Gender on Stroke Outcomes
SPEAKER: Tracy Madsen, MD, PhD, FAHA, FACEP, Brown University

White Matter Lesion Burden, Blood-Brain Barrier Disruption, and Worse Cognitive Performance in Patients with CADASIL
SELECTED ABSTRACT PRESENTER: Richard Leigh, MD, Johns Hopkins University School of Medicine

Tracking Leukocytes to Understand Neutrophil Extravasation and Persistence after Ischemic Stroke and Reperfusion
SELECTED ABSTRACT PRESENTER: Erika Arias, BSc Northwestern University

Prevalence and In-Hospital Outcomes Associated with Ischemic Stroke and Concomitant Cardiomyopathy
SELECTED ABSTRACT PRESENTER: Katelyn McNamara, BS, Yale School of Medicine

Traditional Special Interest Group

Neuro-ophthalmology and Neuro-vestibular Disease*

Tuesday | 11:00 AM - 12:30 PM
Lake Nona B

CHAIR: Scott Grossman, MD, New York University

CO-CHAIR: Neena Cherayil, MD, Northwestern University

This will be a forum for discussion of recent updates in neuro-ophthalmology/neuro-vestibular disease, as well as an opportunity for selected abstracts to be presented.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Utilize the visual/neuro-ophthalmic system to diagnose neurologic disease, and articulate rationale for ocular motor evaluation of the acutely dizzy patient in the ER.
- Apply novel diagnostic techniques for diagnosis of dizziness in the ER.
- Describe the importance of relevant and comprehensive neuro-ophthalmic and vestibular exams.

Choroidal Abnormalities and Visual Outcomes in Children with NF1-Associated Optic Pathway Gliomas
SPEAKER: Gena Heidary, MD, PhD, Boston Children's Hospital

Quantifying Induced Nystagmus Using a Smartphone Eye Tracking Application
SPEAKER: Ali Tehrani, MD, Johns Hopkins University

Updates on the Diagnostic Criteria for MOGAD
SPEAKER: Eoin Flanagan, MBBCh, Mayo Clinic, Rochester

Gaps in Neuro-Vestibular Eye Movement Assessment by Clinical Neurologists in the AVERT Randomized Trial
SELECTED ABSTRACT PRESENTER: Pouya Bastani, MD, Johns Hopkins University

Traditional Special Interest Group

Headache & Pain*

Tuesday | 11:00 AM - 12:30 PM
Lake Monroe A

CHAIR: Seniha Ozudogru, MD, University of Pennsylvania

This Headache and Pain Special Interest Group session will focus on visual symptoms of migraine and advances in the functional MRI studies in migraine pathophysiology.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Recognize visual symptoms of migraine.
- Describe the underlying pathophysiological mechanism of migraine.

Clinical Presentation and Pathophysiological Differences of Visual Symptoms
SPEAKER: Kathleen Digre, MD, FANA, University of Utah

Migraine Pathophysiology: Insights from Functional Imaging
SPEAKER: Catherine Chong, PhD, FAAN, FAHS, Mayo Clinic, Arizona

A Systematic Review Comparing the Strengths and Weaknesses of Neuromodulating Treatments for Pain Management in Fibromyalgia: ECT, TMS, and Psychedelics
SELECTED ABSTRACT PRESENTER: Sofia Flores, BS, University of Medicine & Health Sciences

Comparison of the Region of Interest (ROI) Selection Methods for Diffusion Tensor Image Analysis Along Perivascular Space (DTI-ALPS) Studies
SELECTED ABSTRACT PRESENTER: Enchao Qiu, MD, PhD, Thomas Jefferson University

Traditional Special Interest Group

Movement Disorders

Tuesday | 11:00 AM - 12:30 PM
Lake Nona A

CHAIR: Sheng-Han Kuo, MD, FANA, Columbia University

CO-CHAIR: Chi-Ying (Roy) Lin, MD, MPH, Baylor College of Medicine

In the Movement Disorders SIG, we will be covering important diagnostic tools and neurostimulation therapeutics in adults and pediatric neurological patients. Specifically, Dr. Roy Freeman from BIDMC will discuss the skin synuclein signature in diverse synucleinopathy, focusing on the values of skin biopsy in making differential diagnoses for multiple system atrophy, Parkinson's disease, dementia with Lewy bodies, and pure autonomic failure. In addition, given that the cerebellum has become posited as an attractive target for the deep brain stimulation, we invited Dr. Marta San Luciano from UCSF to discuss the safety and clinical benefit of using the cerebellar deep brain stimulation in persons with dyskinetic cerebral palsy. Dr. Nora Vanegas-Arroyave from Baylor College of Medicine will also discuss the controversies of spinal cord stimulation as well as its therapeutic potential for gait disturbance in Parkinson's disease.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Apply patient selection criteria for optimal outcomes in cerebellar deep brain stimulation and spinal cord stimulation.
- Apply electrode placement techniques for optimal outcomes in cerebellar deep brain stimulation and spinal cord stimulation.
- Apply post-operative management protocols for optimal outcomes in cerebellar deep brain stimulation and spinal cord stimulation.

Controversies of Spinal Cord Stimulation for Gait Disturbance in Parkinson's Disease
SPEAKER: Nora Arroyave Vanegas, MD, Baylor College of Medicine

Synuclein Deposition in the Skin - A Sensitive and Specific Diagnostic Biomarker in the Synucleinopathies
SPEAKER: Roy Freeman, MD, Beth Israel Deaconess Medical Center

Cerebellar Deep Brain Stimulation in Cerebral Palsy
SPEAKER: Marta San Luciano, MD, MS, FAAN, University of California, San Francisco

Genome-sequencing in Multiple System Atrophy: Identification of Novel Susceptibility Loci and Generation of a Foundational Resource
SELECTED ABSTRACT PRESENTER: Sonja Scholz, MD, PhD, National Institutes of Health

Traditional Special Interest Group

Neuro-oncology: Novel Devices For The Treatment of High-Grade Glioma: A Closer Look at Focused Ultrasound, Laser Interstitial Thermal Therapy (LITT), and Tumor Treating Fields*

Tuesday | 11:00 AM - 12:30 PM
Lake Eola B

CHAIR: Douglas Ney, MD, FANA, University of Colorado

CO-CHAIR: Eric Wong, MD, MA, FANA, FAAN, Rhode Island Hospital

High-grade gliomas are notoriously difficult to treat and have poor outcomes. Novel therapies are desperately needed to improve outcomes and shift treatment paradigms. While the traditional research focus has been on pharmaceutical development, more recently novel devices have shown promise in treating gliomas and are being actively investigated in clinical trials. Focused ultrasound represents a promising new technique for glioblastoma allowing for penetration into brain tissue and transiently disrupting the blood-brain barrier thereby improving delivery of chemotherapeutic drugs into tumor tissue. The feasibility and safety of focused ultrasound has been shown in clinical trials and therapeutic trials are ongoing to demonstrate efficacy. Laser interstitial thermal therapy (LITT) is a novel technique allowing for tumor ablation in surgically inaccessible regions of the brain. The use of LITT may be associated with improved outcomes when used as a salvage therapy. Lastly, tumor treating fields (TTF) has been demonstrated in a large-scale clinical trial to improve survival in patients with newly diagnosed glioblastoma when used in the adjuvant setting. Ongoing clinical trials seek to capitalize on this improvement by using TTF in the concomitant setting with radiation therapy or in combination with novel therapeutics. Treatment of high-grade glioma with novel devices is at the forefront of therapeutics and results from ongoing clinical trials are eagerly awaited to determine the impact these devices may have on patient outcomes.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Describe the role of novel devices in the treatment of high-grade glioma.
- Discuss the available evidence and/or lack of evidence for novel devices.
- Apply novel techniques to patients with high-grade gliomas and understand when to refer for appropriate device therapies.

Tumor Treating Fields Treatment Device for Glioblastoma
SPEAKER: Eric Wong, MD, MA, FANA, FAAN, Rhode Island Hospital

Focused US for BBB Disruption
SPEAKER: Wael Asaad, MD, PhD, Brown University

Role of Laser Interstitial Thermal Therapy in Brain Tumors
SPEAKER: Sujit Prabhu, MD, FRCS(Ed), FAANS, University of Texas MD Anderson Cancer Center

Medical Comorbidities Potentially Modify Survival of Glioblastoma Patients
SELECTED ABSTRACT PRESENTER: Jonathan Arditi, ScB, The Warren Alpert Medical School of Brown University

Traditional Special Interest Group

Sleep Disorders and Circadian Rhythms*

Tuesday | 11:00 AM - 12:30 PM
Lake Monroe B

CHAIR: Brendan Lucey, MD, FANA, Washington University in St. Louis

CO-CHAIR: Aleksander Videnovic, MD, MSc, FANA, Massachusetts General Hospital

The Sleep Disorders and Circadian Rhythms Special Interest Group will feature three speakers. Dr. Devin Brown will speak about sleep and obstructive sleep apnea. Dr. Tiffany Braley will

speak about sleep and multiple sclerosis. Dr. Bryce Mander will speak about sleep and cognitive reserve. These dynamic speakers will present innovative research in how sleep and sleep interventions impact neurological disorders such as stroke and multiple sclerosis. Dr. Mander's talk on sleep and cognitive reserve has potential impact on neurological disorders broadly that negatively impact cognitive function such as neurodegenerative diseases.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Identify how sleep disorders impact neurological diseases and symptoms related to those diseases such as cognitive dysfunction.
- Utilize new evidence in the evaluation of sleep disorders in neurological diseases.
- Apply new evidence in managing patients with neurological disorders who have sleep disturbances.

Sleep and Multiple Sclerosis
SPEAKER: Tiffany Braley, MD, MS, FANA, University of Michigan

OSA and Stroke Prevention
SPEAKER: Devin Brown, MD, MS, FANA, University of Michigan

Sleep Stage Specific Effects of Sleep Apnea on Cerebrovascular Pathology and Memory in Older Adults at Risk for Alzheimer's Disease
SPEAKER: Bryce Mander, PhD, University of California, Irvine

Sleep Disturbances Induced by TDP-43 Proteinopathy are Rescued by ATXN2 Knockdown in Drosophila and Mouse Models of Sporadic ALS
SELECTED ABSTRACT PRESENTER: Defne Amado, MD, PhD, University of Pennsylvania

Additional Lunch Workshop

ANA Medical Student Forum: A Conversation with the Neurology Chairs* (By Invitation Only) *JEC*

Tuesday | 11:00 AM - 12:30 PM
Lake Florence

CHAIR: Clifton Gooch, MD, FANA, University of South Florida

This session provides a rare opportunity for medical students attending the ANA meeting to hear from distinguished academic Chairs of Neurology, and to directly interact with them. The session will focus on future academic career paths in the field, how to make specialty and subspecialty choices, important considerations in applying to residency training, and more. Much of the forum will be dedicated to questions from the students, and conversations with the chairs.

LEARNING OBJECTIVES:

At the conclusion of this session, attendees should be able to:

- Discuss how to make specialty and subspecialty choices for their future careers.
- Identify and apply to quality training programs.
- Discuss strategies for rewarding and satisfying careers in neurology.

PANELIST: Ahmed Anwar, MD, Advent Health Neuroscience institute

PANELIST: Kevin Barrett, MD, MSc, FANA, Mayo Clinic, Jacksonville FL

PANELIST: Michael Jaffee, MD, FAAN, FANA, University of Florida

PANELIST: Jose Romano, MD, FAHA, FAAN, FANA, University of Miami

Additional Lunch Workshop

AUPN Networking Lunch for Small Academic Departments

Tuesday | 11:00 AM - 12:30 PM
Champions Gate

CHAIR: Salvador Cruz-Flores, MD, Texas Tech University Health Sciences Center El Paso

While all Neurology departments share some common attributes, there are challenges and opportunities that are unique to smaller academic departments, including handling teaching and clinical service responsibilities, while protecting time for research and faculty development.

This session, sponsored by the AUPN and hosted by Salvador Cruz-Flores, MD, Texas Tech University Health Sciences Center El Paso, provides an opportunity for chairs of smaller departments to meet, discuss issues and share strategies. All Chairs are welcome to attend.

Meeting Adjourned

Tuesday | 12:30 PM

SATELLITE SYMPOSIA

The ANA values the participation of our corporate partners and is supportive of the role that members of this community continue to play in our efforts to provide neurologists and neuroscientists with quality educational programs. These symposia are not part of the ANA official educational program, and the sessions and content are not endorsed by ANA.

SUNDAY, SEPTEMBER 15, 2024

7:00 PM – 8:00 PM
ORLANDO BALLROOM III

Optimizing Alzheimer's disease Care: The Power of Early Diagnosis in an Evolving Treatment Landscape

SPONSORED BY EISAI, INC.

MONDAY, SEPTEMBER 16, 2024

4:15 PM – 5:45 PM
ORLANDO BALLROOM III

Evolving Perspectives in Alzheimer's disease: Reaching an Earlier Diagnosis, Understanding Neuroinflammation, and Exploring Therapeutic Advances

SPONSORED BY PHYSICIANS' EDUCATION RESOURCE

4:15 PM – 5:45 PM
LAKE MIZELL A

SKYCLARYS, the First and Only FDA-Approved Prescription Treatment for Friedreich Ataxia in Adults and Adolescents Aged 16 Years and Older

SPONSORED BY BIOGEN

2024 AWARDEES

F.E. BENNETT MEMORIAL LECTURESHIP AWARD

The F.E. Bennett Memorial Lectureship was established in 1979 to recognize outstanding neuroscientists.

SUNDAY, SEPTEMBER 15, 2024 | 1:00 PM – 3:00 PM

Brian Litt, MD, PhD, FANA

University of Pennsylvania

AI Applications for Implantable Devices in Neuropsychiatric Diseases

This award will be presented during the Presidential Symposium - Present and Future Applications of AI in Neurological Care and Research.

Brian Litt, M.D., is the Perelman Professor of Neurology, Neurosurgery and Bioengineering at the University of Pennsylvania. He is an epileptologist, researcher, entrepreneur, and authority on Neuroengineering, implantable brain devices, AI, and Neurotechnology. He is the Director of Penn's Center for Neuroengineering and Therapeutics, Penn Health-Tech and past Director of the Penn Epilepsy Center. He has founded and advised several start-up and established companies, trained over 85 PhD students and Postdoctoral Fellows, and won awards, including the NIH Director's Pioneer Award, the NINDS Landis Award for Mentoring, and the American Epilepsy Society's Clinical Research Award.

SORIANO LECTURESHIP AWARD

This award was established in 1987 by ANA member Dr. Victor Soriano and his wife to provide a "brilliant lecture delivered by an outstanding scientist" who is a member of the Association.

SATURDAY, SEPTEMBER 14, 2024 | 5:45 PM – 7:15 PM

Merit Cudkowicz, MD, MSc, FANA

Massachusetts General Hospital

Human Genetic Therapies for ALS: Current Status and Future Prospects

This award will be presented during the Opening Symposium: The Dawn of Gene Therapy in ALS.

Dr. Merit Cudkowicz is the Chair of Neurology and Director or the Sean M. Healey & AMG Center for ALS at Massachusetts General Hospital and the Julieanne Dorn Professor of Neurology at Harvard Medical School in Boston. Dr. Cudkowicz is one of the founders and former co-directors of the Northeast ALS Consortium (NEALS), a group of over 150 clinical sites in the United States, Canada, Europe and the Middle East dedicated to performing collaborative academic-led clinical trials and research studies in ALS. She helped bring forward two of the most recent new FDA approved treatments for people with ALS, Relyvrio and Qalsody. She is leading the first Platform Trial initiative in ALS and is also the Principal Investigator of the Clinical Coordination Center for the National Institute of Neurological Disorders and Stroke's Neurology Network of Excellence in Clinical Trials (NeuroNEXT). Dr. Cudkowicz also mentors neurologists in careers in experimental therapeutics.

RAYMOND D. ADAMS LECTURESHIP AWARD

This award honors Dr. Raymond D. Adams, emeritus Bullard Professor of Neuropathy at Harvard Medical School and emeritus Chief of Neurology Service at the Massachusetts General Hospital.

TUESDAY, SEPTEMBER 17, 2024 | 8:45 AM – 10:45 AM

Avindra Nath, MD, FANA

National Institutes of Health

The Advantages and Pitfalls of Metagenomic Sequencing in Infectious and Autoimmune Encephalitis

This award will be presented during the Plenary Session: Autoimmune vs Infectious Encephalitis: Dilemmas and Solutions.

Dr. Nath is the Clinical Director of the National Institute of Neurological Disorders and Stroke (NINDS) at NIH, where he is also Chief of the Section of Infections of the Nervous System, Director of the Translational Center for Neurological Sciences. He is a physician–scientist who specializes in neuro-immunology and neurovirology. His research is focused on clinical manifestations, pathophysiology and treatment of emerging neurological infections with a focus on HIV infection. In recent years, he has studied the neurological complications of endogenous retroviruses, Ebola, Zika virus and SARS-CoV-2 and conducts research on patients with undiagnosed neuroinflammatory disorders.

DEREK DENNY BROWN YOUNG NEUROLOGICAL SCHOLARS SYMPOSIUM

The Derek Denny-Brown Young Neurological Scholar Award, recognizes early- to mid-career neurologists and neuroscientists. This award honors those neurologists and neuroscientists in the first 12 years of their career at the assistant/associate faculty (equivalent) level who have made outstanding basic or clinical scientific advances toward the prevention, diagnosis, treatment, and cure of neurological diseases.

DEREK DENNY-BROWN YOUNG NEUROLOGICAL SCHOLAR AWARD: PHYSICIAN-SCIENTIST - BASIC

MONDAY, SEPTEMBER 16, 2024 | 1:15 PM – 4:00 PM

Mercedes Paredes, MD, PhD, FANA

University of California, San Francisco

Perinatal Neurodevelopment: Understanding the Dynamic Infant Brain

This award will be presented during the Derek Denny-Brown Young Neurological Scholar Symposium.

Mercedes Paredes is associate professor in the Department of Neurology and an associate director of the Medical Scientist Training Program at UCSF. Her lab focuses on identifying features of neuronal progenitor proliferation and migration that have evolved in the gyrated brain, such as in human. She is also a practicing neurologist, treating epilepsy patients with neurodevelopmental disorders, and holds a passion for mentoring UIM (or underrepresented in medicine) in careers in medicine, STEM, and neurology.

2024 AWARDEES

DEREK DENNY-BROWN YOUNG NEUROLOGICAL SCHOLAR AWARD: PHYSICIAN-SCIENTIST - CLINICAL

MONDAY, SEPTEMBER 16, 2024 | 1:15 PM – 4:00 PM

Ashkan Shoamanesh, MD, FRCPC, FESO, FANA

McMaster University, Canada

Antithrombotic Treatment Decisions in Patients with Comorbid Hemorrhage-prone Cerebral Small Vessel and Ischemic Vascular Diseases

This award will be presented during the Derek Denny-Brown Young Neurological Scholar Symposium.

Dr. Ashkan Shoamanesh is an Associate Professor of Medicine (Div. of Neurology) and a stroke neurologist at McMaster University, where he holds the Marta and Owen Boris Chair in Stroke Research and Care. He is the founding Director of the Hemorrhagic Stroke Research Program and a Senior Scientist at the affiliated Population Health Research Institute in Hamilton, Canada. His clinical trials program is working on establishing new treatment and standards of care that prevent stroke and reduce stroke-related disability. He leads several multicentre randomized trials as PI/Co-PI, including ENRICH-AF (NCT03950076; Lancet 2023), OCEANIC-STROKE (NCT05686070), SATURN-MRI (NCT03936361) and CoVasc-ICH (NCT05159219), and has held central leadership roles in the ANNEXa-I (NEJM 2024), PACIFIC-STROKE (Lancet 2022) and NAVIGATE-ESUS (NEJM 2018) trials.

Dr. Shoamanesh has published over 160 manuscripts in leading scientific journals and serves on the editorial boards of Stroke, International Journal of Stroke and Canadian Journal of Neurological Sciences.

THE GRASS FOUNDATION — ANA AWARD IN NEUROSCIENCE

In collaboration with the Grass Foundation this award was established in 2007 to honor outstanding young investigators conducting research in basic or clinical neuroscience.

MONDAY, SEPTEMBER 16, 2024 | 1:15 PM – 4:00 PM

Claire Clelland, MD, PhD, Mphil

University of California, San Francsico

Developing CRISPR Gene Therapy for Neurodegenerative Diseases

This award will be presented during the Derek Denny-Brown Young Neurological Scholars Symposium.

Claire Clelland, PhD, MD, MPhil, is an Assistant Professor in the UCSF Department of Neurology. As a neurologist, she specializes in caring for patients with dementia and cognitive symptoms at the UCSF Memory & Aging Center. Her lab at the UCSF Weill Institute for Neurosciences develops novel therapies for neurodegenerative diseases. Her current work centers on creating novel CRISPR gene therapies for genetic forms of dementia and ALS, utilizing patient iPSCs to model disease, advanced sequencing technologies and cutting edge CRISPR technologies to develop first-in-class gene therapies for CNS diseases. In addition, the Clelland lab is committed to promoting equity and justice in science in medicine. One of the pillars of our lab is the mentoring and advancement of trainees from underrepresented backgrounds to become the next generation of scientific leaders.

2024 AWARDEES

AUDREY S. PENN LECTURESHIP AWARD

This award is provided to an ANA member who conducts outstanding research, program-building, or educational scholarship to promote health equity. The recipient's novel and significant work has had or may have a far-reaching impact on:

1) Improving equity in the prevention, detection, treatment, survivorship of neurological conditions
2) Building clinical programs to care for historically medically underserved populations, and/or:
3) Commitment to diversity and inclusion in the medical workforce

MONDAY, SEPTEMBER 16, 2024 | 1:15 PM – 4:00 PM EDT

Larry Charleston IV, MD, Msc, FAHS

Michigan State University

Exploration of Race, Racism, Race-based Headache Disparities and Professional Ethics

This award will be presented during the Derek Denny-Brown Young Neurological Scholar Symposium.

Dr. Larry Charleston IV is Director of the Headache & Facial Pain Division, Director of Faculty Development, Professor of Neurology in Michigan State University College of Human Medicine Department of Neurology and Ophthalmology, and Adjunct faculty at the Jefferson Headache Center. He is certified in Adult Neurology by the American Board of Psychiatry and Neurology and Headache Medicine by the United Council of Neurological Subspecialties. He is founder of Charleston Health Neurology & Head Pain Consultants, Co-founder of Charleston International, a National Institute of Minority Health and Health Disparities' Research Institute Scholar, and a fellow of the American Headache Society.

ANA AWARD FOR EXCELLENCE: CLINICAL AND SCIENTIFIC EXCELLENCE – NOVEL SCIENTIFIC CAREER BASED CONTRIBUTIONS (>15 YEARS)

The ANA strives to recognize the full scope of academic neurology and neuroscience represented by its members. The ANA Award for Excellence recognizes individuals who have had an exceptional impact on the field through their research, leadership, educational endeavors, or service to the ANA itself. The ANA Award for Excellence in the category of Clinical and Scientific Excellence – Novel Scientific Career Based Contributions Over 15 Years is bestowed to an individual who has made novel scientific contributions that reshape the field's conceptual understanding of neurological disorders, made sustained or breakthrough contributions to the development of therapeutics, or helped transform or expand diagnostic tools and technologies.

MONDAY, SEPTEMBER 16, 2024 | 1:15 PM – 4:00 PM

Clifford B. Saper, MD, PhD, FANA

Beth Israel Deaconess Medical Center, Harvard Medical School

This award will be presented during the Derek Denny-Brown Young Neurological Scholar Symposium.

Dr. Saper graduated with his MD and PhD degrees from Washington University and did his neurolgy residency at Cornell/New York Hospital under Drs. Fred Plum and Jerry Posner. After time on the faculty at Washington University and the University of Chicago, he became the James Jackson Putnam Professor of Neurology at Harvard Medical School and chaired the Department of Neurology at Beth Israel Deaconess Medical Center from 1992-2021. Dr. Saper was the Editor-in-Chief of Annals of Neurology from 2013-2021. He studies the brain circuitry for wake-sleep and circadian rhythms and how this is affected by neurodegenerative disorders.

2024 AWARDEES

DISTINGUISHED NEUROLOGY TEACHER AWARD

The award recognizes and rewards contributions by gifted and talented teachers of neurology.

MONDAY, SEPTEMBER 16, 2024 | 1:15 PM – 4:00 PM

Stefano Sandorne, PhD, SFHEA

Imperial College London

This award will be presented during the Derek Denny-Brown Young Neurological Scholar Symposium.

Stefano Sandrone is an Italian neuroscientist and educationalist working at Imperial College London. He is the youngest Distinguished Neurology Teacher Award winner and the first European to win this award. He has also won the Science Educator Award presented by the Society for Neuroscience, the Miriam Friedman Ben-David Award from the Association for Medical Education in Europe and the B. Baker Teacher Recognition Award (twice) from the American Academy of Neurology. He wrote three books, including Nobel Life, in which he interviewed 24 Nobel Laureates about their life stories, advice for future generations, and what remains to be discovered.

ANA-PERSYST IDEAS PROFESSIONAL DEVELOPMENT AWARD

Made possible through the generosity of the Persyst Development Corporation, the ANA-Persyst IDEAS Professional Development Award supports career development opportunities for individuals from communities that are underrepresented in academic neurology and neuroscience. The award recognizes an early-career academic neurologist or neuroscientist who is an ANA member working in the field of epilepsy.

MONDAY, SEPTEMBER 16, 2024 | 1:15 PM – 4:00 PM

Shawniqua Williams Roberson, M.Eng., MD

Vanderbilt University Medical Center

This award will be presented during the Derek Denny-Brown Young Neurological Scholars Symposium.

Dr. Williams Roberson is an Assistant Professor in the departments of Neurology and Biomedical Engineering at Vanderbilt University. She currently serves as the medical director of ICU EEG services at Vanderbilt University Medical Center and an investigator in the Critical Illness, Brain Dysfunction and Survivorship (CIBS) Center. Her clinical interests include the evaluation and management of refractory epilepsy, critical illness encephalopathy (ICU delirium) and related neurological disorders, with an emphasis on their cognitive and neuropsychiatric comorbidities. Her research interests center on the use of neurophysiologic signal processing and neuromodulation to study and ameliorate disorders of consciousness and cognition among people with epilepsy, ICU delirium, and post-ICU cognitive impairment.

2024 AWARDEES

ANA IDEAS EARLY CAREER MEMBER AWARD

This award was established in 2021 to support the professional development of early career physician-scientists and researchers underrepresented in medicine (URiM).

MONDAY, SEPTEMBER 16, 2024 | 1:15 PM – 4:00 PM

Melody Asukile, MBChB, MMED

University of Zambia, University Teaching Hospital

This award will be presented during the Derek Denny-Brown Young Neurological Scholar Symposium.

Dr Asukile is one of Zambia's first Zambian neurologists. She completed neurology residency in 2020 at the University of Cape Town, South Africa. She further specialized in Clinical Epileptology there, funded by an education award from the International Federation of Clinical Neurophysiology. Currently, she serves as a lecturer and attending neurologist at the University Teaching Hospitals Adult Hospital in Lusaka. She also directs the national electroencephalography laboratory and is treasurer of the Neurological Association of Zambia. Her research interests include epilepsy diagnosis and management in resource-limited settings and the use of telemedicine for neurology education and service provision.

ANA IDEAS EARLY CAREER MEMBER AWARD

This award was established to support the professional development of early career physician-scientists and researchers underrepresented in medicine (URiM).

MONDAY, SEPTEMBER 16, 2024 | 1:15 PM – 4:00 PM

Tshibambe Nathanael Tshimbombu, MD

Barrow Neurological Institute

This award will be presented during the Derek Denny-Brown Young Neurological Scholar Symposium.

Tshibambe Nathanael Tshimbombu (TNT) grew up in the Democratic Republic of Congo and moved to the U.S. amid political unrest. Academically gifted, he graduated as valedictorian from College La Fontaine High School and later earned an Associate of Science in Chemistry from Georgia Perimeter College. He furthered his education at Dartmouth, obtaining a bachelor's in psychology, a business certification from the Tuck School of Business at Dartmouth, and a medical degree from Dartmouth Geisel School of Medicine. Currently, he is a resident at Barrow Neurological Institute. A certified human rights consultant, TNT founded Bonsomi, an organization that has provided medical care to over 50,000 underserved Africans. His tireless advocacy for health equity has earned him numerous accolades, including the 2024 C. Everett Koop Courage Award, the 2023 Health Innovator to Watch Award, the 2023 40 Under 40 Public Health Catalyst Award, and nominations for Forbes 30 Under 30. TNT's leadership and dedication have made a profound impact on countless lives, showcasing his unwavering commitment to reducing global health disparities.

WOLFE RESEARCH PRIZE FOR IDENTIFYING NEW CAUSES OR NOVEL TREATMENT OF NEUROPATHY AND RELATED DISORDERS

The award honors an outstanding investigator in the field of neuropathy or related disorders who has made significant contributions to the understanding of pathogenesis or treatment of these conditions..

MONDAY, SEPTEMBER 16, 2024 | 1:15 PM – 4:00 PM

Charlotte Sumner, MD, FANA

Johns Hopkins University

Blood Neural Barrier Breakdown Drives Mutant TRPV4 Mediated Motor Nerve Degeneration

This award will be presented during the Derek Denny-Brown Young Neurological Scholar Symposium.

Dr. Sumner is a Professor of Neurology, Neuroscience and Genetic Medicine at Johns Hopkins University School of Medicine, Vice Chair for Clinical Research, and President of the Peripheral Nerve Society. She cares for patients with genetically-mediated neuromuscular diseases and co-directs the Johns Hopkins MDA Care Center and the Spinal Muscular Atrophy (SMA), and the Charcot-Marie-Tooth (CMT) clinics. Her laboratory focuses on understanding the genetic and cellular pathogenesis of motor neuron and peripheral nerve disorders with particular attention to identifying novel disease genes, characterizing molecular and cellular disease mechanisms, and developing therapeutics. She particularly enjoys teaching at all levels.

ANA 2024

149th Annual Meeting of the American Neurological Association

THANK YOU!

PLATINUM SPONSOR:

Eisai

hhc human health care

GOLD SPONSOR:

goto PER® .com

SPONSORS AND EXHIBITORS:

ADVENTHEALTH NEUROSCIENCE INSTITUTE
ASTRAZENECA
AUPN
AXIVA HEALTH SOLUTIONS
CDC/ALS REGISTRY
GBR MEDICAL
IMMUNOVANT
LAMBER-EATON LEMS FAMILY ASSOCIATION
LILLY
MEDEIA
NEUROELECTRICS
OMNISCIENT NEUROTECHNOLOGY
ROSMANSEARCH
SAREPTA THERAPEUTICS
SOMALOGIC OPERATING CO.
thinkCADASIL
UCB
WILEY

INDEPENDENT MEDICAL EDUCATION GRANTS:

Abbvie
Eisai, Inc.
Lilly

ANA 2024
149th Annual Meeting of the American Neurological Association

ABSTRACT REVIEWERS

We want to thank the experts who reviewed the almost 500 abstracts submitted in 18 categories for inclusion in this year's poster hall. They performed outstanding service for the ANA. Based on these ratings and comments, authors of 30 impressive studies were selected to give short oral presentations of their abstracts during both Plenary and the SIG Series sessions

Jayant Acharya, MD, FANA, SIU School of Medicine

Allen Aksamit, MD, FANA, Mayo Clinic

Yagiz Altun, MD, PhD, Albert Einstein College of Medicine

Muhammad Alvi, MD, MBA, West Virginia University

Beau Ances, MD, PhD, Washington University in Saint Louis

Piero Antuono, MD, Medical College of Wisconsin

Anwar Ahmed, MD, Advent Health Orlando

Zoe Arvanitakis, MD, MS, Rush University

Kevin Barrett, MD, MSc, FANA, Mayo Clinic

Rohini Bhole, MD, MS, FANA, FAAN, University of Virginia

Craig Blackstone, MD, PhD, FANA, Massachusetts General Hospital/Harvard Medical School

Devin Brown, MD, MS, University of Michigan

Seenaiah Byreddy, MD, Unity Point Clinic, University of Iowa

Katherine Carroll, MD, Northwestern University

Neena Cherayil, MD, Northwestern University

Steve Cramer, MD, MMSc, University of California, Los Angeles

Albert (Gus) Davis, MD, Washington University, St. Louis

Ramon Diaz-Arrastia, MD, PhD, University of Pennsylvania

Cheran Elangovan, MBBS, University of Tennessee Health Science Center

Xiang Fang, MD, PhD, University of Texas, Medical Branch

Sam Gandy, MD, PhD, Icahn School of Medicine at Mount Sinai

Romergryko (Romer) Geocadin, MD, FANA, The Johns Hopkins University

Clifton Gooch, MD, FANA, University of South Florida

Howard Goodkin, MD, PhD, University of Virginia

Rebecca Gottesman, MD PhD, FANA, National Institutes of Health

Kemar Green, DO, Johns Hopkins University School of Medicine

David Greer, MD, MA, FANA, Boston Medical Center

Andrea Gropman, MD, Children's National Hospital

James Gugger, MD, PharmD, University of Pennsylvania

Michael Guo, MD, PhD, University of Pennsylvania

Roy Hamilton, MD, MS, University of Pennsylvania

Claire Henchcliffe, MD, DPhil, University of California, Irvine

Nils Henninger, MD, PhD, University of Massachusetts, Chan Medical School

Bo Hu, MD, PhD, Houston Methodist Research Institute

Michael Jaffee, MD, FAAN, FANA, University of Florida

Amanda Jagolino-Cole, MD, FAHA, FAAN, FANA, McGovern Medical School at the University of Texas Health Science Center at Houston

Frances E. Jensen, MD, FACP, FANA, FAAN, FAES, University of Pennsylvania

Ioannis Karakis, MD, PhD, MSc, Emory University

Andrew Kayser, MD, PhD, FANA, University of California, San Francisco

ABSTRACT REVIEWERS

Minjee Kim, MD, MS, Northwestern University

John Kincaid, MD, Indiana University School of Medicine

Brendan Lucey, MD, Washington University

Elisabeth Marsh, MD, The Johns Hopkins University

Farrah Mateen, MD, PhD, Massachusetts General Hospital, Harvard Medical School

Daniela Maria Menichella, MD,PhD, Northwestern University

Vanessa Merker, PhD, Massachusetts General Hospital

Margherita Milone, MD, PhD, Mayo Clinic

Cassie Mitchell, PhD, Georgia Institute of Technology, Emory University

Tahseen Mozaffar, MD, University of California, Irvine

Santosh Murthy, MD, MPH, FANA, Weill Cornell Medicine

Neil Nadkarni, MD, Stony Brook University

Alexandra Nelson, MD, PhD, University of California, San Francisco

Sarah Nelson, MD, MPH, Tufts Medical Center

Doug Ney, MD, University of Colorado

Kevin Pacheco-Barrios, MD, MSc, MPH, Spaulding Rehabilitation Hospital

Jack Parent, MD, University of Michigan

Chilvana Patel, MD, FAAN, FANA, University of Texas, Medical Branch

Annapurna Poduri, MD, MPH, Boston's Children's Hospital

Ashok Reddy Polu, MD, Fort Sanders Regional Medical Center, Covenant Health

Jose Javier Provencio, MD, University of Virginia

Pazhani Ranganathan, MD, DM, FRCP, FEBN, FEAN, FAAN, FANA, ML, Pazhani Neuro Centre

Laura Ranum, MD, University of Florida

John Richert, MD, Richert Partners LLC

Nina Riggins, MD, PhD, FAAN, FAHS, Brain Performance Center and Research Institute

Jose Romano, MD, FAHA, FAAN, FANA, University of Miami

M. Elizabeth Ross, MD, PhD, FANA, Weill Cornell Medicine

Bhaskar Roy, MBBS, MHS, Yale School of Medicine

Lauren Sansing, MD, MS, FANA, Yale University

Andrea Schneider, MD, PhD, University of Pennsylvania

Sonja Scholz, MD, PhD, National Institutes of Health

Nina Schor, MD, PhD, FANA, National Institute of Health/NINDS

Duygu Selcen, MD, Mayo Clinic

Shashank Shekhar, MD, MSc, Duke University School Of Medicine

Xin-Ming Shen, PhD, Mayo Clinic

Ludy Shih, MD, Boston University

Lesli Skolarus, MD, MS, Northwestern University

Kelly Sloane, MD, University of Pennsylvania

Christoph Stretz, MD, Brown University

Richa Tripathi, MD, MS, Emory University

Raymond Turner, PhD, MD, Georgetown University

Mark Wainwright, MD, PhD, Seattle Children's Hospital

Yu Wang, MD, PhD, University of Michigan

Allison Willis, MD, MS, FANA University of Pennsylvania

Michael Wilson, MD, University of California, San Francisco

Eric Wong, MD, MA, FANA, FAAN, Rhode Island Hospital

Midori Yenari, MD, University of California, San Francisco

2024 COMMITTEES

Board of Directors

DIRECTOR
Beau Ances, MD, PhD, MSc, FANA
2023-2026
Washington University in St. Louis

DIRECTOR
Devin Brown, MD, MS, FANA
2022-2025
University of Michigan

DIRECTOR
Salvador Cruz-Flores, MD, MPH, FANA
2022-2025
Texas Tech University

DIRECTOR
Howard Goodkin, MD, PhD, FANA
2023-2026
University of Virginia

DIRECTOR
Ming Guo, MD, PhD, FANA
2021-2024
University of California, Los Angeles

DIRECTOR
Roy Hamiliton, MD, MS, FANA
2023-2026
University of Pennsylvania

DIRECTOR
Elizabeth Marsh, MD, FANA
2021-2024
Johns Hopkins University

DIRECTOR
Avindra Nath, MD, FANA
2021-2024
National Institutes of Health

DIRECTOR
Rajiv Ratan, MD, PhD, FANA
2022-2025
Burke Neurological Institute

DIRECTOR
Caroline Tanner, MD, PhD, FANA
2023-2026
University of California, San Francisco

EX-OFFICIO
Ahmet Hoke, MD, FANA
2022-2026
Johns Hopkins University

EX-OFFICIO
Kenneth Tyler, MD, FANA
2022-2025
University of Colorado

EX-OFFICO
Sara Stern-Nezer, MD, MPH
2023-2024
University of California, Irvine

Annual Meeting Programming (AMP) Committee

CHAIR
Allison Willis, MD, MS
2023-2025
University Of Pennsylvania

MEMBER
Allen Aksamit, MD, FANA
2023-2026
Mayo Clinic

MEMBER
Beau Ances, MD, PhD, MSC, FANA
2021-2024
Washington University In St. Louis

MEMBER
Rohini Bhole, MD, PhD, FANA
2023-2026
University Of Virginia

MEMBER
Roy Hamilton, MD, MS, FANA
2021-2024
University Of Pennsylvania

2024 COMMITTEES

MEMBER
Brendan Lucey, MD
2023-2026
Washington University School of Medicine

MEMBER
Daniela Maria Menichella, MD, PhD, FANA
2023-2026
Northwestern University

MEMBER
Jack Parent, MD, FANA
2021-2024
University of Michigan

MEMBER
Annapurna Poduri, MD, MPH
2021-2024
Boston's Children Hospital

MEMBER
Laura Ranum, PhD, FANA
2023-2026
University of Florida

MEMBER
Rafael Llinas, MD, FANA
2023-2026
Johns Hopkins University

MEMBER & SPECIAL INTEREST GROUP LIASON
Howard Goodkin, MD, PhD, FANA
2021-2025
University of Virginia

MEMBER & PROFESSIONAL DEVELOPMENT WORKSHOPS SUBCOMMITTEE CHAIR
Claire Henchcliffe, MD, DPHIL, FANA
2022-2024
University of California, Irvine

MEMBER & INTERACTIVE LUNCH WORKSHOPS SUB-COMMITTEE CHAIR
Cassie Mitchell, PhD
2022-2024
Georgia Institute of Technology

MEMBER & ANA-NINDS CAREER DEVELOPMENT SYMPOSIUM
Lauren Sansing, MD, MS, FANA
2021-2024
Yale University

EX-OFFICIO
Clifton L. Gooch, MD, FANA
2023-2024
University of South Florida

EX-OFFICIO
Frances Jensen, MD, FACP, FANA
2019-2025
University of Pennsylvania

EX-OFFICIO
M. Elizabeth Ross, MD, PhD, FANA
2020-2027
Weill Cornell Medicine

EX-OFFICIO
Laura Balcer, MD, MSCE, FANA
2022 - 2024
New York University

EX-OFFCIO
Tish Weigand, PhD
National Institute of Neurological Disorders and Stroke

Professional Development Workshops Subcommittee

CHAIR
Claire Henchcliffe, MD, DPhil, FANA
2022-2024
University of California, Irvine

MEMBER
Jayant Acharya, MD, FANA
2021-2024
Southern Illinois University

2024 COMMITTEES

MEMBER
Katherine Carroll, MD
2023-2026
Northwestern University

MEMBER
Christa Nobleza, MD, FANA
2021-2024
University of Mississippi

MEMBER
Kelly Sloane, MD
2022-2025
University of Pennsylvania

MEMBER
Michael Wilson, MD, MAS, FANA
2022-2025
University of California, San Francisco

MEMBER
Midori Yenari, MD, FANA
2023-2026
University of California, San Francsico

ANA BOARD LIASON
Romergryko (Romer) Geocadin, MD, FANA
2022-2024
Johns Hopkins University

Interactive Lunch Workshop Subcommittee

CHAIR
Cassie Mitchell, PhD
2022-2024
Georgia Institute of Technology

MEMBER
Albert (Gus) Davis, MD, PhD
2023-2026
Washington University in St. Louis

MEMBER
James Gugger, MD, PharmD
2022-2025
University of Pennsylvania

MEMBER
Amanda Jagolino-Cole, MD, FANA
2023-2026
McGovern Medical School at the University of Texas Health Science Center at Houston

MEMBER
Andrew Kayser, MD, PhD, FANA
2022-2025
University of California, San Francisco

MEMBER
Andrea Schneider, MD, PhD
2022-2025
University of Pennsylvania

MEMBER
Richa Tripathi, MD
2022-2025
Emory University

MEMBER
Mark Wainwright, MD, PhD
2016-2024
Seattle Children's Hospital

MEMBER
Eric Wong, MD
2022-2025
Rhode Island Hospital

ANA BOARD LIASON
Lesli Skolarus, MD, MS, FANA
2023-2025
Northwestern University

Local Arrangements Subcommittee

CHAIR
Clifton L. Gooch, MD, FANA
2023-2024
University of South Florida

MEMBER
Ahmed Anwar, MD
2023-2024
Advent Health

2024 COMMITTEES

MEMBER
Kevin Barrett, MD, MSc, FANA
2023-2024
Mayo Clinic

MEMBER
Michael Jaffee, MD, FANA
2023-2024
University of Florida

MEMBER
Jose Romano, MD, FANA
2023-2024
University of Miami

MEMBER
Ramon Bautista, MD, MBA
2024
UF Health of Jacksonville