

NEW!
Dates • Format • Value



SCIENTIFIC ABSTRACT LISTING AND MEETING INFORMATION

Early Registration Deadline:
March 24, 2016

VANCOUVER, BC, CANADA

NEW DATES FRIDAY, April 15—THURSDAY, April 21, 2016

AAN
●●●●● **2016**
Annual Meeting

All-inclusive Re

Save Time · Save Money ·

New for 2016: No course fees

Experience all Annual Meeting science—and a whole lot more—without breaking the bank.

Accessing 2,700+ scientific abstracts, more than 230 education courses, practice and advocacy programming, and networking opportunities has never been easier, more affordable, or less stressful than at the innovative new AAN Annual Meeting. That's because we're offering access to most everything the meeting has to offer for one all-inclusive rate, making your experience at the world's largest gathering of neurologists better than ever.

New all-inclusive registration rates:

- ▶ \$0 Student/Senior Member
- ▶ \$395* Non-neurologist Member
- ▶ \$1,195* Nonmember
- ▶ \$245* Junior Member
- ▶ \$695* Neurologist Member



* Before March 24.

While you can access more than 95% of this year's programming for one all-inclusive registration rate, a few special programs are subject to closure due to capacity, or require a separate fee. View the list at AAN.com/view/SpecialPrograms.

Registration Rate

Save Unnecessary Stress

See the value!

		2015 Meeting Price	2016 Meeting Price
Registration (Member Neurologist Rate)		\$305	\$695
C12	Neurologic Complications of Medical Disease	\$115	FREE
C37	Neurology Update I	\$225	FREE
C143	Neurology Update II	\$225	FREE
C6	The Practice of Neurology	\$135	FREE
C73	Therapy in Neurology	\$225	FREE
TOTAL		\$1,230	\$695
		Total Savings	\$535

Register today!

AAN.com/view/AM16

VANCOUVER, BC, CANADA
FRIDAY, April 15—THURSDAY, April 21, 2016





In MS, it starts with a flicker...



DISEASE ACTIVITY AND PERMANENT DAMAGE

Even a flicker of disease activity can have potentially substantial consequences for MS patients. In MS, clinical and subclinical disease activity can occur early in the disease course and persist throughout the disease.¹⁻³

IF SUBCLINICAL ACTIVITY IS NOT ADDRESSED EARLIER IN THE DISEASE COURSE, WHAT ARE THE CLINICAL CONSEQUENCES?

LEARN MORE AT [MSIMMUNOLOGY.COM](https://msimmunology.com)

This content originates from outside of Canada.

References: 1. Polman CH, Reingold SC, Banwell B, et al. Diagnostic criteria for multiple sclerosis: 2010 revisions to the McDonald criteria. *Ann Neurol*. 2011;69(2):292-302. 2. Scott TF, Hackett CT, Quigley MR, Schramke CJ. Relapsing multiple sclerosis patients treated with disease modifying therapy exhibit highly variable disease progression: a predictive model. *Clin Neurol*. 2014;127:86-92. 3. Prosperini L, Gallo V, Petsas N, Borriello G, Pozzilli C. One-year MRI scan predicts clinical response to interferon beta in multiple sclerosis. *Eur J Neurol*. 2009;16(11):1202-1209.

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Current as of 2/26/16. Program subject to change.

Experience an ALL-NEW Annual

See what's new

All-inclusive Registration Rate*

- ▶ No more individual course fees
- ▶ Access to most everything the Annual Meeting has to offer—all week long and at no additional cost to you

Flexible, Stress-Free Scheduling

- ▶ New two-hour course format allows you to sample a wider variety of programs
- ▶ No pre-planning required to attend the courses most interesting to you—simply pay your all-inclusive registration rate and come and go from courses at your convenience

Science Now Featured Every Day

- ▶ Plenary sessions will take place every day with no conflicting courses
- ▶ Platform and poster sessions will also be available daily, beginning Saturday
- ▶ Poster Halls open all day with one poster session per day, beginning Saturday. Author stand-by sessions each evening
- ▶ Poster discussion sessions have been revamped, featuring eight five-minute lectures on selected posters offered daily over the lunch-hour

**Special Programs Requiring Additional Fees*

While you can access more than 95% of this year's programming for one all-inclusive registration rate, a few special programs are subject to closure due to capacity, or require a separate fee. For more information on what is not included with your registration, please visit AAN.com/view/SpecialPrograms.

New Scientific Programs Throughout the Week

- ▶ 14 Integrated Neuroscience Session (INS) topics will provide an in-depth look into research highlights around a specific subspecialty using a variety of presentation formats
- ▶ Invited Science Sessions will highlight cutting-edge research presented at the International Parkinson and Movement Disorder Society and European Committee for Treatment and Research in Multiple Sclerosis
- ▶ Half-day program on Frontiers in Child Neurology: Cultivating Careers, Transitioning Care, and Highlighting Scientific Development

Experiential Learning Areas

- ▶ Dynamic and interactive learning opportunities to explore, engage, and reflect
- ▶ Continue the learning outside of a traditional classroom
- ▶ Open Friday–Thursday throughout the convention center
- ▶ See *page 122* » for details



Meeting!



Lisa M. DeAngelis, MD, FAAN
Chair, AAN Science Committee

“ See You in Vancouver ”

An AAN Annual Meeting is always the place to discover the very latest, groundbreaking research across a wide variety of neurology topics—and 2016 will be no exception. In fact, I believe the 68th Annual Meeting is going to be the best one yet! We’re building upon the successes of previous meetings to offer a truly enhanced, innovative experience with easier access to the cutting-edge science you’ve come to expect. I look forward to seeing you in beautiful Vancouver!



Did You Know Registration Is Now All-inclusive?

3 Easy Steps

- 1 Register with the **all-inclusive registration* rate for access to virtually all the meeting programs.**
- 2 Use the pages starting on [page 13 »](#) to plan your week full of education programs, scientific sessions, and other social and informational events. After you complete your registration, use the Itinerary Planner or the Annual Meeting Mobile App to customize your schedule.
- 3 Experience the world's largest gathering of neurologists!

Ways to Register

Online

AAN.com/view/register

Telephone

US/Canada: (800) 676-4226
International: (415) 979-2283

Registration Deadline: **March 24, 2016**

Registrations received after March 24, 2016, will be processed at a higher rate.

Hotel Reservation Deadline: **February 24, 2016**

Questions

Online: aanam.cmrushehelp.com

To obtain a registration form or to pay by check, please contact CMR. Registration forms will only be accepted for check payments.

Registration Options

Annual Meeting Registration

The new all-inclusive meeting registration fee* is determined by AAN member type.

Gold Registration

Upgrade your meeting registration to include a copy of Annual Meeting On Demand.

**Skills Workshops, Maintenance of Certification Exam Preparation Course, Between Venus and Mars: How Great Leadership Adopts Traits from the Best of Both Genders, Improving Your Leadership Skills: A Practical Approach, Women in Leadership, Research Career Development Symposium, The Most Important Tool in Your Black Bag: Gallup StrengthsFinder™ Assessment I & II, Continuum® Test Your Knowledge: A Multiple-choice Question Review I & II, Bedside Evidence-based Medicine: How to Find and Deconstruct Articles in Order to Take Care of Patients I & II, and Genomic Neurology Workshop: Developing Practical Knowledge of Tools and Concepts Through Case Studies I & II, are not included in the Annual Meeting registration price. These courses require pre-registration, may have a separate registration fee, and are subject to closure due to reaching maximum capacity.*

Ways to Save

- Renew your AAN membership or join the AAN for maximum registration savings. Visit AAN.com/view/membership.
- Register by the March 24, 2016, early registration deadline to avoid increased rates after this date.

2016 AAN Annual Meeting Fees

<i>Note: All prices in US dollars, on-site rates will be in Canadian dollars</i>	Early Registration (Before March 24, 2016)	Late Registration (After March 24, 2016)
Students	\$0	\$0
Senior/Honorary	\$0	\$0
Junior	\$245	\$335
Non-neurologist Member¹	\$395	\$545
Neurologist Member²	\$695	\$955
Nonmember	\$1,195	\$1,635

¹Business Administrator, Non-neurologist Clinician, Nurse Practitioner/Physician Assistant, Research Scientist, Research Coordinator, Research Scientist Fellow

²Active, Associate, Fellow, Early Career

Additional Information

Changes in Education Programs

Most* education courses are now included with your registration fee and do not require pre-registration. Visit the online Itinerary Planner or Annual Meeting Mobile App to add courses to your schedule at your convenience.

Canceled or Closed Programs

Education programs may be closed due to reaching maximum capacity or canceled due to insufficient enrollment. In the event of cancellation, registration for the canceled course will be fully refunded for courses that have a separate registration fee. The AAN is not responsible for airfare, hotel, or other costs incurred by participants in the event of program or registration closure or cancellation.

Cancellations/Refunds of Registration

Until March 24, 2016—Refund less \$50 administrative fee

March 25–April 7, 2016—Refund less \$100 administrative fee

After April 8, 2016—No refund

- ▶ All cancellations must be submitted in writing to aanam.cmrushelp.com or faxed to (415) 293-4071.
- ▶ No-shows will not receive a refund.
- ▶ Name substitutions are not permitted.
- ▶ No refunds will be processed for amounts of \$20 or less.

Special Accommodations Deadline: March 24, 2016

The Vancouver Convention Centre and the AAN strive to accommodate all visitors. Information booths, designated parking, and assisted listening devices are available. If you require special accommodation to attend the Annual Meeting, submit your request while registering online or contact Laurie Dixon no later than March 24, 2016, at ldixon@aan.com or (612) 928-6154.

Kosher meals may be provided at any breakfast or lunch and must be arranged on or before March 24, 2016, through the registration website or by contacting AAN Registration/CMR at aanam.cmrushelp.com, (800) 676-4226, or (415) 979-2283. There is a \$50 surcharge per kosher meal. On-site requests cannot be accommodated. There are no refunds for kosher meals.

Group Registration Deadline: March 30, 2016

Group registrations are those in which 10 or more individuals' fees are paid for with one check or credit card. Special registration instructions are available online AAN.com/view/register or by contacting CMR's Group Registration at (800) 676-4226 (US/Canada) or (415) 979-2283 (International) or aanam.cmrushelp.com. See [page 169](#) » for housing information.

What Is Not Included with Registration

While the new all-inclusive registration rate provides an exceptional value, a few programs are not included, require a separate registration fee, and are subject to closure due to reaching maximum capacity. View the list at AAN.com/view/SpecialPrograms.

Early Gold Registration (Before March 24, 2016)	Late Gold Registration (After March 24, 2016)
\$199	\$199
\$399	\$399
\$444	\$534
\$594	\$744
\$1,094	\$1,354
\$1,794	\$2,234

AAN
2016
Annual Meeting

Meeting-at-a-Glance

Experience the New Schedule. Experience New Opportunities.

The new, condensed timeframe of the 2016 Annual Meeting offers countless opportunities for meaningful changes. Most education courses will take place in 2-hour increments; poster sessions will begin Saturday and run through Thursday; Plenary Sessions will take place daily; and much more!

	Fri April 15	Sat April 16	Sun April 17
6:00 a.m.		Education & Science 6:30 a.m.–8:30 a.m.	Education & Science 6:30 a.m.–8:30 a.m.
7:00 a.m.			
8:00 a.m.	C1 8:00 a.m.–12:00 p.m.		
9:00 a.m.	C2 Clerkship and Program Directors Conference 8:00 a.m.–3:00 p.m.	Contemporary Clinical Issues Plenary Session 9:00 a.m.–11:30 a.m.	Presidential Plenary Session 9:00 a.m.–12:00 p.m.
10:00 a.m.			
11:00 a.m.			
12:00 p.m.		Frontiers in Child Neurology 11:30 a.m.–6:00 p.m.	
1:00 p.m.	C6–C8 1:00 p.m.–3:00 p.m.	Education & Science 1:00 p.m.–3:00 p.m.	Education & Science 1:00 p.m.–3:00 p.m.
2:00 p.m.	C9–C11 1:00 p.m.–5:00 p.m.		
3:00 p.m.		Business Meeting	
4:00 p.m.	C12–C14 3:30 p.m.–5:30 p.m.	Education & Science 3:30 p.m.–5:30 p.m.	Education & Science 3:30 p.m.–5:30 p.m.
5:00 p.m.			
6:00 p.m.	Hot Topics Plenary Session 5:30 p.m.–7:00 p.m.	Faculty and Trainee Reception 6:00 p.m.–9:00 p.m.	Opening Party 6:00 p.m.–10:00 p.m. 6:00 p.m.–8:00 p.m. Neurobow!®
7:00 p.m.		Education 6:30 p.m.–9:30 p.m.	8:10 p.m.–8:15 p.m. Lighting of the Olympic Torch
8:00 p.m.		Industry Therapeutic Updates 7:00 p.m.–10:00 p.m.	8:15 p.m.–9:00 p.m. Native Thunder Productions Presents Story Telling Through Native Dancing
9:00 p.m.			8:45 p.m.–10:00 p.m. Sixwire

Mon April 18**Education & Science**

6:30 a.m.–8:30 a.m.

**Controversies in Neurology
Plenary Session**

9:00 a.m.–11:30 a.m.

Poster Session
8:30 a.m.–7:00 p.m.
Presenters Stand by Posters 5:30 p.m.–7:00 p.m.**Education & Science**

1:00 p.m.–3:00 p.m.

Education & Science

3:30 p.m.–5:30 p.m.

Exhibit Hall
4:30 p.m.–6:30 p.m.**Tue** April 19**Education
& Science**

6:30 a.m.–8:30 a.m.

**2016 AAN
Run/Walk for
Brain Research**
6:30 a.m.–8:30 a.m.**Frontiers in Neuroscience
Plenary Session**

9:00 a.m.–11:30 a.m.

Awards Luncheon
11:30 a.m.–1:00 p.m.**Exhibit Hall**
11:00 a.m.–4:00 p.m.**Poster Session**
8:30 a.m.–7:00 p.m.
Presenters Stand by Posters 5:30 p.m.–7:00 p.m.**Education
& Science**

1:00 p.m.–3:00 p.m.

**Education
& Science**

3:30 p.m.–5:30 p.m.

**Industry
Therapeutic Updates**
7:00 p.m.–
10:00 p.m.**Wed** April 20**Education & Science**

6:30 a.m.–8:30 a.m.

**Clinical Trials
Plenary Session**

9:00 a.m.–11:00 a.m.

Poster Session
8:30 a.m.–7:00 p.m.
Presenters Stand by Posters 5:30 p.m.–7:00 p.m.**Education
& Science**

1:00 p.m.–3:00 p.m.

**Education
& Science**

3:30 p.m.–5:30 p.m.

Emerging Science

6:00 p.m.–7:30 p.m.

**Industry
Therapeutic Updates**
7:00 p.m.–
10:00 p.m.**Thu** April 21**Education & Science**

6:30 a.m.–8:30 a.m.

**Neurology Year
in Review
Plenary Session**

9:00 a.m.–11:30 a.m.

Poster Session
8:30 a.m.–5:30 p.m.
Presenters Stand by Posters 4:00 p.m.–5:30 p.m.**Education
& Science**1:00 p.m.–
3:00 p.m.**Education
& Science**

3:30 p.m.–5:30 p.m.

Closing Party Happy Hour
5:30 p.m.–7:00 p.m.

Understanding the Program Listing

Course Listing Indicators

Course Numbers Indicate Program Types

- C** Course
- I** Integrated Neuroscience Session (scientific session combining invited speakers, data blitz presentations, and poster discussion)
- P** Poster Session (a hall of posters on a variety of topics)
- S** Scientific Session (didactic session featuring abstracts)

Course Feature Icons

-  A registration fee is required
-  The program is one of the AAN Leadership University sessions
-  The program is one of the I Talk sessions
-  The course is part of a Subspecialty in Focus track
-  The program is part of the Experiential Learning Area sessions
-  Learning Lab
-  Excitement of Discovery
-  Health Wellness
-  Navigating Your Career
-  Meet World of Neurology

Subspecialty in Focus Tracks

The Subspecialty in Focus Track is a series of seven special, intensive topic-specific tracks designed for subspecialists, combining an education course with an Integrated Neuroscience Session.

Subspecialty in Focus— Movement Disorders

- C15**  Redefining Parkinson's Disease: Challenging the Past and Preparing For the Future 19
- I1**  Redefining Parkinson's Disease: Novel Approaches to Understanding Its Mechanisms and Developing Treatments 38

Subspecialty in Focus— Headache

- C59**  Interventional Treatment of Migraine and Other Headache Disorders 45
- I3**  New and Emerging Therapeutic Options in Migraine and Other Headache Disorders 58

Subspecialty in Focus— Cerebrovascular Disease

- C95**  Stroke Team Action Therapy (STAT): Current State of the Art 66
- I6**  Future Directions and Challenges in Stroke Team Action Therapy (STAT). 82

Subspecialty in Focus— Sleep

- C127**  Sleep Across the Lifecycle: What Neurologists Need to Know. 91
- I9**  Sleep, Clocks, and Alzheimer's Disease 104

Subspecialty in Focus— Neuro Critical Care

- C166**  Acute Neurological Emergencies 111
- I11**  Neurocritical Care and Neuroscience Crossroads: From Bench To Bedside 126

Subspecialty in Focus— Alzheimer's Disease

- C167**  Current State of Alzheimer's Disease Imaging Biomarkers and the Road Ahead 111
- I12**  Amyloid and Beyond: From Bench to Bedside 128

Subspecialty in Focus— Neuro-ophthalmology/Neuro-otology

- C202**  The Eyes and The Ears of Traumatic Brain Injury 133
- I13**  Sports-related Concussion: Vision and Vestibular Insights. 146

Schedule Planning Forms

Use the convenient forms on the following pages to develop your Annual Meeting schedule, incorporating your favorite education programs, scientific sessions, and other Annual Meeting social and informational events. After you complete your registration, use the Itinerary Planner, available within the registration site, or Annual Meeting Mobile App, to customize your schedule.

Plan Your Experience

100 p.m. - 5:00 p.m.
C40 Resident Basic Science III: Neuropharmacology

1:00 p.m. - 5:30 p.m.
C41 Neuro-ophthalmology and Neurovestibular Exam Lab Skills Workshop (registration required)
I1 Redefining Parkinson's Disease: Novel Approaches to Understanding Its Mechanisms and Developing Treatments... 38
I2 Stroke in the Elderly and Young: Challenges for the Next Decade... 40

3:00 p.m. - 3:30 p.m.
AAN/AAMI Business Meeting
All members are invited to attend the meeting to take part in the Academy business... 41

3:30 p.m. - 4:15 p.m.
S8 Global Health... 41

3:30 p.m. - 5:30 p.m.
C42 Assessment of Rapidly Progressive Dementias and Related Neurologic Conditions II
C43 Chronic Migraine Education Program II
C44 Multiple Sclerosis Overview: Clinical Advances II
C45 Peripheral Neuropathy III
C46 Case Studies: Neurologic Consultations in Cancer Patients II
C47 Neuroimaging for the General Neurologist: Spine and Peripheral Nerve II
C48 Clinical EEG III
C49 Sports Concussion Skills Workshop II (registration required)
C50 Autoimmune Neurology II
C51 Stroke Clinical Trials... 41

4:00 p.m. - 5:00 p.m.
S8 World Federation of Neurology... 41

4:30 p.m. - 5:30 p.m.
S8 Practice and Policy... 41

5:30 p.m. - 6:30 p.m.
Neurology Compensation and Productivity Survey and Dashboard Report

6:00 p.m. - 8:00 p.m.
Faculty and Trainee Reception

6:30 p.m. - 9:30 p.m.
C51 Case Studies in Behavioral Neurology: Focus on Frontotemporal Degeneration
C52 Case Studies: Challenging Headache Cases

7:00 p.m. - 10:00 p.m.
Industry Therapeutic Updates
Industry-sponsored, non-CME programs will be open to attendees at no charge. This program offers the opportunity to learn about current projects in the industry pipeline. Please visit AAN.com/View/TU for more info.

My Saturday

Time 6:30 to 9:15
S1 Rapidly Progressive Dementias I
Program II

Time 8:30 to 8:45
C49 Sports Concussion Skills Workshop II
Program II

Time 9:00 to 11:30 a.m.
Meet Guler outside entrance
Program II

Lunch 12:30 to 1:30
Rapidly Progressive Dementias I
Program II

Time 3:00 to 3:30 p.m.
AAN/AAMI Business Meeting
Program II

Time 3:30 to 5:30
C42 Rapidly Progressive Dementias II
Program II

Legend

- A registration fee is required
- The program is one of the AAN Leadership University sessions
- The course is one of the I Talk sessions
- The program is one of the I Talk sessions

Friday, April 15

Plan Your Experience

8:00 a.m.–12:00 p.m.

C1 Resident Basic Science I: Neuropathology

8:00 a.m.–3:00 p.m.

C2 Clerkship and Program Directors Conference

8:00 a.m.–5:00 p.m.

C3  Maintenance of Certification Exam Preparation Course
(registration required)

C4  Research Career Development Symposium: How to Be Successful in Academic Neuroscience
(registration required)

9:00 a.m.–5:00 p.m.

C5   Women in Leadership
(registration required)

1:00 p.m.–2:00 p.m.

 How to Avoid Death by PowerPoint
 Mind-body Therapies for Patients with Neurologic Disorders

1:00 p.m.–3:00 p.m.

C6 ICD-10-CM: How to Optimize for Accurate Diagnosis and Reimbursement

C7 Applications of Teleneurology: General

C8 Clinical Research: Introduction and Methods

 Ask the Expert: Neurology Business Strategies

1:00 p.m.–5:00 p.m.

C9 Lost in Transition

C10 Resident Basic Science II: Neuroanatomy

C11  Neurophysiologic Intraoperative Monitoring Skills Workshop
(registration required)

3:30 p.m.–4:30 p.m.

 Patient Engagement: The Good, The Bad, Is There Any Ugly?

3:30 p.m.–5:30 p.m.

C12 Advanced Neurologic Coding

C13 Applications of Teleneurology: Telestroke

C14 Clinical Research: Drug Development and Clinical Trials

5:30 p.m.–7:00 p.m.

Hot Topics Plenary Session 15

Frequently Asked Question

How can I access my course syllabi?

New for 2016, all attendees will receive complimentary online access to all Annual Meeting Syllabi for one year. Notifications will be sent out prior to the meeting with instructions for access. Attendees may choose to upgrade to a USB drive for permanent access.

- ⓘ A registration fee is required
- ⦿ The program is one of the AAN Leadership University sessions
- Ⓜ The course is part of a Subspecialty in Focus track
- 🗣️ The program is one of the I Talk sessions



The program is part of the
Experiential Learning Area sessions

My Friday

Time _____ to _____

Program # _____ Program Name _____

Time _____ to _____

Program # _____ Program Name _____

Lunch

Time _____ to _____

Program # _____ Program Name _____

Time _____ to _____

Program # _____ Program Name _____

Time _____ to _____

Program # _____ Program Name _____

5:30 p.m.–7:00 p.m. Hot Topics Plenary Session

Fri - April 15



About the American Brain Foundation

Our Mission

The American Brain Foundation supports vital research and education to discover causes, improved treatments, and cures for brain and other nervous system diseases.

Our Vision

Cure brain disease.

- ④ A registration fee is required
 - ⊗ The program is one of the AAN Leadership University sessions
 - SD The course is part of a Subspecialty in Focus track
 - 1 The program is one of the I Talk sessions
 - EW Learning Lab
 - EW Enhancement of Education
 - EW Health & Wellness
 - EW Neurogeriatrics
 - EW World of Neurology
- The program is part of the Experiential Learning Area sessions

Meeting Schedule

8:00 a.m.–12:00 p.m.

- C1 Resident Basic Science I: Neuropathology**
Director: J. Clay Goodman, MD, FAAN, Houston, TX

8:00 a.m.–3:00 p.m.

- C2 Clerkship and Program Directors Conference**
Director: Madhu Soni, MD, Chicago, IL

8:00 a.m.–5:00 p.m.

- C3 ④ Maintenance of Certification Exam Preparation Course** (registration required)
Director: Ericka P. Simpson, MD, Houston, TX
- C4 ④ Research Career Development Symposium: How to Be Successful in Academic Neuroscience** (registration required)
Directors: Jaishri Blakeley, MD, Baltimore, MD
Conrad Weihl, MD, PhD, Webster Groves, MO

9:00 a.m.–5:00 p.m.

- C5 ⊗ ④ Women in Leadership** (registration required)
Directors: Cynthia L. Comella, MD, FAAN, Chicago, IL,
Barbara L. Hoese, President, Penticore Coaching, Minneapolis, MN

1:00 p.m.–2:00 p.m.

- 1 How to Avoid Death by PowerPoint**
Director: Joseph E. Safdieh, MD, FAAN, New York, NY
- EW Health & Wellness Mind-body Therapies for Patients with Neurologic Disorders**
Director: Sarah Mulukutla, MD, MPH, Stamford, CT

1:00 p.m.–3:00 p.m.

- EW World of Neurology Ask the Expert: Neurology Business Strategies**
Director: Joseph V. Fritz, PhD, Amherst, NY
- C6 ICD-10-CM: How to Optimize for Accurate Diagnosis and Reimbursement**
Director: Jeffrey R. Buchhalter, MD, FAAN, Calgary, AB
- C7 Applications of Teleneurology: General**
Director: Kevin M. Biglan, MD, Rochester, NY
- C8 Clinical Research: Introduction and Methods**
Director: Deborah Hall, MD, PhD, FAAN, Chicago, IL

1:00 p.m.–5:00 p.m.

- C9 Lost in Transition**
Director: Anup D. Patel, MD, Columbus, OH
- C10 Resident Basic Science II: Neuroanatomy**
Director: Ralph F. Józefowicz, MD, FAAN, Rochester, NY
- C11 ④ Neurophysiologic Intraoperative Monitoring Skills Workshop** (registration required)
Director: Gloria Galloway, MD, FAAN, Columbus, OH

3:30 p.m.–4:30 p.m.

- 1 Patient Engagement: The Good, The Bad, Is There Any Ugly?**
Director: Allison L. Weathers, MD, FAAN, Chicago, IL

3:30 p.m.–5:30 p.m.

- C12 Advanced Neurologic Coding**
Director: Peter D. Donofrio, MD, FAAN, Nashville, TN
- C13 Applications of Teleneurology: Telestroke**
Director: Kevin M. Barrett, MD, Jacksonville, FL
- C14 Clinical Research: Drug Development and Clinical Trials**
Director: Wendy R. Galpern, MD, PhD, FAAN, Titusville, NJ

5:30 p.m.–7:00 p.m.

- Hot Topics Plenary Session**

Hot Topics Plenary Session

Friday, April 15, 2016 5:30 p.m. to 7:00 p.m.

Features translational research related to clinical issues of importance. Five outstanding physician-scientists provide summaries of their recent research findings and describe the clinical implications of the results.

Fri - April 15

Moderator:



Edward H. Bertram, MD
 Member, AAN Science Committee

Presenters:



Eva Feldman, MD, PhD, FAAN
 University of Michigan
 Ann Arbor, MI
Intraspinal Stem Cell Transplantation in ALS: Where We Are Today



Jonathan Kipnis, PhD
 University of Virginia
 Charlottesville, VA
Meningeal Lymphatic Vessels in CNS Physiology



James J. Sejvar, MD
 National Center for Emerging and Zoonotic Infectious Diseases
 Centers for Disease Control and Prevention
Zika Virus: Neurologic Complications of the Latest Merging Pathogen



Andres M. Lozano, MD
 Toronto Western Hospital
 Toronto, ON, Canada
Recent Advances in Functional Neurosurgery



Karunesh Ganguly, MD, PhD
 University of California
 San Francisco, CA
Recent Progress in Brain-Computer Interfaces

Saturday, April 16

Plan Your Experience

6:30 a.m.–8:30 a.m.

- C15  Redefining Parkinson's Disease: Challenging the Past and Preparing For the Future
- C16 How to Interpret Sleep Studies
- C17 Paroxysmal Movement Disorders
- C18 Multiple Sclerosis Overview: Basic and Translational Science
- C19 Peripheral Neuropathy I
- C20 The Palliative Care Guide in Neurology: What You Must Know About Neuro-oncology
- C21 Neuro Flash: Approach to Acute CNS Infections
- C22 Career Development for Clinician Educators
- C23 Borderlands of Neurology and Internal Medicine: Chalk Talk
- C24 Clinical EEG I
- C25 Update on Medical Management of Stroke
- C26 Leadership in Neurology: Be a Champion for Your Patients and Protector of Your Specialty with Payers, Policymakers, and the Public
- C27 Lumbar Radiculopathy, Lumbar Spinal Stenosis, Low Back Pain, and Post-laminectomy Syndrome
- C28 Higher Cortical Visual Disorders: Case-based Review
- S1 Aging and Dementia: Therapeutics and Management 18
- S2 Multiple Sclerosis: Animal Models and In Vitro Studies 18
- S3 Neurology Education 18

7:00 a.m.–7:45 a.m.

 Yoga

8:00 a.m.–9:00 a.m.

-  Quality in Neurology—Can We Measure and Improve It?

8:30 a.m.–7:00 p.m.

- P1 Poster Session I
Presenters Stand by Posters 5:30 p.m.–7:00 p.m. 22

9:00 a.m.–11:30 a.m.

Contemporary Clinical Issues Plenary Session 32

11:30 a.m.–6:00 p.m.

Frontiers in Child Neurology:
Cultivating Careers, Transitioning Care, and
Highlighting Scientific Developments 34

1:00 p.m.–3:00 p.m.

- C29 Assessment of Rapidly Progressive Dementias and Related Neurologic Conditions I
- C30 Chronic Migraine Education Program I
- C31 Hyperkinetic Movement Disorders: Videodiagnosis and Treatment

C32 Multiple Sclerosis Overview: Clinical Advances I

C33 Peripheral Neuropathy II

C34 Case Studies: Neurologic Consultations in Cancer Patients I

C35 Differential Diagnosis of Neurologic Infections

C36 Neuroimaging for the General Neurologist: Spine and Peripheral Nerve I

C37 Clinical EEG II

C38  Sports Concussion Skills Workshop I
(registration required)

C39 Autoimmune Neurology I

S4 Health Disparities and Sex Differences in Stroke . . . 37

S5 Movement Disorders: Parkinson's Disease and Atypical Parkinsonian Syndromes: Biomarkers. . . . 37

 Ask the Expert: Solo / Small Practitioners

1:00 p.m.–5:00 p.m.

C40 Resident Basic Science III: Neuropharmacology

1:00 p.m.–5:30 p.m.

C41  Neuro-ophthalmology and Neurovestibular Exam Lab Skills Workshop
(registration required)

I1  Redefining Parkinson's Disease: Novel Approaches to Understanding Its Mechanisms and Developing Treatments 38

I2 Stroke in the Elderly and Young: Challenges for the Next Decade 40

3:00 p.m.–3:30 p.m.

AAN/AANI Business Meeting

All members are invited to attend the meeting to take part in the Academy business.

3:30 p.m.–4:15 p.m.

S6 Global Health 41

3:30 p.m.–5:30 p.m.

C42 Assessment of Rapidly Progressive Dementias and Related Neurologic Conditions II

C43 Chronic Migraine Education Program II

C44 Multiple Sclerosis Overview: Clinical Advances II

C45 Peripheral Neuropathy III

C46 Case Studies: Neurologic Consultations in Cancer Patients II

C47 Neuroimaging for the General Neurologist: Spine and Peripheral Nerve II

C48 Clinical EEG III

C49  Sports Concussion Skills Workshop II
(registration required)

C50 Autoimmune Neurology II

S7 Stroke Clinical Trials 41

- A registration fee is required
- The program is one of the AAN Leadership University sessions
- The course is part of a Subspecialty in Focus track
- The program is one of the I Talk sessions



The program is part of the Experiential Learning Area sessions

4:00 p.m.–5:00 p.m.

- World Federation of Neurology

4:30 p.m.–5:30 p.m.

- S8 Practice and Policy 41

5:30 p.m.–6:30 p.m.

- Neurology Compensation and Productivity Survey and Dashboard Report

6:00 p.m.–9:00 p.m.

- Faculty and Trainee Reception

6:30 p.m.–9:30 p.m.

- C51 Case Studies in Behavioral Neurology: Focus on Frontotemporal Degeneration
- C52 Case Studies: Challenging Headache Cases

- C53 Case Studies: Unusual Movement Disorders
- C54 Case Studies: Multiple Sclerosis
- C55 Case Studies: Unusual Diagnostic and Management of Cases in Neuromuscular Disease
- C56 Test Your Knowledge: A Case-based Approach to Neuroimaging
- C57 Case Studies: How to Analyze Spells by Video-EEG
- C58 Case Studies in the ICU

7:00 p.m.–10:00 p.m.

Industry Therapeutic Updates 87

Industry-sponsored, non-CME programs will be offered and are open to attendees at no charge. This program provides you the opportunity to learn about current therapies and projects in the industry pipeline.

Please visit AAN.com/view/ITU for more information.

Sat • April 16

My Saturday

Time _____ to _____

Program # _____ Program Name _____

Time _____ to _____

Program # _____ Program Name _____

9:00 a.m.–11:30 a.m. Contemporary Clinical Issues Plenary Session

Lunch

Time _____ to _____

Program # _____ Program Name _____

3:00 p.m.–3:30 p.m. AAN/AANI Business Meeting

Time _____ to _____

Program # _____ Program Name _____

Time _____ to _____

Program # _____ Program Name _____

6:30 a.m.–8:30 a.m.

Scientific Platform Sessions

S1: Aging and Dementia: Therapeutics and Management

6:30 a.m. S1.001

Targeting Tau in Mouse Models of Dementia Reveals a Toxic Tau Isoform Amenable to Therapeutic Intervention—*Kathleen Schoch, Sarah DeVos, Carey Kebodeaux, Rebecca Miller, Seung Chun, Michaela Norrbom, David Wozniak, Hana Dawson, Frank Bennett, Frank Rigo, Timothy Miller*

6:45 a.m. S1.002

Efficacy, Safety and Biomarker Data from SCarlet RoAD - A Global Phase 3 Study of Gantenerumab in Patients with Prodromal AD—*Robert Lasser, Philip Scheltens, Bruno Dubois, Tania Nikolcheva, Sylvie Retout, Dietmar Volz, Csoboth Csilla, Mercè Boada*

7:00 a.m. S1.003

Randomized, Double-Blind, Placebo-Controlled Studies to Evaluate Treatment with Aducanumab (BIB037) in Patients with Early Alzheimer's Disease: Phase 3 Study Design—*Vissia Vigiuetta, John O'Gorman, Leslie Williams, Ying Tian, Alfred Sandrock, Rachelle Doody, Stephen Salloway, Frederik Barkhof, Bruno Velas, Mary Sano, Paul Aisen, Jeffrey Sevigny*

7:15 a.m. S1.004

Impact of Armodafinil Therapy on Neuropsychiatric Features in Dementia with Lewy Bodies—*Karen Kuntz, Sara Mason, Maria Lapid, Jeremiah Aakre, Emily Lundt, Bradley Bove*

7:30 a.m. S1.005

Defining and Validating a Short Form Montreal Cognitive Assessment (s-MoCA) for Use in Neurodegenerative Disease—*David Roalf, Tyler Moore, David Wolk, Steven Arnold, Dawn Mechanic-Hamilton, Jacqueline Rick, Sushila Kabadi, Kosha Ruparel, Alice Chen-Plotkin, Lama Chahine, Nabila Dahodwala, John Duda, Daniel Weintraub, Paul Moberg*

7:45 a.m. S1.006

Development of an Expert Consensus Approach to Screening, Assessment, and Diagnosis of Patients at Risk for Neurodegenerative Disease—*Katherine Rankin, Katherine Possin, Michael*

Geschwind, Joel Kramer, Christine Ritchie, Rosalie Gearhart, Natasha Rabinowitz, Stephen Bonasera, James Brewer, Cynthia Carlsson, Richard Caselli, Bradford Dickerson, Jamie Fong, Carolyn Fredericks, Jeffrey Gelfand, Murray Grossman, Christopher Hess, Joseph Higgins, Edward Huey, Daniel Kaufer, Sergio Lanata, Suzee Lee, Jennifer Merrilees, Georges Naasan, Don Ng, Ronald Petersen, Peter Pressman, Howard Rosen, Gary Small, Robert Stern, Marilyn Williams, Kristine Yaffe, Jennifer Yokoyama, Bruce Miller

8:00 a.m. S1.007

What is the Current Value Equation for Dementia Diagnosis and Management: Variation in Costs Across Practice Types—*Leslie Wilson, Stephen Bonasera, Marion Davis, Donato Balsamo, Daniel Kassan, James Stallone, Jacob Harry, Peter Kurzweil, Joseph Higgins, Katherine Rankin, Johnathan Warsh, Robert Kaplan*

8:15 a.m. S1.008

Characterization of Anti-Amyloid β Autoantibodies and Cerebrospinal Fluid Markers of Cerebral Amyloid Angiopathy-Related Inflammation—*Akio Kimura, Nobuaki Yoshikura, Yuichi Hayashi, Takashi Inuzuka*

S2: Multiple Sclerosis: Animal Models and In Vitro Studies

6:30 a.m. S2.001

The Development of a Novel Zebrafish Model of Demyelination Allowing Therapeutic Development to Promote Remyelination in Multiple Sclerosis—*Alexander McGown, Tennore Ramesh, Basil Sharrack*

6:45 a.m. S2.002

Cortical Hyperactivity Beyond the Immune Attack: Starting Point of Neurodegeneration—*Frauke Zipp, Erik Ellwardt, Guatam Pramanik, Thomas Mittmann, Albrecht Stroh*

7:00 a.m. S2.003

Oligodendroglial Pathology in Multiple Sclerosis: Relation to Low Glycolytic Metabolic Rate of Oligodendrocytes—*Qiao Ling Cui, Malena Rone, Damla Khan, Melissa Bedard, Guillermina Almazan, Samuel Ludwin, Timothy Kennedy, Jack Antel*

7:15 a.m. S2.004

KCNK2 Regulates the Nanoscale Formation of Immune-Cell Docking Structures on Brain Endothelial Cells Under Autoinflammatory Conditions—*Stefanie Bock, Tobias Ruck, Jonas Franz, Christoph Riethmüller, Sven Meuth, Stefan Bittner*

7:30 a.m. S2.005

Multi-Sequence Serial 7-Tesla MRI in Experimental Autoimmune Encephalomyelitis of the Common Marmoset—*Matthew Schindler, Pascal Sati, Emily Leibovitch, Bridgette Billioux, Jennifer Lefevre, Steven Jacobson, Afonso Silva, Daniel Reich*

7:45 a.m. S2.006

Modeling Leptomenigeal Inflammation in EAE - A New Method to Understand Its Pathophysiology and Screen Potential Therapies for Progressive MS—*Pavan Bhargava, Jiangyang Zhang, Carlos Pardo-Villamizar, Peter Van Zijl, Peter Calabresi*

8:00 a.m. S2.007

Neuroglial Protective Capacity of Multipotent Mesenchymal Stromal Cells Declines with Duration of Progressive Disease in Multiple Sclerosis—*Dr Pamela Sarkar, Julianna Redondo, Alastair Wilkins, N Scolding, Claire Rice*

8:15 a.m. S2.008

Alemtuzumab Long Term Immunological Study: The Immunosuppressive Effect Does Not Last More Than 48 Months—*Luca Durelli, Stefania De Mercanti, Simona Rolla, Angele Cucci, Valentina Bardina, Eleonora Cocco, Anton Vladic, Silva Soldo-Butkovic, Mario Habek, Ivan Adamec, Pietro Annovazzi, Dana Horakova, Franco Novelli, Marinella Clerico*

S3: Neurology Education

6:30 a.m. S3.001

An Analysis of Incorporation of Outpatient Neurology Patients in the Neurology Clerkship: Impact on Student Performance—*Mona Mehta, Julie DeBacker, Jeremy Weedon, Brian Anziska, Lisa Merlin*

6:45 a.m. S3.002

Flipped Versus Online-Only Instruction in the Neurology Clerkship: A Comparative Effectiveness Study of Best-Practices in Medical Education—*Roy Strowd, Rachel Marie Salas, Tiana Cruz, John Shatzer, Chadia Abras, Veronique Gugliucciello, Jaqueline Nunn, Charlene Gamaldo*

7:00 a.m. S3.003

Engaging Medical Students in Neurology Clinic Improves Clinic Productivity and Cultivates an Optimal Educational Environment—*Jeremy Tanner, Karthik Rao, Rachel Marie Salas, Roy Strowd, Angeline Nguyen, Alexandra Kornbluh, Evan Mead-Brewer, Charlene Gamaldo*

7:15 a.m. S3.004

Rapid Feedback After Thrombolysis for Acute Stroke Using a Novel E-mail Protocol—*Sara Rostanski, Joshua Stillman, Crismely Perdomo, Vepuka Kauari, Olajide Williams*

7:30 a.m. S3.005

Pediatric Sport-Related Concussion Education: Effectiveness and Long-Term Retention of the Head Safety Youth Sports (HSYS) Program for Youth Athletes, Ages 11-16—*Ross-Jordan Elliott, Linda Leary*

7:45 a.m. S3.006

Attitudes Toward Animal Research Among Medical Students in the United States—*David Beversdorf, Nellie Adams*

8:00 a.m. S3.007

Innovations in Outpatient Continuity Clinics for Residents: The Partners Neurology Experience with a Burst Model for Resident Clinics—*Kate Brizzi, Nancy Wang, Ayush Batra, Joel Salinas, Tracey Cho, Tracey Milligan*

8:15 a.m. S3.008

Impact of a Dedicated Scholarly Research Program on an Adult and Pediatric Neurology Residency Program—*Matthew Robbins, Sheryl Haut, Richard Lipton, Mark Milstein, Lenore Ocava, Karen Ballaban-Gil, Solomon Moshe, Mark Mehler*

Frequently Asked Question

Do I need to register for the Annual Meeting courses that I want to take?

No. A big change this year is that most courses no longer require pre-registration. You are free to attend any course you like. Courses that require pre-registration are clearly marked.

Meeting Schedule

6:30 a.m.–8:30 a.m.

**S1 Aging and Dementia:
Therapeutics and Management**

**S2 Multiple Sclerosis:
Animal Models and In Vitro Studies**

S3 Neurology Education

C15  Redefining Parkinson's Disease: Challenging the Past and Preparing For the Future

Director: Jennifer G. Goldman, MD, MS, FAAN, Chicago, IL

C16 How to Interpret Sleep Studies

Director: Charlene Gamaldo, MD, FAAN, Baltimore, MD

C17 Paroxysmal Movement Disorders

Director: Kailash P. Bhatia, MD, FAAN, London,

C18 Multiple Sclerosis Overview: Basic and Translational Science

Director: Michael K. Racke, MD, Columbus, OH

C19 Peripheral Neuropathy I

Director: Michael E. Shy, MD, Iowa City, IA

C20 The Palliative Care Guide in Neurology: What You Must Know About Neuro-oncology

Director: Tobias Walbert, MD, PhD, Detroit, MI

C21 Neuro Flash: Approach to Acute CNS Infections

Director: Christina Marra, MD, FAAN, Seattle, WA

C22 Career Development for Clinician Educators

Director: Allison Brashear, MD, MBA, FAAN, Winston Salem, NC

C23 Borderlands of Neurology and Internal Medicine: Chalk Talk

Director: Martin A. Samuels, MD, MACP, FAAN, Boston, MA

C24 Clinical EEG I

Director: Selim R. Benbadis, MD, Tampa, FL

C25 Update on Medical Management of Stroke

Director: Natalia Sana Rost, MD, FAAN, Boston, MA

C26 Leadership in Neurology: Be a Champion for Your Patients and Protector of Your Specialty with Payers, Policymakers, and the Public

Director: Elaine C. Jones, MD, FAAN, Bristol, RI

C27 Lumbar Radiculopathy, Lumbar Spinal Stenosis, Low Back Pain, and Post-laminectomy Syndrome

Director: J. D. Bartleson, MD, FAAN, Rochester, MN

C28 Higher Cortical Visual Disorders: Case-based Review

Director: Sashank Prasad, MD, Boston, MA

7:00 a.m.–7:45 a.m.

 **Yoga**

Instructor: Sarah Bird Nelson, JD, RYT 200, Minneapolis, MN

8:00 a.m.–9:00 a.m.

 **Quality in Neurology—Can We Measure and Improve It?**

Director: Anup D. Patel, MD, Columbus, OH



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- ▶ Visit the on-site Annual Meeting Information Booth
- ▶ Tap in to the AAN Annual Meeting Mobile App
- ▶ Join the Annual Meeting LinkedIn group

AAN.com/view/AM16



Poster Session Schedule and Floorplan

Poster Discussion

Eight abstracts have been selected for presentation during a poster discussion session. Authors will present a 5-minute data blitz presentation. In addition to the regular poster time, authors also have a specific time slot over lunch. Times below are standard across poster sessions.

- P.001 11:45 a.m.–11:50 a.m.
- P.002 11:50 a.m.–11:55 a.m.
- P.003 11:55 a.m.–12:00 p.m.
- P.004 12:00 p.m.–12:05 p.m.
- P.005 12:05 p.m.–12:10 p.m.
- P.006 12:10 p.m.–12:15 p.m.
- P.007 12:15 p.m.–12:20 p.m.
- P.008 12:20 p.m.–12:25 p.m.

Saturday, April 16

8:30 a.m.–7:00 p.m.

Poster Session I

Presenters Stand by Posters 5:30 p.m.–7:00 p.m.

Sunday, April 17

8:30 a.m.–5:30 p.m.

Poster Session II

Presenters Stand by Posters 4:00 p.m.–5:30 p.m.

Monday, April 18

8:30 a.m.–7:00 p.m.

Poster Session III

Presenters Stand by Posters 5:30 p.m.–7:00 p.m.

Tuesday, April 19

8:30 a.m.–7:00 p.m.

Poster Session IV

Presenters Stand by Posters 5:30 p.m.–7:00 p.m.

Wednesday, April 20

8:30 a.m.–7:00 p.m.

Poster Session V

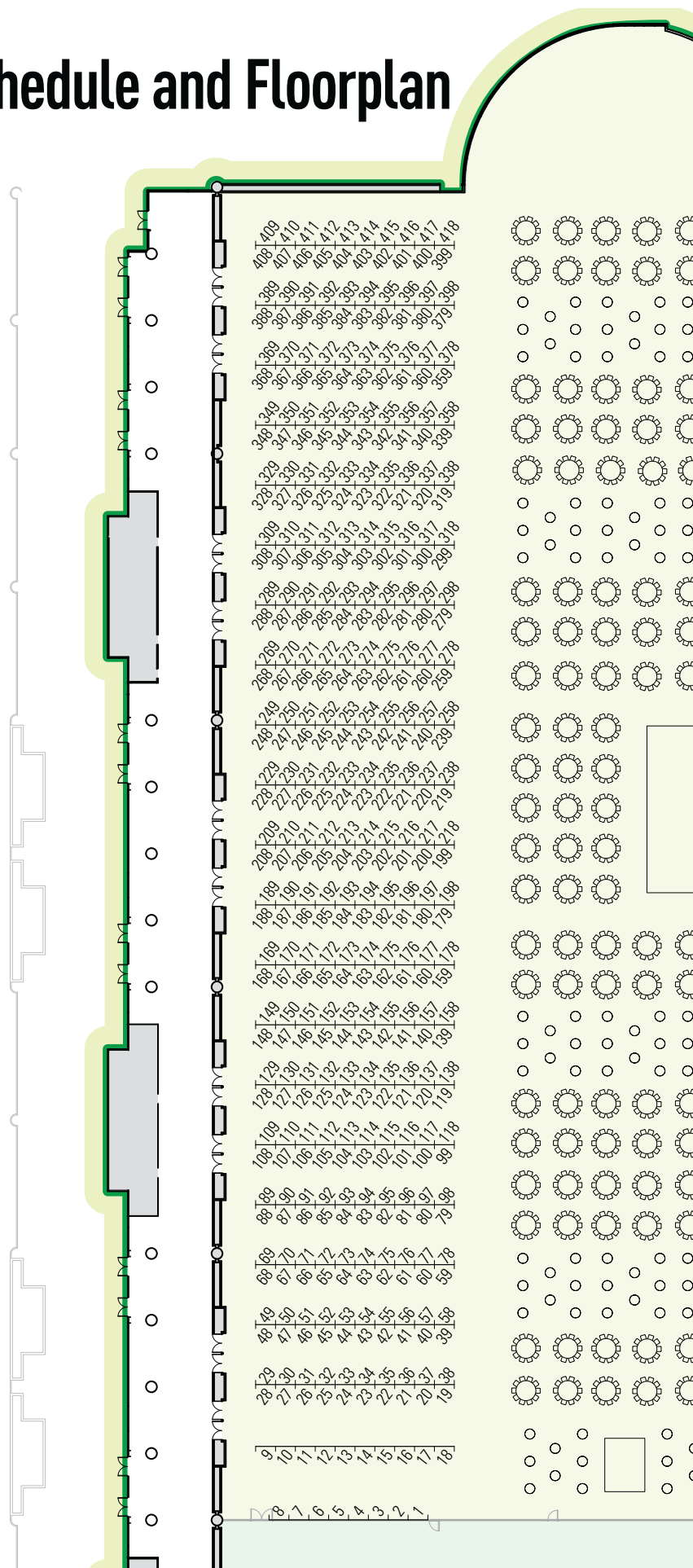
Presenters Stand by Posters 5:30 p.m.–7:00 p.m.

Thursday, April 21

8:30 a.m.–5:30 p.m.

Poster Session VI

Presenters Stand by Posters 4:00 p.m.–5:30 p.m.



8:30 a.m.–7:00 p.m.

Poster Session

P1 Poster Session I

Presenters Stand by Posters 5:30 p.m.–7:00 p.m.

Poster Discussion Session: Movement Disorders

Eight abstracts have been selected for presentation during a poster discussion session. Authors will present a 5-minute data blitz presentation.

In addition to the regular poster time, authors also have a specific time slot over lunch. Times below are standard across poster sessions.

Discussion: 11:45 a.m.–11:50 a.m.

P1.001 Thalamic Connectivity Patterns with Subthalamic Nucleus Deep Brain Stimulation —*Ling Huang, Nora Vanegas-Arroyave, Omar Ahmad, Kareem Zaghloul, Mark Hallett, Silvina Horovitz, Codrin Lungu*

Discussion: 11:50 a.m.–11:55 a.m.

P1.002 Lower Executive Function Negatively Impacts Gait and Balance in Fragile X Premutation Carriers with and Without Fragile X-Associated Tremor/Ataxia Syndrome (FXTAS) —*Maija Swanson, Erin Robertson-Dick, Elizabeth Berry-Kravis, Deborah Hall, Joan O'Keefe*

Discussion: 11:55 a.m.–12:00 p.m.

P1.003 First Neurological Evaluation and Course of Parkinson's Disease —*Ali Rajput, Michele Rajput, Leslie Ferguson, Alexander Rajput*

Discussion: 12:00 p.m.–12:05 p.m.

P1.004 Dopamine Therapy and Perseverative Reward-Driven Decisions in Parkinson's Disease —*Charis Spears, Joseph Kim, Kristen Kanoff, Scott Wyllie, Daniel Claassen*

Discussion: 12:05 p.m.–12:10 p.m.

P1.005 Simplified Conversion Method for Unified Parkinson's Disease Rating Scale Motor Examinations —*Joseph Hentz, Shyamal Mehta, Holly Shill, Erika Driver-Dunckley, Thomas Beach, Charles Adler*

Discussion: 12:10 p.m.–12:15 p.m.

P1.006 Increased Rate of GBA Variants in MSA Brains at a Brain Bank in New York City —*Miriam Sklerov, Ety Cortes, Un Kang, Jean Paul Vonsattel, William Nichols, Michael Pauciulo, Roy Alcalay*

Discussion: 12:15 p.m.–12:20 p.m.

P1.007 Self Perceived Health Status, Comorbid Conditions and Health Related Behaviours in Individuals with Tourette Syndrome: A Canadian Population-Based Study —*Jaeun Yang, Lauren Hirsch, Jodie Roberts, Davide Martino, Nathalie Jette, Tamara Pringsheim*

Discussion: 12:20 p.m.–12:25 p.m.

P1.008 Subthalamic Nucleus Deep Brain Stimulation in Isolated Dystonia: A 3-Year Follow-Up Study —*Jill Ostrem, Marta San Luciano, Kristen Dodenhoff, Nathan Ziman, Leslie Markun, Caroline Racine, Monica Volz, Susan Heath, Philip Starr*

e-Poster Session: Movement Disorders

Ten e-posters in six neurologic topics have been selected for on-site, interactive display. e-Posters will be grouped in a separate area where attendees are invited to explore more deeply through touch screen displays.

P1.009 Mutation of the Murine Ataxia Gene TRPC3 Causes Cerebellar Ataxia in Humans —*Brent Fogel, Sonya Hanson, Esther Becker*

P1.010 Interleaving Deep Brain Stimulation (DBS) in Parkinson's Disease (PD): A Retrospective Review on Rational, Management, and Outcomes —*Drew Kern, Marina Picillo, Lazzaro Di Biase, Renato Munhoz, Alfonso Fasano*

P1.011 Experiencing Parkinson's Disease Psychosis Via Virtual Reality Simulation: A Novel and Effective Educational Tool —*Jennifer Goldman, Glenn Stebbins, Doral Fredericks, Mike Upchurch*

P1.012 Role of Iron Deposition Patterns as Evaluated by Susceptibility-Weighted Imaging of the Brain in Differentiating Parkinson Disease and the Parkinson-Plus Syndromes —*Christopher Oustwani, Alexander Korutz, Malisa Lester, Yasaman Kianirad, Tanya Simuni, Tarek Hijaz*

P1.013 Paradoxical Worsening Dystonia After Deep Brain Stimulation in a Patient with Neurodegeneration with Brain Iron Accumulation —*Arjun Tarakad, Joohi Jimenez Shahed*

P1.014 Parakinesia Brachialis Oscitans After an Acute Internal Capsule Infarct —*Benjamin Koo, Elizabeth Wang*

P1.015 Faciobrachial Dystonic Seizures: Pathognomonic Phenomenology —*David Schmerler, Stephanie Roller, Alberto Espay*

P1.016 Bilateral Pallidal Deep Brain Stimulation for Severe X-Linked Dystonia-Parkinsonism (Lubag's Disease) —*Mini Sandhu, Nancy Polyhronopoulos, Anujan Poologaiandran, Christopher Honey*

P1.017 A Community Exercise Program for People with Parkinson Disease: Six Years of Experience —*Sarah Ingersoll, Jason Chen, Michael Jakowec*

P1.018 The Anatomical Basis of Genetic Dystonia: A Multimodal MRI Study —*Elisabetta Sarasso, Federica Agosta, Alexandra Tomic, Silvia Basaia, Nataša Dragašević, Marina Svetel, Massimiliano Copetti, Vladimir Kostic, Massimo Filippi*

Movement Disorders: Health Services/Outcomes Research

P1.019 Increased Odds of Melanoma: Essential Tremor, Dystonia, Parkinson's Disease Vs. Controls —*Elan Louis, Sherif Shalaby*

P1.020 Impact of Reduction in Falls for Patients with PD and NOH: Post Hoc Economic Analyses of Phase 3 Clinical Trial Data on Droxidopa —*Randall Owen, Clement Francois, Robert Hauser, Horacio Kaufmann, Stephane Heritier, Lawrence Hewitt, Benoit Rive, Gerald Rowse*

P1.021 Health Literacy in Parkinson's Disease Caregivers —*Jori Fleisher, Steven Bondi, Jamika Singleton-Garvin, Marissa Lanoff, Alessandro Di Rocco, Sharon Xie, Judy Shea, Joshua Chodosh, Nabila Dahodwala*

P1.022 Patient Acceptance and Potential Cost-Savings of Teleneurology in an Academic Outpatient Movement Disorders Practice —*Jaime Hatcher-Martin, Eric Anderson, Stewart Factor*

P1.023 Unified Dyskinesia Rating Scale: Candidate for Official Designation of FDA Designation as Qualified Clinical Outcome Assessment —*Christopher Goetz, Glenn Stebbins*

P1.024 The Effect of Functional Status on Nursing Home Admission Among Patients with Advanced Parkinson's Disease —*Tiffany Shih, Jeffrey Sullivan, Kavita Sail, Yash Jalundhwala, Emma van Eijndhoven, Thomas Marshall, Cindy Zadikoff, Darius Lakdawalla*

P1.025 Important Concepts in Parkinson's Disease: Can Online Education Improve Physician Knowledge on Neuropsychiatric Complications? —*Jovana Lubarda, Kelly Hanley, Jeffrey Cummings*

P1.026 Falls in Parkinson Disease: Beware the Short, Slow Step —*Aman Deep, Abraham Lieberman, Saulena Shafer*

P1.027 Exploring Gender-Associated Socioeconomic Differences in Parkinson's Disease —*Robert McInnis, William Cavanagh, Janice Weinberg, Marie-Helene Saint-Hilaire, Samuel Elias, Samuel Frank, Anna Hahler*

Movement Disorders: Cervical Dystonia

P1.028 Abobotulinumtoxin A Injection Patterns in Patients with Cervical Dystonia from the ANCHOR-CD Registry Study —*Cynthia Comella, Daniel Truong, Alberto Espay, Daniel Snyder, Dominic Marchese, Richard Trosch*

P1.029 Efficacy and Safety of a 2 ML Dilution of AbobotulinumtoxinA Compared with Placebo in Adult Patients with Cervical Dystonia —*Mark Lew, Daniel Snyder*

P1.030 GABA-A Receptor Binding is Abnormal in Cervical Dystonia —*Rebecca Pollard, Erika Shelton, Phillip Koo, Brian Berman*

P1.031 Changes in Sensorimotor Network Activations After Botulinum Toxin Injections in Cervical Dystonia —*Martin Nevrlj, Petr Hlustik, Pavel Otruba, Pavel Hok, Zbynek Tudos, Petr Kanovsky*

P1.032 Synergistic Effects of Botulinum Toxin and Physical Therapy in Primary Cervical Dystonia —*Wei Hu, Valerie Rundle-Gonzalez, Shankar Kulkarni, Leonardo Almeida, Michael Okun, Aparna Wagle-Shukla*

P1.033 Geographic Differences in Pain Perception in Patients with Cervical Dystonia —*Richard Troesch, Peter Misra, Pascal Maisonnobe, Savary Om*

P1.034 Botulinum Toxin Injection for Cervical Dystonia Weakens Hand Grip —*Barbara Karp, Sarah Pirio Richardson, Zoltan Mari*

P1.035 Methodologies, Patient Characteristics, and Treatment Results Between Registry Studies of Botulinum Toxin Type A in Cervical Dystonia —*Alberto Espay, Cynthia Comella, Richard Troesch, Daniel Snyder, Dominic Marchese, Daniel Truong*

P1.036 Do Online Patient Surveys of Cervical Dystonia Reflect Clinical Practice? A Comparison of an International Online Patient Survey with Baseline Data from Open-Label Observational Clinical Studies —*Richard Troesch, Peter Misra, Savary Om, Pascal Maisonnobe*

P1.037 Strengths and Weaknesses of Patient-Reported Outcomes Following DBS Surgery: Comparing Clinician, Patient, and Caregiver Assessments —*Leili Shahgholi Ghahfarokhi, Wissam Deeb, Kelly Foote, Aparna Wagle-Shukla, Umer Akbar, Justin Rossi, Sol De Jesus, Michael Okun*

Movement Disorders: Dystonia

P1.038 White Matter Connectome in Patients with Genetic Dystonia —*Federica Agosta, Silvia Basaia, Alexandra Tomic, Elisabetta Sarasso, Nikola Kresojevic, Sebastiano Galantucci, Marina Svetel, Vladimir Kostic, Massimo Filippi*

P1.039 Digitized Spiral Analysis Differentiates Dystonia Patients from Control —*Jeffrey Ratliff, Ana Mirallave, Robert Ortega, Amanda Glickman, Qiping Yu, Deborah Raymond, Susan Bressman, Seth Pullman, Rachel Saunders-Pullman*

P1.040 Structural Organization of the Brain Connectome in Patients with Psychogenic Dystonia —*Silvia Basaia, Federica Agosta, Aleksandra*

Tomic, Elisabetta Sarasso, Marina Svetel, Sebastiano Galantucci, Vladimir Kostic, Massimo Filippi

P1.041 A Patient with DYT1 Torsion Dystonia and Basal Ganglia Calcifications: Should Parsimony Surrender to the Stochastics of Polygenic Phenotypes? —*Camilo Toro, Codrin Lungu, Catherine Groden, Mark Hallett, William Gahl*

P1.042 Structural and Functional Brain Network Alterations in Psychogenic Dystonia —*Elisabetta Sarasso, Federica Agosta, Alexandra Tomic, Silvia Basaia, Marina Svetel, Gorana Mandic-Stojmenovic, Massimiliano Copetti, Vladimir Kostic, Massimo Filippi*

P1.043 Runner's Dystonia Successfully Treated with Unilateral Globus Pallidus Interna (GPI) Deep Brain Stimulation (DBS) —*Behrang Saminejad, Paul House, D. James Ballard, Lauren Schrock*

P1.044 Dopamine-Responsive Dystonia After Spinal Surgery —*Diane Chan, Diana Richardson*

Movement Disorders: Tics, Tourette Syndrome, and Other

P1.045 Safety Profile of Unblinded Internal Pallidal Deep Brain Stimulation for Medically Refractory Tourette Syndrome —*Nicki Niemann, Adriana Strutt, Ashwin Viswanathan, Joohi Jimenez Shahed*

P1.046 A Pilot Study of SD-809 (Deutetrabenazine) in Tics Associated with Tourette Syndrome —*Joseph Jankovic, Joohi Jimenez-Shahed, Cathy Budman, Barbara Coffey, Tanya Murphy, David Shprecher, David Stamlor*

P1.047 The Prevalence of Tourette Syndrome in Canada: A National Population-Based Study —*Jaeun Yang, Lauren Hirsch, Davide Martino, Nathalie Jette, Tamara Pringsheim*

P1.048 Predictors of Tic Severity in Post-Childhood Tourette Syndrome: Age-Gender Interaction and Comorbidities —*David Lichter, Sarah Finnegan*

P1.049 Thalamocortical Network Dynamics of Tourette Syndrome and Deep Brain Stimulation —*Jonathan Shute, Enrico Opri, Rene Molina, Justin Rossi, Michael Okun, Kelly Foote, Daniel Martinez-Ramirez, Aysegul Gunduz*

P1.050 Long-Term Responsive Deep Brain Stimulation in Tourette Syndrome: A Case Report —*Rene Molina, Jonathan Shute, Enrico Opri, Peter Rossi, Daniel Martinez-Ramirez, Kelly Foote, Michael Okun, Aysegul Gunduz*

P1.051 Gait Differences Between Initial Symptom Onset of Tremor-Dominant and Non-Tremor Dominant Sub-Types in Parkinson's Disease —*Taylor Chomiak, Fernando Pereira, Kailie Luan, Alexandra Cihal, Nicole Meyer, Bin Hu*

Meeting Schedule

8:30 a.m.–7:00 p.m.

P1 Poster Session I

9:00 a.m.–11:30 a.m.

Contemporary Clinical Issues
Plenary Session 32

Sat - April 16

- ③ A registration fee is required
- ⦿ The program is one of the AAN Leadership University sessions
- Ⓜ The course is part of a Subspecialty in Focus track
- ① The program is one of the I Talk sessions
- Ⓜ The program is part of the Experiential Learning Area sessions



P1.052 Assessment of Gait Dysfunction in Patients with Parkinson's Disease and REM Behavioral Disorder — Lindsey Neimand, Ashima Dang, Carlos Singer, Corneliu Luca

Movement Disorders: Huntington's Disease

P1.053 Salivary Huntingtin Protein As a Peripheral Biomarker for Huntington's Disease — Jody Corey-Bloom, Alaina Aikin, Madeline Garza, Ameera Haque, Sungmee Park, Andrew Herndon, Elizabeth Thomas

P1.054 A Relative Bioavailability Study of Three Dose Strengths and Four Dose Levels of SD-809, a Potential Treatment for Movement Disorders — David Stamlar, Margaret Bradbury, Lisa De Boer, Elliot Offman

P1.055 Using a Wii Balance Board to Measure Disease Onset in Huntington's Disease — Andrew Herndon, Jody Corey-Bloom, Christopher Heil, Sungmee Park, Stephen Howell, Seon Nam, Ameera Haque, Paul Gilbert, Daniel Goble

P1.056 Screening for Behavioral Disturbances in Huntington's Disease (HD) with the Huntington's Disease-Behavioral Questionnaire (HD-BQ) — Jody Corey-Bloom, Seon Nam, Andrew Herndon, Sungmee Park, Ameera Haque, Paul Gilbert

P1.057 Temporal Perception and UHDRS Correlation in Huntington Disease — Patricia Agostino, Emilia Gatto, Martin Cesarini, Ana Sanguinetti, Diego Golombek

P1.058 Dopamine Transporter Scan Finding in Patients with Huntington's Disease — Kiyokazu Kawabe, Miura Ken, Ken Ikeda, Yasuo Iwasaki

P1.059 Cerebellar Gray Matter Excess and Atrophy in Huntington's Disease: a Voxel-based Morphometry Study — Paula Azevedo, Rachel Guimaraes, Camila Piccini, Luiza Piovesana, Lidiane Campos, Giordanna Pinheiro, Maria Cristina Arci Santos, Larissa Vilany, Augusto Amato-Filho, Fernando Cendes, Iscia Lopes-Cendes, Anelyssa D'Abreu

P1.060 Low Dose Tetrabenazine As Monotherapy for Non-Ketotic Hyperglycemic Hemichorea — Monica Chavarria, Alonso Morales-Rivero, Pablo Leon-Ortiz

Epilepsy/Clinical Neurophysiology: Health Services and Outcomes Research

P1.061 Emergency Department Visits for Uncontrolled Epilepsy in US: A National Perspective — Gurkirpal Singh, Alka Mithal, Bharathi Lingala

P1.062 Temporal Trends of Post-Stroke Early Seizures or Epilepsy During Acute Ischemic Stroke Hospitalizations and Its Impact on Clinical Outcomes — Achint Patel, Vishal Jani, Harshil Shah, Alex Schulte, Abhishek Lunagariya, Sanjeeva Onteddu, Sonal Mehta, Tyson Burghardt, Mounzer Kassab

P1.063 Knowledge, Attitude & Practice Towards Epilepsy Among Sudanese Doctors, Khartoum State, 2014 — Razeen Alsherif

P1.064 Changes in Healthcare Resource Utilization Among Medicaid Patients with Lennox-Gastaut Syndrome Initiating Clobazam Treatment — John Stern, Clement Francois, Augustina Ogbonnaya, Tasneem Lokhandwala, Pamela Landsman-Blumberg, Amy Duhig, Vivienne Shen

P1.065 Attitudes Toward Rescue Medications and Discussion of Seizure Emergencies Among Physicians, Patients, and Caregivers — Charles Akos Szabo, Ronald Davis, Wendy Mitchell, Patricia Penovich, Raman Sankar, Julia Weisman, James Wheelless

P1.066 Demographic, Regional and Social Predictors of Do Not Resuscitate Order Utilization in Generalized Convulsive Status Epilepticus (GCSE): A National Perspective — Mounzer Kassab, Achint Patel, Harshil Shah, Alex Schulte, Vishal Jani, Tyson Burghardt

P1.067 A Quality of Care Analysis Utilizing the 2014 American Academy of Neurology Updated Quality Measurement Set for Patients with Epilepsy — George Lai, Steven Wolf, Patricia McGoldrick, Kyusang Lee, Weiyei Gao, Ji-Yeoun Yoo, Migdana Kepecs, Cynthia Harden

P1.068 Healthcare Resource Utilization Among Commercially Insured Clobazam-Treated Patients with Lennox-Gastaut Syndrome — Clement Francois, John Stern, Augustina Ogbonnaya, Tasneem Lokhandwala, Pamela Landsman-Blumberg, Amy Duhig, Vivienne Shen

P1.069 The Patient-Clinician Relationship in Seizure Cluster Management — Patricia Penovich, Joseph Sirven, Janice Buelow, James Wheelless

Movement Disorders: Miscellaneous

P1.070 Deficits in Sensorimotor Networks in Functional Movement Disorders: A Graph-Theory Based Network Analysis — Carine Maurer, Kathrin LaFaver, Sule Tinaz, Mark Hallett, Silvina Horowitz

P1.071 Objective Response to Ethanol in Essential Tremor: Results from a Standardized Ethanol Challenge Study — Dietrich Haubenberger, Sungyoung Auh, Johanna Thompson-Westra, Peter Buchwald, Gayle McCrossin, Bernhard Voller, Vijay Ramchandani, Mark Hallett

P1.072 Orthostatic Tremor: Clinical, Electrophysiologic and Treatment Findings in 184 Patients — Anhar Hassan, J. Ahlskog, Joseph Matsumoto, Joshua Milber, James Bower, Jayne Wilkins

P1.073 A Survey of Functional Movement Disorders at the National Institutes of Health — Omar Ahmad, Carine Maurer, Monica Anne Valle Villegas, Codrin Lungu, Mark Hallett

P1.074 Smartphone Apps Provide a Simple, Accurate Bedside Screening Tool for Orthostatic Tremor — Danish Bhatti, Rebecca Thompson, Amy Hellman, Cindy Penke, John Bertoni, Diego Torres-Russotto

P1.075 A Retrospective Review of the Phenomenon of Gait Freezing — Emily Owens, Keith Josephs, Rodolfo Savica, Anhar Hassan, James Bower, Joseph Matsumoto, J. Ahlskog

P1.076 The Clinical and Genetic Features and Brain Imaging Findings in Mitochondrial Disease Patients Presenting with Movement Disorders — Mika Martikainen, Yi Shiao Ng, Grainne Gorman, Charlotte Alston, Emma Blakely, Andrew Schaefer, Patrick Chinnery, David Burn, Robert Taylor, Robert McFarland, Douglas Turnbull

P1.077 Positive Outcome After the First GPi DBS Implantation in a Patient with an ADCY5 Related Movement Disorder — Inge Meijer, Joan Miravite, Brian Kopell, Naomi Lubarr

P1.078 EEG Analysis in 30 Patients with Orthostatic Tremor — Danish Bhatti, Najib Murr, Amy Hellman, John Bertoni, Diego Torres-Russotto

Epilepsy/Clinical Neurophysiology: Geriatric Epilepsy, Epidemiology, and Health Services

P1.079 Differences in Volumetric Analysis Distinguish Geriatric Onset from Longstanding Epilepsy. — Rebecca O'Dwyer, Lauren Cussen, Hamid Rajebi, Golshan Fahimi, Kent Ogden

P1.080 Nursing Home Residents with Seizure Disorders/Epilepsy: Prevalence, Characteristics, and Treatment Patterns — Barbara Zarowitz, Carrie Allen, Terrence O'Shea, Zhixiao Wang, Marilyn Semenchuk, Victoria Barghout

P1.081 The Treatment Journey in Epilepsy: Part 1: Sticking Points in Treatment Decision-Making — Huibrie Pieters, Lizza Ranit, Sandra Dewar

P1.082 Determinants of the Epilepsy Treatment Gap in a Resource Limited Setting: A Study in a Rural Community in South India — Jagarlapudi Murthy, Seshadri Vijay

P1.083 Characteristics and Resource Utilization of U.S. Emergency Department Visits (2008-2011) for Patients with Epilepsy and Convulsions — Allison Pettrilla, Xiaoping Ning, Erin Sullivan, Jane Osterhaus, Andrew Mosso, Gregory Gilmet

P1.084 Assessment of Status Epilepticus in Elderly Population: Geriatric Onset Vs. Non-Geriatric Onset Epilepsy — Rebecca O'Dwyer, Hamid Rajebi, Golshan Fahimi

P1.085 A Life-Course Assessment of Treatment Patterns and Healthcare Costs of Lennox-Gastaut Syndrome (LGS) — Georgia Montouris, J. Eric Piña-Garza, Francis Vekeman, Wendy Cheng, Edward Tuttle, Philippe Giguere-Duval, Mei Sheng Duh, Vivienne Shen, Jouko Isojarvi

P1.086 Comparing Patient Characteristics and Treatment Patterns in Incident Patients with or Without Lesional Epilepsy: A US Database Analysis — R Fought, Sandra Helmers, David Thurman, Hyunmi Kim, Tracy Durgin, Linda Kalilani

P1.087 Comparing Patient Characteristics and Treatment Patterns in Prevalent Patients with or Without Lesional Epilepsy: A US Database Analysis — David Thurman, Hyunmi Kim, Sandra Helmers, R Fought, Tracy Durgin, Linda Kalilani

P1.088 An Outcome Study of Referrals to the Epilepsy Clinic at the Montreal Neurological Institute (MNI) — Raluca Pana, Aurelie Labbe, Eliane Kobayashi

Epidemiology of Aging and Dementias

P1.089 Cognition and Brain Atrophy Decades After Hypertensive Pregnancy Disorders — Michelle Mielke, Natasa Milic, Tracey Weissgerber, Wendy White, Kejal Kantarci, Thomas Mosley, B. Gwen Windham, Brittany Simpson, Stephen Turner, Vesna Garovic

P1.090 Framingham Risk Score and Cognitive Outcomes in Cognitively Normal and Subjective Memory Complaint Subjects — Yesica Campos, Maria Diaz, Maria Rossetti, Chuanhui Dong, Elizabeth Crocco, David Loewenstein, Bonnie Levin, Xiaoyan Sun, Clinton Wright

P1.091 Prognostic Risk Profiles for Dementia: A Machine Learning Approach — Jason Morgenstern, Mark Daley, Vladimir Hachinski

P1.092 Von Willebrand Factor and the Risk of Dementia: A Population-Based Study — Frank Wolters, Johan Boender, Albert Hofman, Moniek De Maat, Peter Koudstaal, Frank Leebeek, Mohammad Ikram

P1.093 Mediterranean Diet and MRI Biomarkers of Cortical Thickness in Cognitively Normal Persons — Rosebud Roberts, Sara Staubo, Jeremiah Aakre, Jeremy Syrjanen, Walter Kremers, Maria Vassilaki, Prashanthi Vemuri, Michelle Mielke, Mary Machulda, Yonas Geda, David Knopman, Clifford Jack, Ronald Petersen

P1.094 Clinical Factors Related to Severity of Dementia: A Retrospective Survey from 50 Geriatric Hospitals in Korea — Jun Hong Lee, Sung-Hee Hwang, Seung-Han Suk, Yang-ki Minn, Hong Song, Jae Hyeon Park, Im-Seok Koh

P1.095 Epidemiology of Idiopathic Unsteady Gait in Aging — Jason Cohen, Joe Verghese

P1.096 Meta-Analysis of Modifiable Risk Factors for Alzheimer's Disease — Lan Tan, Wei Xu, Jin-Tai Yu

P1.097 History of Hypertension, but Not Measured Blood Pressure, Is Associated with Cortical Volume and White Matter Integrity in Middle-Aged Women with HIV — Glenn Stebbins, Susan Holman, Deborah Gustafson, Jose Cabassa, Diana Rojas-Soto, Yvonne W Lui, Howard Crystal

P1.098 Social Relationships, Serum Brain-Derived Neurotrophic Factor, and the Risk for Stroke and Dementia: The Framingham Heart Study—*Joel Salinas*

Neuroepidemiology: Aging and Dementia, Epilepsy, and Education

P1.099 Temporal and Racial Trends in Post-Stroke Dementia in the “Stroke Buckle” of the United States—*Andrea Boan, Daniel Lackland, Wuwei Feng, Jennifer Voeks, Robert Adams, David Bachman, Bruce Ovbiagele*

P1.100 White Matter Integrity As a Mediator in the Relationship Between Dietary Nutrients and Cognition in the Elderly—*Yian Gu, Christian Habeck, Elaine Gazes, Yaakov Stern, Jose Luchsinger, Jennifer Manly, Nicole Schupf, Adam Brickman*

P1.101 Subclinical Carotid Atherosclerosis Associates with Impairment in Immediate Memory—*Lumine Matsumoto, Kazushi Suzuki, Yoshiko Mizuno, Yumiko Ohike, Atsuko Ozeki, Satoshi Ono, Mikio Takamashi, Daigo Sawaki, Toru Suzuki, Tsutomu Yamazaki, Shoji Tsuji, Atsushi Iwata*

P1.102 Survival in Dementia and Cognitive Impairment Not Dementia: 16 Year Follow Up from the ACCORD Study—*Maya Lichtenstein, Nader Fallah, Howard Feldman*

P1.103 A Population-Based Study on the Long-Term Prognosis of Epilepsy, Prognostic Patterns and Drug Resistance—*Ettore Beghi, Giorgia Giussani, Valentina Canelli, Elisa Bianchi, Giuseppe Erba, Carlotta Franchi, Alessandro Nobili, Josemir Sander*

P1.104 The Epidemiology of Drug-Resistant Epilepsy in Northern Italy—*Ettore Beghi, Giorgia Giussani, Valentina Canelli, Elisa Bianchi, Carlotta Franchi, Alessandro Nobili, Giuseppe Erba*

P1.105 Medical Students NMBE Performance And Their Neurology Clerkship Satisfaction—*Daniel Martinez-Ramirez, Samuel Carbanaru, Addie Patterson, Sol De Jesus, Leonardo Almeida, Leili Shahgholi Ghahfarokhi, Erin Hastings, Christina Wilson, Robert Hatch, Michael Okun, Maureen Novak*

P1.106 Patient Safety Events in Hospitalization of Individuals with Epilepsy—*Adys Mendizabal, Dylan Thibault, Allison Wright Willis*

Neuroepidemiology: Cerebrovascular Disease

P1.107 Olfactory and Gustatory Dysfunction and Subsequent Stroke Risk: A Community-Based Cohort Study—*Chaoran Ma, Zhe Huang, Zhijun Wu, Xiaodong Yuan, Songbin He, Shuohua Chen, Shouling Wu, Xiang Gao*

P1.108 Disparity in Decreased Age and Increased Incidence of Stroke in a Low-Income Chinese Population—

Jinghua Wang, Li Yang, Zhongping An, Bin Li, Wenjuan Zhao, Hongfei Gu, Changqing Zhan, Lingling Bai, Jun Tu, Xianjia Ning

P1.109 Circulating Fatty Acids and the Risk of Stroke—*Claudia Satizabal, Alexa Beiser, Jayandra Himali, Hugo Javier Aparicio, Jose Romero, Vasan Ramachandran, Carlos Kase, Ernst Schaefer, Sudha Seshadri*

P1.110 Rate of Endovascular Therapy in Octogenarian/Nonagenarian Acute Ischemic Stroke Patients Compared to Younger Patients—*Fadar Otite, Priyank Khandelwal, Anita Tipirneni, Melissa Fellman, Amer Malik, Dileep Yavagal, Seemant Chaturvedi*

P1.111 Healthy Lifestyle and Functional Outcomes from Stroke in Women—*Pamela Rist, Julie Buring, Carlos Kase, Tobias Kurth*

P1.112 Aetiology of Stroke in a Young Cohort: A Longitudinal Study—*Andrew Lockhart, Roisin O'Connor, Imelda Noone, Niall Tubridy, Sean O'Riordan, Christopher McGuigan*

P1.113 Epidemiology and Outcomes of Ischemic Stroke and Transient Ischemic Attack in the Adult and Geriatric Population—*Allison Navis, Maryna Skliut, David Lucido, Rocio Garcia-Santibanez*

P1.114 Long-Term Risk of Stroke, Seizures and Cognitive Impairment After Transient Global Amnesia: A Case-Control, Population-Based Study with Long Term Follow Up—*Julietta Arena, Jayawant Mandrekar, Tarun Singh, Robert Brown, Alejandro Rabinstein*

P1.115 The Impact of Marijuana Legalization on Reversible Cerebral Vasoconstriction Syndrome—*Jeffrey Wagner, Jan Leonard, Judd Jensen, Leah Farrell, Amy Jensen, Kathryn McCarthy, David Bar-Or*

P1.116 The Clinical Course of Dural Arteriovenous Fistulae: A 10-Year Population-Based Cohort Study of Dural Arteriovenous Fistulae in Scotland—*Dina Ghandour, Adam Kobayashi, Rustam Al-Shahi Salman*

Cerebrovascular Disease: Epidemiology

P1.117 Ischemic Stroke in Oncological Patients—*Emilia Gatto, Gabriel Persi, Dario Lisei, Gustavo Da Prat de Magalhães, Lucia Rattagan, Martin Lopez Vicchi, Virginia Laura Parisi*

P1.118 Pattern of Acute Stroke Presentation in a Young Tertiary Hospital in South-South, Nigeria: Appraisal of Risk Factors and Clinical Outcomes—*Yahaya Obiabo*

P1.119 Formal Education, Socioeconomic Status and Severity of Neglect—*Abbas Kharal, Aarushi Suneja, Argye Hillis*

P1.120 Etiologic Epidemiology of Ischemic Stroke (A Study About 2450 Cases)—*Nouha Bouzidi, Basma Ayadi, Imene Bouchhima, Emna Turki, Mariem Damak, Chokri Mhiri*

P1.121 Smoking is Associated with All-Cause Mortality After Stroke—*Holly MacCallum, Alain Lekoubou Looi, Bruce Ovbiagele, Daniela Markovic, Amy Towfighi*

P1.122 Clopidogrel and Smoking Status Among Ischemic Stroke Patients: Smoker's Paradox?—*Qian Zhang, Yuan Wang, Haiqing Song, Xunming Ji, Chengbei Hou, Qingyu Cao, Kai Dong, Xiaoqin Huang, Wayne Feng, Bruce Ovbiagele, Moli Wang*

P1.123 Analysis of Inpatient Thrombophilia Testing for Adults with an Ischemic Stroke or Transient Ischemic Attack and Its Impact on Clinical Management—*Chakri Gavva, Mark Alberts, Mark Johnson, Ravindra Sarode*

P1.124 Stroke Subtypes and Risk Factors in Saudi Arabia—*Abdulrahman Al Harbi, Ashkan Shoamaneh*

P1.125 Prevalence of the Diagnoses of Alzheimer's Dementia, Non-Alzheimer's Dementia and Vascular Dementia Among Hospitalized Stroke Patients: A National Inpatient Sample Analysis, 1999-2012—*Ayesha Sherzai, Dean Sherzai, Markeith Pilot, Bruce Ovbiagele*

Natural History, Outcome, and Epidemiology in Muscle Disorders and Myasthenia Gravis

P1.126 Baseline Characteristics from a Prospective Natural History Study in Patients with Sporadic Inclusion Body Myositis—*Parul Houston, Pedro Machado, Angela Genge, Ingo Scholten, Linda Lowes, Didier Laurent, Dimitris Papanicolaou, Michael Hanna*

P1.127 Prevalence of Sporadic Inclusion Body Myositis—*Callan Aoife, Gorana Capkun, Rita Freitas, Vijayalakshmi Vasanthaprasad, Shubhro Ghosh, Merrilee Needham*

P1.128 The Journey of Sporadic Inclusion Body Myositis Patients Before Diagnosis: A Claims-Based Cohort Analyses—*Neetu Agashivala, Eibhlín Hudson, Caitriona O'Neil, Yuen Tsang, Zafer Ozturk, Yujin Park*

P1.129 Prospective Study of Quality of Life in Myotonic Dystrophy Type 1—*Milorad Vujnic, Stojan Peric, Dragana Lavrnica, Vidosava Rakocevic-Stojanovic*

P1.130 Three Year Natural History of Motor Impairment in Myotonic Dystrophy Type 1 (DM1)—*Katy Eichinger, Shree Pandya, Jeanne Dekdebrun, Elizabeth Luebke, Nuran Dilek, William Martens, Chad Heatwole, Charles Thornton, Richard Moxley*

P1.131 LOPED Study: Evaluation Prevalence of Pompe Disease In Iranian Patients with Myopathies of Unknown Etiology in a Single Referral Neuromuscular Center from 2011 to 2012—*Khadijeh Hajinaghitehrani*

P1.132 Prognostic Factors of Generalisation in Ocular Myasthenia Gravis (OMG)—*Sivesh Kathir Kamarajah, Jonathan Palmer, Helena Carley, Arul Sivaguru*

P1.133 Clinical Follow-Up of the Pregnancy in Myasthenia Gravis Patients—*Rosana Scola, Renata Dal Pra Ducci, Paulo Lorenzoni, Claudia Kay, Lineu Werneck*

P1.134 Myasthenia Gravis Patient Registry: Knowledge Gap in Understanding Disease Diagnosis and Treatment—*Henry Kaminski, Karim Salame, Gary Cutter, Michelle Feese, Radwa Aly*

P1.135 Economic Burden of Sporadic Inclusion Body Myositis Patients in the United States—*Gorana Capkun, Haijun Tian, Changpeng Zhao, Victoria Barghout, Aoife Callan, Neetu Agashivala, Zhongyuan Wei, Mark Price, Sandra Lewis, Brian Tseng, Carla Demuro*

Natural History and Outcome in Motor Neuron Diseases and Peripheral Neuropathies

P1.136 The Frontotemporal Syndrome of ALS Is Associated with Poor Survival—*Rosanne Govaerts, Emma Beeldman, Michael Kampelmacher, Marie-Jose van Tol, Leonard Van den Berg, Anneke Van Der Kooij, Peter Wijkstra, Marianne Zijnen, Nicolle Cobben, Ben Schmand, Rob De Haan, Marianne De Visser, Joost Raaphorst*

P1.137 Sniff Nasal Inspiratory Pressure (SNIP): A Prognostic Factor of Percutaneous Endoscopic Gastrostomy in Patients with Amyotrophic Lateral Sclerosis—*Vitaliano Quaranta, Rosa Capozzo, Simona Arcuti, Silvano Dragonieri, Rosanna Tortelli, Carratu' Pierluigi, Francesco Panza, Anna Cassano, Isabella Simone, Onofrio Resta, Giancarlo Logroscino*

P1.138 Evaluation of the Association Between Pattern of Symptoms Onset and Survival Within the ALS-FTD Continuum—*Elena Ratti, Nazem Atassi, Eric Macklin, Alyssa Murphy, Andre Caldeira Groberio, Bradford Dickerson, James Berry*

P1.139 Prognostic Factors for Survival in Patients with Amyotrophic Lateral Sclerosis: Analysis of a Multi-Centre Clinical Trial—*Muhammad Rafiq, Emma Yates*

P1.140 Death with Dignity in Washington and Oregon Patients with Amyotrophic Lateral Sclerosis—*Leo Wang, Michael Elliott, Lily Jung Henson, Elba Gerena-Maldonado, Susan Strom, Sharon Downing, Jennifer Vetrovs, Paige Kayihan, Piper Paul, Kate Kennedy, Joshua Benditt, Michael Weiss*

P1.141 Preliminary Data on Driving Ability in Charcot Marie Tooth 1A (CMT 1A) Patients—*Nivedita Jerath, Shawna Feely, Jeffrey Dawson, Nazan Aksan, Matthew Rizzo, Michael Shy*

P1.142 Patient Activity of Daily Living for Amyotrophic Lateral Sclerosis—*Richard Barohn, Jeffrey Statland, Kim Kimminau, Tamara McMahon, Bhargav Adagarla, Steve Goebel, Laura Herbelin, Russ Waitman*

P1.143 Spinal and Bulbar Muscular Atrophy (SBMA) Outcome Measures and the Role of Creatinine—*Giorgia Querin,*

Luca Bello, Elisa Da Re, Ilaria Martinelli, Cinzia Bertolin, Maria Pennuto, Elena Pegoraro, Gianni Soraru

P1.144 Bariatric Surgery Improves Peripheral Nerve Function and Intraepidermal Nerve Fiber Density in Obese Patients Without Symptomatic Neuropathy —A. Gordon Smith, Timothy Graham, Eric Volckmann, Peter Hauer, Adrienne Apherghis, Victor Solis, J. Singleton

P1.145 Sciatic Nerve Diameter Relates to Disability in Patients with Charcot-Marie-Tooth Disease Type 1A —Lauren Brooks, Jun Li, Richard Dortch

Neuroepidemiology: Headache and Sleep

P1.146 Complex Relationship Among Migraine, Irritable Bowel Syndrome and Mood Disorders —Yen-Yu Chen, Mei-Fong Wu

P1.147 Post-Vaccination Headache Reporting Trends According to the Vaccine Adverse Events Reporting System (VAERS) —Alexandra Cocores, Teshamae Monteith

P1.148 Increased Risk of Migraine Diagnosis in 6,243 Patients with Benign Paroxysmal Positional Vertigo: Implications from a Nationwide Population-Based Cohort Study —Ian Shih, Ruey-Yun Wang

P1.149 The Restless Legs Syndrome - Depression Relationship: Effect Mediation by Disturbed Sleep and Periodic Limb Movements —Brian Koo, Terri Blackwell, Hochang Lee, Katie Stone, Elan Louis, Susan Redline

P1.150 Sleep Duration is Associated with Depression in the Northern Manhattan Study —Suzanne Lippman, Hannah Gardener, Tatjana Rundek, Azizi Seixas, Maria Santiago, Mitchell Elkind, Ralph Sacco, Clinton Wright, Alberto Ramos

P1.151 Sleep Deficiency Is Associated with Lack of Exercise and Higher BMI Among Community-Dwelling Older Adults —Kelly Sullivan

Headache: Health Services/Outcomes Research, Genetics, and Therapeutics

P1.152 Cytochrome P450 (CYP) Genetic Analysis in a Population of Patients with Headache and Facial Pain —Jonathan Eskenazi Markewitz, Oana Dumitrascu, Steven Graff-Radford

P1.153 The Association Between Migraine Headache and Vascular Risk Ascertained by Molecular Profiling Testing —Oana Dumitrascu, Steven Graff-Radford, Jonathan Eskenazi, Miriam Nuno

P1.154 Predictors of Inadequate Response to Medication in Episodic Migraine: Results from American Migraine Prevalence and Prevention Study (AMPP) —Alexandre Bennett, Michael Reed, Dawn Buse, Sagar Munjal, Kristina Fanning, Richard Lipton

P1.155 Toward Improving Migraine Management in Primary Care: The HAPPY Project —Jennifer Bickel, Mark Connelly

P1.156 Patient Centered Goals for Subspecialty Headache Evaluation: A Cross-Sectional Analysis of Intake Data —Alan Finkel, Margaret Mishra, Kristina Fanning, Michael Reed

P1.157 National Trends in Hospitalizations of Migraine in the United States, 2002-2012 —Mehran Taherian, Teshamae Monteith

P1.158 Trying to Illuminate the Unknown Pathophysiology of Idiopathic Intracranial Hypertension: A Study of Various Biomarkers Including Cytokines and Adipokines —Bedia Samanci, Yavuz Samanci, Erdem Tuzun, Gunes Altiocka Uzun, Esme Ekizoglu, Sema Icoz, Erdi Sahin, Cem Ismail Kucukali, Betül Baykan

P1.159 A Feasible RTMS Clinical Protocol in Managing Migraines —Shawn Zardouz, Lei Shi, Albert Leung

P1.160 Treatment of Status Migrainosus with Oral Dexamethasone in an Outpatient Setting —Ruth Bland, Todd Levine

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Frequently Asked Question

How do I plan my Annual Meeting schedule?

The Annual Meeting Mobile App and Itinerary Planner (available within the registration site) are optional tools available to assist you in customizing your itinerary. You can edit your itinerary at any time; adding course(s) or event(s) to your schedule does not require you to attend.

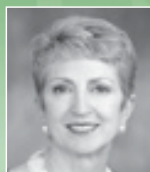
During the meeting, you are free to move between sessions, as you wish. We only ask that you are mindful of the speakers and other attendees and enter and exit with as little disruption as possible.

Contemporary Clinical Issues Plenary Session

Saturday, April 16, 2016 9:00 a.m. to 11:30 a.m.

Highlights issues most critical to practicing neurologists, including abstracts related to new therapeutic developments, clinical applications of basic and translational research, and innovative technical developments. Commentary and discussion follow each presentation.

Moderator



Lisa M. DeAngelis, MD, FAAN

Chair, AAN Science Committee

Abstract Presentations



Presenter:
Andrew J. Solomon, MD
University of Vermont
Burlington, VT

Discussant:
John Corboy, MD, FAAN
University of Colorado
School of Medicine
Aurora, CO

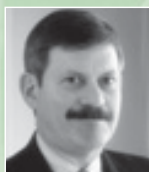
The Spectrum of Multiple Sclerosis Misdiagnosis in the Era of McDonald Criteria: A Multicenter Study



Presenter:
Kiran Thakur, MD
Columbia University
New York, NY

Discussant:
Walter J. Koroshetz, MD, FAAN
National Institute of Neurological Disorders and Stroke
Bethesda, MD

The World Health Organization Atlas 2015: Country Resources for Neurological Disorders



Presenter:
Blair Leavitt, MD
University of British Columbia
Vancouver, BC, Canada

Discussant:
Ira Shoulson, MD, FAAN
Georgetown University
Washington, DC

Discovery and Early Clinical Development of ISIS-HTTRx, the First HTT-Lowering Drug to Be Tested in Patients with Huntington's Disease

Invited Speakers



Birgit Högl, MD

Innsbruck Medical University
Innsbruck, Austria

Beyond Sleep: Recent Advances in Research for REM Sleep Behavior Disorder/RBD



Andrew Charles, MD

University of California
Los Angeles, CA

Future Management of Migraine: A Focus on Antibody Therapies



Jeffery W. Kelly, PhD

The Scripps Research Institute
La Jolla, CA

Peripheral Neuropathy

New Faculty and Trainee Reception!

VCC West Level 1, Ballroom CD

Saturday, April 16, 2016

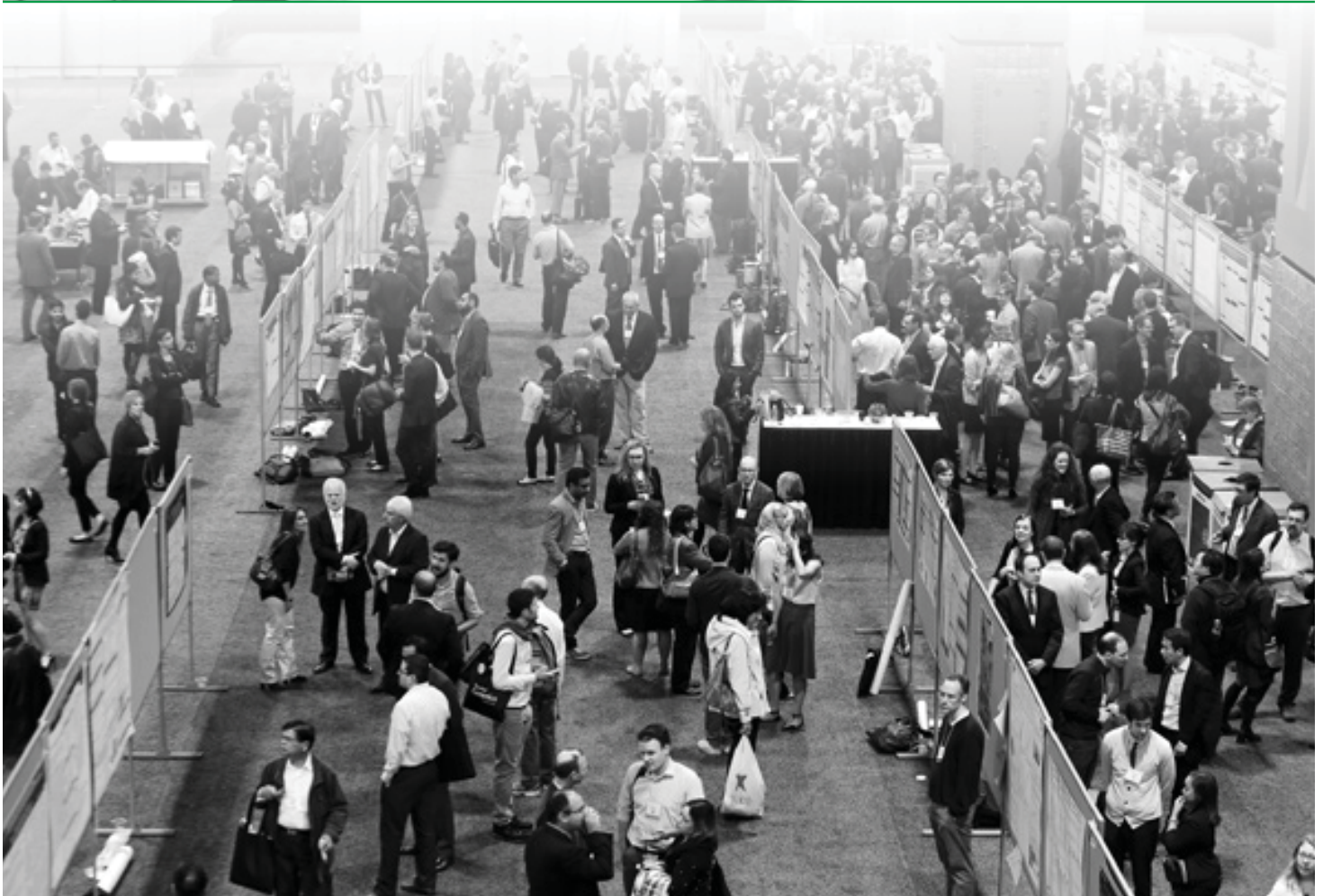
6:00 p.m.–9:00 p.m.

Experience a unique place for undergraduate and graduate attendees to:

- Network with peers: Program/clerkship directors and coordinators, fellowship directors, residents, fellows, and medical students
- Find information about residency programs, on pursuing fellowships and/or careers in neurology academics, research, or practice
- Get recognized for their scholarships/awards

Sat - April 16

AAN
●●●●● 2016
Annual Meeting



Saturday, April 16

11:30 a.m.–6:30 p.m.

Frontiers in Child Neurology:

Cultivating Careers, Transitioning Care, and Highlighting Scientific Developments

Coordinators: Rebecca K. Lehman, MD, and Shafali Jeste, MD

Program Description

The challenge of transitioning patients from pediatric to adult care has been a neglected area of investigation, and there are few successful models in the literature. In 2011, the primary health care community (AAP, AAFO, ACP) called for subspecialists to outline their role in the medical transition of pediatric patients, and in 2014, the Child Neurology Foundation responded by convening an interdisciplinary panel—including child and adult neurologists—to examine the role of child neurologists in transitioning youths with neurologic disorders. The panel generated a Consensus Statement, which reviewed the literature and

outlined Common Principles—direct or indirect responsibilities of the child neurology team in the transition process—based on the current literature and expert opinion.

At the conclusion of the program, attendees will recognize that patients with childhood neurologic disorders must ultimately transition to the adult system of care. They will be able to understand the child neurology team's role in the transition process as defined by the Common Principles and will identify the transition process as a longitudinal effort, not a one-time handoff.

Luncheon 11:30 a.m.–1:00 p.m.

Careers in Child Neurology: Ask the Experts

Brenda Banwell, MD, Rujuta Bhatt, MD, Shafali Jeste, MD, Karen C. Keough, MD, Rebecca K. Lehman, MD, Ann H. Tilton, MD, FAAN, David K. Urion, MD, FAAN

Invited Speakers 1:00 p.m.–3:00 p.m.

1:00 p.m.–1:30 p.m.

Overview of the Child Neurology Foundation's Transition Project
Lawrence W. Brown, MD, Philadelphia, PA

1:30 p.m.–2:00 p.m.

Review of the Literature
Claudio DeGusmao, MD, Boston, MA

2:00 p.m.–2:30 p.m.

Common Principles of Transition for the Child Neurology Team
Ann H. Tilton, MD, FAAN, New Orleans, LA

2:30 p.m.–3:00 p.m.

How Can Adult Neurologists Support Successful Transitions?
Gregory D. Cascino, MD, FAAN, Rochester, MN

Break/Guided Poster Rounds

3:00 p.m.–3:30 p.m.

001 Effects of Vagal Nerve Stimulation in Alternating Hemiplegia of Childhood. —*Ashley Helseth, Lyndsey Prange, Sujay Kansagra, Mohamad Mikati*

002 Clinical Metabolomic Profiling for the Diagnosis of Neurometabolic Disorders for Global Developmental Delay, Seizures
Meeta Wagle, Taraka Donti, Qin Sun, Sarah Elsea, Lisa Emrick

003 Quantitative Effects of Botulinum Toxin Treatment on the Modified Ashworth Scale and the Tardieu Scale: Results from a Randomized Controlled Study of AbobotulinumtoxinA in Children with Dynamic Equinus Foot Deformity due to Cerebral Palsy
Ann Tilton, Edward Dabrowski, Dennis Matthews, Mark Gormley, Jorge Carranza, Magali Volteau, Philippe Picaut

004 Changes in the Microstructural Connectome Underlie Visual Memory Deficits in the Prematurely Born at Age 16 Years
Alyssa R. Thomas, Dustin Scheinost, Betty Vohr, Cheryl Lacadie, R. Todd Constable, Laura Ment

005 Pediatric Sport-Related Concussion Education: Effectiveness and Long-Term Retention of the Head Safety Youth Sports (HSYS) Program for Youth Athletes, Ages 11-16
Ross-Jordan Elliott, Linda Leary

006 Treatment of ADHD in Youth with Epilepsy
Michelle Lally, Mary C. Kral, Andrea Boan

007 Quantification of Risks of Seizure in Autism
Jennifer Jaskiewicz, Apryl Susi, Elizabeth Hisle-Gorman, David Dennison, Gregory Gorman, Cade Nylund, Christine Erdie-Lalena

008 Results of North Star Ambulatory Assessments (NSAA) in the Phase 3 Ataluren Confirmatory Trial in Patients with Nonsense Mutation Duchenne Muscular Dystrophy (ACT DMD)
Katharine Bushby, Jan Kirschner, Xiaohui Luo, Gary Elfring, Hans Kroger, Peter Riebling, Tuyen Ong, Robert Spiegel, Stuart W. Peltz, Francesco Muntoni, for the Ataluren DMD Study Steering Committee

Meeting Schedule

11:30 a.m.–6:30 p.m.

Frontiers in Child Neurology: Cultivating Careers, Transitioning Care, and Highlighting Scientific Developments

Sat - April 16

009 Placental Pathology in Neonatal Stroke:

A Retrospective Case-Control Study

Miya Bemson-Leung, Theonia K. Boyd, Amy R. Danehy, Emily E. Meserve, Michael Rivkin

010 Emotional Abuse History and Migraine among Young Adults:

Results from The Add Health Dataset

Gretchen Tietjen, Monita Karmakar, Aliaksander Amialchuk

011 Treatment of Leukoencephalopathy with Cerebral

Calcifications and Cysts with Bevacizumab: A Case Report
Alexander Fay, Allison King, Janice Brunstrom

012 Maternal illness in pregnancy and perinatal exposure to pesticides are associated with risk for pediatric onset MS

Jennifer Graves, Tanuja Chitnis, Bianca Weinstock-Guttman, Jennifer Rubin, Aaron Zelikovitch, Bardia Nourbakhsh, Timothy Simmons, Charlie Casper, Emmanuelle Waubant, U.S. Network of Pediatric Multiple Sclerosis Centers

013 Predictors of Tic Severity in Post-Childhood Tourette Syndrome: Age-Gender Interaction and Comorbidities

David G. Lichter, Sarah Finnegan

Scientific Presentations

3:30 p.m.–5:30 p.m.

3:30 p.m.–3:45 p.m.

001 Effects of Vagal Nerve Stimulation in Alternating Hemiplegia of Childhood.

Ashley Helseth, Lyndsey Prange, Sujay Kansagra, Mohamad Mikati

3:45 p.m.–4:00 p.m.

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Networking Reception

5:30 p.m.–6:30 p.m.

APP Programs of Interest

Commonly known by such professional designations as nurse practitioners or physician assistants, advanced practice providers, or APPs, are being employed by more medical practices nationally to extend the reach of neurology practices while holding down costs— two increasingly critical outcomes in an era of a booming patient population and increased physician shortages.

These suggested courses for neurologic advanced practice providers to provide a “deep dive” into general neurology.

For a full list of Annual Meeting Programs visit AAN.com/view/SearchAM

General Review and Update

- C1 Resident Basic Science I: Neuropathology
- C10 Resident Basic Science II: Neuroanatomy
- C23 Borderlands of Neurology and Internal Medicine: Chalk Talk
- C40 Resident Basic Science III: Neuropharmacology
- C62 Genetics in Neurology Overview
- C72 Neurology Update I
- C86 Neurology Update II
- C140 Clinical Neurology for Advanced Practice Providers I
- C163 Clinical Neurology for Advanced Practice Providers II
- C168 Clinical E-Pearls
- C214 Neurology Update III
- C225 Neurology Update IV

Practice, Quality, Leadership

- C63 Improving Patients' and Families' Satisfaction and Experiences with Neurologic Care
- C73 Quality Improvement in Practice
- C114 Contemporary Ethical Issues
- C115  Improving Your Leadership Skills: A Practical Approach
- C121 Emotional Communication: Chalk Talk

Headache/Concussion

- C38 Sports Concussion Skills Workshop I
- C49 Sports Concussion Skills Workshop II
- C52 Case Studies: Challenging Headache Cases
- C137 Introduction to Primary Headache Disorders I
- C152 Introduction to Primary Headache Disorders II
- C179 Sports Concussion and Other Mild Concussive Injuries I
- C192 Sports Concussion and Other Mild Concussive Injuries II

Immunology and MS

- C18 Multiple Sclerosis Overview: Basic and Translational Science
- C32 Multiple Sclerosis Overview: Clinical Advances I
- C44 Multiple Sclerosis Overview: Clinical Advances II
- C54 Case Studies: Multiple Sclerosis
- C85 Multiple Sclerosis Essentials

Epilepsy, Seizures, Spells

- C169 Clinical Epilepsy I
- C178 Clinical Epilepsy II
- C191 Clinical Epilepsy III

Imaging

- C36 Neuroimaging for the General Neurologist: Spine and Peripheral Nerve I
- C47 Neuroimaging for the General Neurologist: Spine and Peripheral Nerve II
- C146 Neuroimaging for the General Neurologist: Brain I
- C161 Neuroimaging for the General Neurologist: Brain II
- C56 Test Your Knowledge: A Case-based Approach to Neuroimaging

Some Other Examples

- C64 Child Neurology I
- C66 Movement Disorders for the General Neurologist I
- C74 Child Neurology II
- C77 Movement Disorders for the General Neurologist II
- C87 Child Neurology III
- C90 Movement Disorders for the General Neurologist III
- C127 Sleep Across the Lifecycle: What Neurologists Need to Know
- C133 Mild Cognitive Impairment: Implications for Clinicians

Featured Highlights:

APP Networking Reception

Saturday, April 16, 5:30 p.m.–7:00 p.m.

APP Lunch Networking Sessions

Sunday, April 17, and Monday, April 18, 11:45 a.m.–1:00 p.m.



Saturday, April 16

1:00 p.m.–3:00 p.m. Scientific Platform Sessions

S4: Health Disparities and Sex Differences in Stroke

1:00 p.m. S4.001
Association of Black Race with Recurrent Stroke Risk —*Jong-Ho Park, Bruce Ovbiagele*

1:15 p.m. S4.002
COLADAS: Caribbean Origin Latin American's Disparities in Acute Stroke —*Ina Teron Molina, Abiezer Rodriguez Centeno, Fernando Santiago, Mariel López Valentín*

1:30 p.m. S4.003
African Americans Are Less Likely to Be Adherent to Statins After Ischemic Stroke: An Analysis of Medicare Beneficiaries Following Hospital Discharge —*Karen Albright, Justin Blackburn, Hong Zhao, T. Beasley, Nita Limdi, Virginia Howard, Paul Muntner*

1:45 p.m. S4.004
Subarachnoid Hemorrhage with and Without Concomitant Sickle Cell Disease, a Comparison Using the Nationwide Inpatient Sample —*Fatmah Al Zahmi, James Connors, Shawna Cutting, Laurel Cherian, Sarah Song, Vivien Lee, Rajeev Garg, Bichun Ouyang*

2:00 p.m. S4.005
Age Disparities in Acute Stroke Treatment: An Analysis of Six Years of US Hospital Discharges —*Michael Lysterly, Karen Albright, Toby Groten, Katrina Booth, Mark Harrigan*

2:15 p.m. S4.006
Primary Stroke Prevention in Women —*Puja Patel, Brian Tark, Ketevan Berekashvili, Leah Steinberg, Clotilde Balucani, Jeremy Weedon, Alla Akivis, Richard Sadosky, Grigol Adeishvili, Nagaraj Gabbur, Zachary Adler, Lavanya Chekuru, Ovadia Abulafia, Steven Weiss, Steven Levine*

2:30 p.m. S4.007
Risk of Pregnancy-Associated Stroke Across Age Groups: Population-Based Data from New York State —*Eliza Miller, Hajere Gatollari, Gloria Too, Amelia Boehme, Anna Colello, Lisa Leffert, Mitchell Elkind, Joshua Willey*

2:45 p.m. S4.008
Previous Use of Unopposed Estrogen Hormone Replacement Therapy Continues to Cause Increased Risk for Future Ischemic Strokes —*Haseeb Rahman, Abraham Thomas, Ahmed Malik, Omar Saeed, Adnan Qureshi*

S5: Movement Disorders: Parkinson's Disease and Atypical Parkinsonian Syndromes: Biomarkers

1:00 p.m. S5.001
Tau Imaging in Atypical Parkinsonism: Preliminary Evidence with [11C]PBB3 PET in PSP Subjects —*Alexandra Perez Soriano, Julieta Arena, Jenna Smith-*

Forrester, Nasim Vafai, Elham Shahinfard, Qing Miao, Paul Schaffer, Hitoshi Shinotoh, Makoto Higuchi, Vesna Sossi, A Stoessl

1:15 p.m. S5.002
Modeling Trajectories of Brain Damage in Progressive Supranuclear Palsy: A Longitudinal Multimodal MRI Study —*Francesca Caso, Federica Agosta, Milica Lukic-Jecmenica, Igor Petrovic, Paola Valsasina, Pilar Maria Ferraro, Alessandro Meani, Massimiliano Copetti, Vladimir Kostic, Massimo Filippi*

1:30 p.m. S5.003
Retinal and Visual Cortex Damage and Higher Order Visual Dysfunction in Carriers of E46K Mutation of Alpha-Synuclein Gene —*Inigo Gabilondo, Marta Galdos, Alvaro Arjonilla, Amaia Gonzalez, Begoña Arana, Marian Acera, Alberto Cabrera, Carmen Alonso, Rocio del Pino, Olaia Lucas, Natalia Ojeda, Naroa Ibarretxe-Bilbao, Juan Carlos Gomez Esteban*

1:45 p.m. S5.004
Elevated Systolic Blood Pressure Predicts Motor Outcomes in Parkinson's Disease—A Retrospective Analysis of the CALM-PD Trial —*Christina Lineback, Roger Albin, Nicolaas Bohnen, Vikas Kotagal, The Parkinson Study Group CALM-PD Investigators*

2:00 p.m. S5.005
Trajectories of Prediagnostic Motor and Non-Motor Functioning in Parkinson Disease —*Sirwan Darweesh, Vincentius Verlinden, Bruno Stricker, Albert Hofman, Peter Koudstaal, Mohammad Ikram*

2:15 p.m. S5.006
In Synucleinopathies, Elevated Ratios of Cysteinyldopamine:3,4-Dihydroxyphenylacetic Acid (DOPAC) in Cerebrospinal Fluid Are Associated Specifically with Parkinsonism —*David Goldstein, Courtney Holmes, Irwin Kopin, Yehonatan Sharabi*

2:30 p.m. S5.007
Olfactory Function Predicts Cognitive Deficits and Decline in Early Parkinson's Disease —*Michelle Fullard, Baochan Tran, Sharon Xie, Christi Scordia, Carly Linder, Rachael Purri, Daniel Weintraub, John Duda, Lama Chahine, James Morley*

2:45 p.m. S5.008
Gastric and Colonic Mucosal Alpha-Synuclein Immunostaining As a Biomarker for Parkinson's Disease —*Sun J. Chung, Juyeon Kim, Hyo Jeong Lee, Ho-Sung Ryu, Kee Wook Jung, Mi Jung Kim, Mi-Jung Kim, Seung-Mo Hong, Seung-Jae Myung*

Meeting Schedule

1:00 p.m.–3:00 p.m.

S4 Health Disparities and Sex Differences in Stroke

S5 Movement Disorders: Parkinson's Disease and Atypical Parkinsonian Syndromes: Biomarkers

Ask the Expert: Solo / Small Practitioners

Director: *Brad C. Klein, MD, MBA, FAAN, Willow Grove, PA*

C29 Assessment of Rapidly Progressive Dementias and Related Neurologic Conditions I

Director: *Steven Vernino, MD, PhD, FAAN, Dallas, TX*

C30 Chronic Migraine Education Program I

Director: *Richard B. Lipton, MD, FAAN, Bronx, NY*

C31 Hyperkinetic Movement Disorders: Videodiagnosis and Treatment

Director: *Oksana Suchowersky, MD, FAAN, Edmonton, AB*

C32 Multiple Sclerosis Overview: Clinical Advances I

Director: *Myla Goldman, MD, Charlottesville, VA*

C33 Peripheral Neuropathy II

Director: *Michael E. Shy, MD, Iowa City, IA*

C34 Case Studies: Neurologic Consultations in Cancer Patients I

Director: *Amy A. Pruitt, MD, Philadelphia, PA*

C35 Differential Diagnosis of Neurologic Infections

Director: *Allen J. Aksamit, Jr., MD, FAAN, Rochester, MN*

C36 Neuroimaging for the General Neurologist: Spine and Peripheral Nerve I

Director: *Joshua Klein, MD, PhD, Boston, MA*

C37 Clinical EEG II

Director: *Susan T. Herman, MD, FAAN, Boston, MA*

C38 Sports Concussion Skills Workshop I (registration required)

Director: *Vernon B. Williams, MD, Los Angeles, CA*

C39 Autoimmune Neurology I

Director: *Maarten Jan Titulaer, MD, PhD, Rotterdam, The Netherlands*

1:00 p.m.–5:00 p.m.

C40 Resident Basic Science III: Neuropharmacology

Director: *James W. M. Owens, Jr., MD, PhD, Seattle, WA*

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1:00 p.m.–5:30 p.m.

Integrated Neuroscience Session

11

SIF Redefining Parkinson's Disease: Novel Approaches to Understanding Its Mechanisms and Developing Treatments

This program is offered in partnership with the International Parkinson Disease and Movement Disorder Society and the Movement Disorders Section.

Coordinators: Irene Litvan, MD, FAAN, and Alberto J. Espay, MD, FAAN



International Parkinson and
Movement Disorder Society

Program Description: Recent findings have led us to question when exactly does Parkinson disease (PD) start, where and why does it begin, how does PD evolve clinically and pathologically, and what are the best treatments across all stages and symptoms of PD. Our current definitions of PD appear to be inadequate to capture this complex, multi-system, and multi-faceted disorder. This session will highlight the complexities of PD from its pathogenic and pathologic diversity, and the challenges associated with immune modulation targeting alpha-synuclein cell-to-cell propagation, among other therapeutic strategies heavily dependent on the redefinition of PD.

Upon Completion: Participants should be able to recognize the increasing complexity of pathogenesis and pathologic spread in PD; describe the therapeutic approaches aimed at disease modification, with emphasis on immunotherapy aimed at alpha-synuclein propagation; and discuss the challenges and controversies associated current and evolving definitions of PD, which will shape therapeutic efforts in the coming years and decades.

Part I

1:00 p.m.–3:35 p.m.

1:00 p.m.–1:05 p.m. Introduction

Irene Litvan, MD, FAAN, and Alberto J. Espay, MD, FAAN

1:05 p.m.–1:35 p.m. Invited Speaker

Understanding the Complexity of Parkinson's Disease Pathogenesis
Anthony E. Lang, MD, FRCP, FAAN, Toronto, Canada

1:35 p.m.–1:50 p.m. Discussion

1:50 p.m.–1:55 p.m. I1.001 Data Blitz

Nicotinamide: A Key Player in the Developmental Origins of Parkinson's Disease? —Adrian Williams, Sile Griffin, Mark Pickard, Rosemary Fricker

1:55 p.m.–2:00 p.m. Audience Q&A

2:00 p.m.–2:05 p.m. I1.002 Data Blitz

Genetic Variation Near the SNCA Gene Associates with Parkinson's Disease Motor Endophenotype and Progression —Christine Cooper, Yosef Berlyand, Sharon Xie, Daniel Weintraub, John Trojanowski, Cyrus Zabetian, Alice Chen-Plotkin

2:05 p.m.–2:10 p.m. Audience Q&A

2:10 p.m.–2:15 p.m. I1.003 Data Blitz

The Influence of Bacterial Amyloid on Alpha Synuclein (AS) Misfolding in the Rat —Robert Friedland, Madave Rane, Evelyn Gozal, Shinying Jin, rekha Jagadapillai, Andrew Roberts, Ruolan Liu, Eliezer Masliah, Vilis Stribinski

2:15 p.m.–2:20 p.m. Audience Q&A

2:20 p.m.–2:50 p.m. Invited Speaker

Challenging the Centrality of Brainstem Lewy Bodies for Parkinson Disease Pathogenesis
Glenda Halliday, PhD, New South Wales, Australia

2:50 p.m.–3:05 p.m. Discussion

3:05 p.m.–3:10 p.m. I1.004 Data Blitz

Trajectories of Prediagnostic Motor and Non-Motor Functioning in Parkinson Disease —Sirwan Darweesh, Vincentius Verlinden, Bruno Stricker, Albert Hofman, Peter Koudstaal, Mohammad Ikram

3:10 p.m.–3:15 p.m. Audience Q&A

3:15 p.m.–3:20 p.m. I1.005 Data Blitz

Distinct Synuclein Seeds in Parkinson Disease and Multiple System Atrophy —Tritia Yamasaki, Brandon Holmes, Jennifer Furman, Dhruva Dhavale, Paul Kotzbauer, Marc Diamond

3:20 p.m.–3:25 p.m. Audience Q&A

3:25 p.m.–3:30 p.m. I1.006 Data Blitz

In Synucleinopathies, Elevated Ratios of Cysteinyldopamine:3,4-Dihydroxyphenylacetic Acid (DOPAC) in Cerebrospinal Fluid Are Associated Specifically with Parkinsonism —David Goldstein, Courtney Holmes, Irwin Kopin, Yehonatan Sharabi

3:30 p.m.–3:35 p.m. Audience Q&A

Guided Poster Rounds

3:35 p.m.–4:15 p.m.

I1.001 Nicotinamide: A Key Player in the Developmental Origins of Parkinson's Disease? —Adrian Williams, Sile Griffin, Mark Pickard, Rosemary Fricker

I1.002 Genetic Variation Near the SNCA Gene Associates with Parkinson's Disease Motor Endophenotype and Progression —Christine Cooper, Yosef Berlyand, Sharon Xie, Daniel Weintraub, John Trojanowski, Cyrus Zabetian, Alice Chen-Plotkin

I1.003 The Influence of Bacterial Amyloid on Alpha Synuclein (AS) Misfolding in the Rat —Robert Friedland, Madave Rane, Evelyn Gozal, Shinying Jin, rekha Jagadapillai, Andrew Roberts, Ruolan Liu, Eliezer Masliah, Vilis Stribinski

I1.004 Trajectories of Prediagnostic Motor and Non-Motor Functioning in Parkinson Disease —Sirwan Darweesh, Vincentius Verlinden, Bruno Stricker, Albert Hofman, Peter Koudstaal, Mohammad Ikram

I1.005 Distinct Synuclein Seeds in Parkinson Disease and Multiple System Atrophy —Tritia Yamasaki, Brandon Holmes, Jennifer Furman, Dhruva Dhavale, Paul Kotzbauer, Marc Diamond

I1.006 In Synucleinopathies, Elevated Ratios of Cysteinyldopamine:3,4-Dihydroxyphenylacetic Acid (DOPAC) in Cerebrospinal Fluid Are Associated Specifically with Parkinsonism —David Goldstein, Courtney Holmes, Irwin Kopin, Yehonatan Sharabi

I1.007 Antisense Oligonucleotides to LRRK2 Ameliorate Alpha-synuclein Pathology and Behavioral Deficit Induced by Pre-formed Alpha-synuclein Fibrils —Hien Zhao, Tracy Cole, Andreas Weihofen, Eric Swayze, Holly Kordasiewicz

I1.008 Nilotinib Improves Motor Skills, Cognition and Autonomic Function in Open-Label Phase I Clinical Trial in Parkinsons Disease with Dementia and Lewy Body Dementia —Fernando Pagan, Ellen Valadez, Yasar Torres-Yaghi, Michaeline Hebron, Ramsey Falconer, Sean Rogers, Reversa Mills, Howard Helen, Barbara Wilmarth, Charbel Moussa

I1.009 Nilotinib Significantly Alters CSF Biomarkers and Increases Endogenous Dopamine in Open-Label Phase I Clinical Trial in Parkinsons Disease with Dementia and Lewy Body

Dementia —Charbel Moussa, Michaeline Hebron, Xiaoxia Li, Huang Xu, Ellen Valadez, Torres-Yaghi Yasar, Sean Rogers, Drew Falconer, Reversa Mills, Fernando Pagan

I1.010 MDS Clinical Diagnostic Criteria for Parkinson's Disease —Ronald Postuma, Daniela Berg

I1.011 MDS Research Criteria for Prodromal Parkinson's Disease —Ronald Postuma, Daniela Berg

I1.012 EPI-743 Improves Motor Function and CNS Biomarkers in PD: Results from a Phase 2A Pilot Trial —Theresa Zesiewicz, Kevin Allison, Israt Jahan, Jessica Shaw, F. Murtagh, Tracy Jones, Clifton Gooch, Jason Salemi, Matthew Klein, Guy Miller, Kelly Sullivan

I1.013 Activation of Chaperone-Mediated Autophagy Prevents Accumulation of Oligomeric Alpha-Synuclein in LRRK2 R1441G Knockin Mice of Parkinson's Disease —Shu Leong Ho, Philip Wing-Lok Ho, Shirley Pang, Huifang Liu, Colin Siu-Chi Lam, Matthew Chi-Ting Leung, Lingfei Li, David Ramsden

I1.014 Toward a New Biomarker of Parkinson's Disease by Study of Alpha Synuclein on Upper Enteric System by Endoscopy —Nadia Ben Ali, Achouri-Rassas Afef, Mrabet Saloua, Kchaou Meriem, Fray Saloua, Debbeche Radhouane, Najjar Taoufik, Slim Hawat, Belal Samir

Part II

4:15 p.m.–5:30 p.m.

4:15 p.m.–4:45 p.m. Invited Speaker

Immunotherapy Against Alpha-synuclein: Promises and Challenges
Eliezer Masliah, MD, San Diego, CA

4:45 p.m.–5:00 p.m. Discussion

5:00 p.m.–5:05 p.m. I1.007 Data Blitz

Antisense Oligonucleotides to LRRK2 Ameliorate Alpha-synuclein Pathology and Behavioral Deficit Induced by Pre-formed Alpha-synuclein Fibrils —Hien Zhao, Tracy Cole, Andreas Weihofen, Eric Swayze, Holly Kordasiewicz

5:05 p.m.–5:10 p.m. Audience Q&A

5:10 p.m.–5:15 p.m. I1.008 Data Blitz

Nilotinib Improves Motor Skills, Cognition and Autonomic Function in Open-Label Phase I Clinical Trial in Parkinsons Disease with Dementia and Lewy Body Dementia —Fernando Pagan, Ellen Valadez, Yasar Torres-Yaghi, Michaeline Hebron, Ramsey Falconer, Sean Rogers, Reversa Mills, Howard Helen, Barbara Wilmarth, Charbel Moussa

5:15 p.m.–5:20 p.m. Audience Q&A

5:20 p.m.–5:30 p.m. Session Conclusion

General Comments and Questions

Meeting Schedule

1:00 p.m.–5:30 p.m.

I1  **Redefining Parkinson's Disease: Novel Approaches to Understanding Its Mechanisms and Developing Treatments**

I2 **Stroke in the Elderly and Young: Challenges for the Next Decade** 40

C41  **Neuro-ophthalmology and Neurovestibular Exam Lab Skills Workshop**
(registration required)
Director: John Pula, MD, Chicago, IL

3:30 p.m.–4:15 p.m.

S6 **Global Health** 41

3:30 p.m.–5:30 p.m.

S7 **Stroke Clinical Trials** 41

C42 **Assessment of Rapidly Progressive Dementias and Related Neurologic Conditions II**
Director: Steven Vernino, MD, PhD, FAAN, Dallas, TX

C43 **Chronic Migraine Education Program II**
Director: Richard B. Lipton, MD, FAAN, Bronx, NY

C44 **Multiple Sclerosis Overview: Clinical Advances II**
Director: Scott Douglas Newsome, DO, Baltimore, MD

C45 **Peripheral Neuropathy III**
Director: Michael E. Shy, MD, Iowa City, IA

C46 **Case Studies: Neurologic Consultations in Cancer Patients II**
Director: Patrick Y. Wen, MD, FAAN, Boston, MA

C47 **Neuroimaging for the General Neurologist: Spine and Peripheral Nerve II**
Director: Joshua Klein, MD, PhD, Boston, MA

C48 **Clinical EEG III**
Director: Susan T. Herman, MD, FAAN, Boston, MA

C49  **Sports Concussion Skills Workshop II**
(registration required)
Director: Vernon B. Williams, MD, Los Angeles, CA

C50 **Autoimmune Neurology II**
Director: Maarten Jan Titulaer, MD, PhD, Rotterdam, The Netherlands

4:00 p.m.–5:00 p.m.

I **World Federation of Neurology**
Directors: Terrance L. Cascino, MD, FAAN, Rochester, MN
Raad A. Shakir, MD, FRCP, London, United Kingdom



Run/Walk for Brain Research

On your mark, get set...
help cure BRAIN DISEASE!

Join your colleagues on Tuesday, April 19, 2016, at 6:30 a.m., for a friendly run/walk. All proceeds will help support brain research.

Sign up for the Run/Walk at
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AAN
 **2016**
Annual Meeting

1:00 p.m.–5:30 p.m.

Integrated Neuroscience Session

12 Stroke in the Elderly and Young: Challenges for the Next Decade

Coordinators: Seemant Chaturvedi, MD, FAAN, FAHA, and Cheryl Bushnell, MD, MHS

Program Description: At the two ends of the age spectrum, rates of stroke are rising. Both young patients and the elderly have unique stroke presentations and unique challenges in management. Both groups can have substantial rates of misdiagnosis and under treatment. Faculty will review the unique challenges of stroke in children and young adults, as well as in the elderly. Data will be reviewed pertaining to treatment modalities that are both underutilized and over utilized in these populations.

Upon Completion: Participants should be able to identify the common presentations and most common etiologies for stroke in young adults. Participants should also understand the public health impact of stroke in young adults. Attendees will also appreciate the risks of under treatment and overtreatment of stroke in the elderly.

Part I

1:00 p.m.–3:00 p.m.

1:00 p.m.–1:10 p.m. Introduction

Seemant Chaturvedi, MD, FAAN, FAHA, and Cheryl Bushnell, MD, MHS

1:10 p.m.–1:45 p.m. Invited Speaker

Novel Insights into the Pathogenesis of Stroke in Children
Catherine Amlie-Lefond, Seattle, WA

1:45 p.m.–1:50 p.m. 12.001 Data Blitz

Current Practices and Variability in Feeding Tube Placement for Inpatients with Intracerebral Hemorrhage in US Hospitals—David Hwang, Benjamin George, Adam Kelly, Eric Schneider, Kevin Sheth, Robert Holloway

1:50 p.m.–1:55 p.m. 12.002 Data Blitz

Neuroimaging Markers of Cognitive Outcome in Children with Perinatal Stroke—Kara Murias, Adam Kirton, Sana Tariq, Andrea Moir, Giuseppe Iaria

1:55 p.m.–2:05 p.m. Audience Q&A

2:05 p.m.–2:40 p.m. Invited Speaker

Are Stroke Rates Really Rising in Young Adults and What Can Be Done About It?
Cheryl Bushnell, MD, MHS, Winston Salem, NC

2:40 p.m.–2:45 p.m. 12.003 Data Blitz

Temporal Trends in Stroke Incidence in the Young in the Framingham Study—Hugo Javier Aparicio, Alexa Beiser, Jayandra Himali, Claudia Satizabal, Matthew Pase, Jose Romero, Carlos Kase, Sudha Seshadri

2:45 p.m.–2:50 p.m. 12.004 Data Blitz

Infections Present on Admission and Stroke in the Young—Amelia Boehme, Rebecca Hazan, Eliza Miller, Shadi Yaghi, Sara Rostanski, Joshua Willey, Randolph Marshall, Mitchell Elkind

2:50 p.m.–3:00 p.m. Audience Q&A

Guided Poster Rounds

3:00 p.m.–3:30 p.m.

12.001 Current Practices and Variability in Feeding Tube Placement for Inpatients with Intracerebral Hemorrhage in US Hospitals—David Hwang, Benjamin George, Adam Kelly, Eric Schneider, Kevin Sheth, Robert Holloway

12.002 Neuroimaging Markers of Cognitive Outcome in Children with Perinatal Stroke—Kara Murias, Adam Kirton, Sana Tariq, Andrea Moir, Giuseppe Iaria

12.003 Temporal Trends in Stroke Incidence in the Young in the Framingham Study—Hugo Javier Aparicio, Alexa Beiser, Jayandra Himali, Claudia Satizabal, Matthew Pase, Jose Romero, Carlos Kase, Sudha Seshadri

12.004 Infections Present on Admission and Stroke in the Young—Amelia Boehme, Rebecca Hazan, Eliza Miller, Shadi Yaghi, Sara Rostanski, Joshua Willey, Randolph Marshall, Mitchell Elkind

12.005 Incidence of Atrial Fibrillation Within One Year of Cryptogenic Stroke Among a Large, Real-World Population with Insertable Cardiac Monitors—John Rogers, Allan Nichols, Mark Richards, Scott Ferreira, Shantanu Sarkar, Jodi Koehler, Eduardo Warman, Paul Ziegler

12.006 African Americans Are Less Likely to Be Adherent to Statins After Ischemic Stroke: An Analysis of Medicare Beneficiaries Following Hospital Discharge—Karen Albright, Justin Blackburn, Hong Zhao, T. Beasley, Nita Limdi, Virginia Howard, Paul Muntner

12.007 Rate of Endovascular Therapy in Octogenarian/Nonagenarian Acute Ischemic Stroke Patients Compared to Younger Patients—Fadar Otite, Priyank Khandelwal, Anita Tipimeni, Melissa Fellman, Amer Malik, Dileep Yavagal, Seemant Chaturvedi

12.008 Endovascular Treatment for Acute Ischemic Stroke in Nonagenarians Compared with Younger Patients in a Multicenter Cohort—David Miller, Muhib Khan, Shawn Tsekhan, Grayson Baird, Nils Henninger, Anand Patel, Ajit Puri, Shadi Yaghi, Mahesh Jayaraman, Brian Silver

12.009 Significance of BNP for Neurological Severity in Acute Ischemic Stroke—Takahiro Kuwashiro, Masahiro Yasaka, Yuriko Ito, Keisuke Tokunaga, Go Takaguchi, Asako Nakamura, Seiji Gotoh, Yasushi Okada

12.010 Antithrombotic Strategy in Cerebral Venous Thrombosis: Differences Between Neurologists and Haematologists in a Canadian Survey—Sohaila Alshimmeri, Marie-Christine Camden, Gary Lui, Agnes Lee, Thalia Field

12.011 Worsening Severity of Migraines in Current Users of Hormone Replacement Therapy Correlates to Increased Risk of Ischemic Stroke—Haseeb Rahman, Abraham Thomas, Ahmed Malik, Omar Saeed, Adnan Qureshi

12.012 Argentinean Initiative of Stroke in the Young and Fabry Disease (FD): Final Results—Ricardo Reis, Julieta Mazziotti, Luciana Leon Cajas, Alberto Zimmerman, Pablo Bonardo, Manuel Fernandez Pardal, Alejandra Martinez, Luciano Alberto Sposato, Sebastian Ameriso, Eduardo Bendersky, Pedro Nofal, Patricia Cairola, Lorena Jure, Andrea Sotelo, Paula Rozenfeld, Romina Ceci, Ignacio Casas-Parera, Analía Sanchez Luceros

12.013 Exploring Protein Quantitation Methods to Detect Useful Plasma Biomarkers for Distinguishing Ischemic Stroke from Mimic—Andrew Penn, Robert Balshaw, Mary Lesperance, Viera Saly, Angela Jackson, Derek Smith, Kristine Votova, Linghong Lu, Jaclyn Morrison, Shelagh Coutts, Christoph Borchers

Part II

3:30 p.m.–5:30 p.m.

3:30 p.m.–4:05 p.m. Invited Speaker

Stroke Prevention in the Elderly: What Works, What Does Not Work?
Seemant Chaturvedi, MD, FAAN, FAHA, Miami, FL

4:05 p.m.–4:10 p.m. 12.005 Data Blitz

Incidence of Atrial Fibrillation Within One Year of Cryptogenic Stroke Among a Large, Real-World Population with Insertable Cardiac Monitors—John Rogers, Allan Nichols, Mark Richards, Scott Ferreira, Shantanu Sarkar, Jodi Koehler, Eduardo Warman, Paul Ziegler

4:10 p.m.–4:15 p.m. 12.006 Data Blitz

African Americans Are Less Likely to Be Adherent to Statins After Ischemic Stroke: An Analysis of Medicare Beneficiaries Following Hospital Discharge—Karen Albright, Justin Blackburn, Hong Zhao, T. Beasley, Nita Limdi, Virginia Howard, Paul Muntner

4:15 p.m.–4:25 p.m. Audience Q&A

4:25 p.m.–5:00 p.m. Invited Speaker

Acute Stroke Therapy in the Elderly: Which Treatments are Safe and Effective?
Andrew M. Demchuk, MD, Calgary, Canada

5:00 p.m.–5:05 p.m. 12.007 Data Blitz

Rate of Endovascular Therapy in Octogenarian/Nonagenarian Acute Ischemic Stroke Patients Compared to Younger Patients—Fadar Otite, Priyank Khandelwal, Anita Tipimeni, Melissa Fellman, Amer Malik, Dileep Yavagal, Seemant Chaturvedi

5:05 p.m.–5:10 p.m. 12.008 Data Blitz

Endovascular Treatment for Acute Ischemic Stroke in Nonagenarians Compared with Younger Patients in a Multicenter Cohort—David Miller, Muhib Khan, Shawn Tsekhan, Grayson Baird, Nils Henninger, Anand Patel, Ajit Puri, Shadi Yaghi, Mahesh Jayaraman, Brian Silver

5:10 p.m.–5:20 p.m. Audience Q&A

5:20 p.m.–5:30 p.m. Conclusion

- ③ A registration fee is required
- ④ The program is one of the AAN Leadership University sessions
- ⑤ The course is part of a Subspecialty in Focus track
- ⑥ The program is one of the I Talk sessions



The program is part of the Experiential Learning Area sessions

3:30 p.m.–4:15 p.m.

Scientific Platform Session

S6: Global Health

3:30 p.m. S6.001
Stigma Reduction Efforts: Evaluating a Multi-Faceted Intervention Aimed at Teachers in Zambia —*Masharip Atadzhonov, Natalie Thornton, Elwyn Chomba, Edward Mbewe, Gretchen Birbeck*

3:45 p.m. S6.002
Prediction of Incident Epilepsy After First Seizure in Children with HIV/AIDS in Botswana —*David Bearden, Dennis Dlugos*

4:00 p.m. S6.003
Medication Versus Management: Beyond Pills-to-Mouths Measures of Epilepsy Care —*Erica McKenzie, Damber Nirola, Lhab Tshering, Sonam Deki, Bryan Patenaude, Sarah Clark, Sydney Cash, Ronald Thibert, Rodrigo Zepeda Garcia, Edward Leung, Alice Lam, Andrew Lim, Jo Mantia, Joseph Cohen, Andrew Cole, Farrah Mateen*

3:30 p.m.–5:30 p.m.

Scientific Platform Session

S7: Stroke Clinical Trials

3:30 p.m. S7.001
Muscle Selection Patterns for Injection of OnabotulinumtoxinA in Adult Patients with Post-Stroke Lower-Limb Spasticity Influence Outcome: Results from a Double-Blind, Placebo-Controlled Phase 3 Clinical Trial —*Theodore Wein, Alberto Esquenazi, Anthony Ward, Carolyn Geis, Chengcheng Liu, Rozalina Dimitrova*

3:45 p.m. S7.002
Sustained Benefit with Repeated Treatments of OnabotulinumtoxinA in Post-Stroke Lower Limb Spasticity: 1-Year Open-Label Final Results from a Double-Blind, Placebo-Controlled, Phase 3 Trial —*Theodore Wein, Carolyn Geis, Ziyad Ayyoub, Stanislaw Ochudlo, Lynn James, Grace Pan, Andrzej Bogucki, Rozalina Dimitrova*

4:00 p.m. S7.003
Non-Invasive Therapy of Symptomatic High Grade Carotid Stenosis Using [Tin-117m]-DOTA-Annexin V —*Gilbert Gonzales, Harry Strauss, Suresh Srivastava, Nigel Stevens*

4:15 p.m. S7.004
GAMES (Glyburide Advantage in Malignant Edema and Stroke) RP: A Phase II Study Toward Preventing Edema After Ischemia —*Kevin Sheth, Jordan Elm, Holly Hinson, Bradley Molyneaux, Lauren Beslow, Gordon Sze, Ann-Christin Ostwaldt, Gregory Del Zoppo, J Simard, Sven Jacobson, W. Kimberly*

4:30 p.m. S7.005
Natalizumab Versus Placebo in Patients with Acute Ischemic Stroke (AIS): Results from ACTION, a Multicenter, Double-Blind, Placebo-Controlled, Randomized Phase 2 Clinical Trial —*Jacob Elkins, Mitchell Elkind, Roland Veltkamp, Joan Montaner, S Johnston, Aneesh Singhal, Kyra Becker, Maarten Lansberg, Ih Chang, Weihua Tang, Sarah Gheuens, Lahar Mehta*

4:45 p.m. S7.006
GAMES (Glyburide Advantage in Malignant Edema and Stroke) RP Trial: Intermediate Endpoint Analysis As Proof-Of-Concept —*W. Taylor Kimberly, Jordan Elm, Holly Hinson, Bradley Molyneaux, Lauren Beslow, Gordon Sze, Ann-Christin Ostwaldt, Gregory Del Zoppo, Marc Simard, Kevin Sheth*

5:00 p.m. S7.007
Clinical Impairment in Patients Followed with or Without Interventional Therapy in a Randomized Trial of Unruptured Brain AVMs (ARUBA) —*J. Mohr, Jessica Overbey, Christian Stapf, Andreas Hartmann, Marco Stefani, Michael Parides, Ellen Moquete, Claudia Moy, E Vicaute, Alan Moskowitz, R. Al-Shahi Salman, E. Houdart, Charlotte Cordonnier, Ruediger von Kummer, Alessandra Biondi, J. Berkefeld, C. Klijn, Kristy Harkness, Richard Libman, X Barreau, Helen Kim*

5:15 p.m. S7.008
A Multicenter Phase II Randomized Trial of a HIF-Prolyl Hydroxylase Inhibitor for Neuroprotection in High Risk Thoracic Aortic Repair —*Steven Messe, Laura Demopoulos, Thomas Haws, Ali Khonezhad, Bradley Leshnowar, Joseph Coselli, Jehangir Appoo, G Hughes, T Reece, Derek Brinster, Scott Kasner, John Kern, Nimesh Desai, Victoria Ballard, Frank Fang, John Lepore, Joseph Bavaria*

4:30 p.m.–5:30 p.m.

Scientific Platform Session

S8: Practice and Policy

4:30 p.m. S8.001
The Impact of Professional Medical Interpreter Involvement on the Care of Acute Ischemic Stroke Patients at an Academic Medical Center —*Betty Luan Erfe, Khawja Siddiqui, Lee Schwamm, Nicte Mejia*

4:45 p.m. S8.002
Getting the Point: Changing to the Atraumatic Needle at Walter Reed National Military Medical Center —*Michael Johnson*

5:00 p.m. S8.003
Examination of the Effects of Chronic Exposure to Federally-Regulated and Approved Levels of Methyl Bromide in Dock Workers: A Case Series —*Joseph McCall, David Harris, Matthew Berk*

5:15 p.m. S8.004
A Quality Improvement Project to Improve Trainee Compliance with the AAN Guidelines for Neurological Prognosis After Cardiac Arrest —*Proleta Datta, Jennifer Padilla Martinez, Omatola Hope, Huimahn Choi*

Meeting Schedule

4:30 p.m.–5:30 p.m.

S8 Practice and Policy

5:30 p.m.–6:30 p.m.

Neurology Compensation and Productivity Survey and Dashboard Report

Directors: *David A. Evans, MBA, Dallas, TX, Bryan Soronson, CRA, FACMPE, MPA, Baltimore, MD*

6:00 p.m.–9:00 p.m.

Faculty and Trainee Reception

6:30 p.m.–9:30 p.m.

C51 Case Studies in Behavioral Neurology: Focus on Frontotemporal Degeneration

Director: *Daniel Kauffer, MD, FAAN, Chapel Hill, NC*

C52 Case Studies: Challenging Headache Cases

Director: *Kathleen B. Digre, MD, FAAN, Salt Lake City, UT*

C53 Case Studies: Unusual Movement Disorders

Director: *Anthony E. Lang, MD, FAAN, Toronto, ON*

C54 Case Studies: Multiple Sclerosis

Director: *John Corboy, MD, FAAN, Aurora, CO*

C55 Case Studies: Unusual Diagnostic and Management of Cases in Neuromuscular Disease

Director: *Anne M. Connolly, MD, St. Louis, MO*

C56 Test Your Knowledge: A Case-based Approach to Neuroimaging

Director: *Joseph C. Masdeu, MD, PhD, FAAN, Houston, TX*

C57 Case Studies: How to Analyze Spells by Video-EEG

Director: *Joseph F. Dratzkowski, MD, FAAN, Phoenix, AZ*

C58 Case Studies in the ICU

Director: *Nicholas Joseph Silvestri, MD, Buffalo, NY*

Sat - April 16

Sunday, April 17

Plan Your Experience

6:30 a.m.–7:15 a.m.

- S9 Neurorehabilitation: New Targets and Therapies . . . 44

6:30 a.m.–8:30 a.m.

- C59  Interventional Treatment of Migraine and Other Headache Disorders
- C60 Dementia Update: Diagnostic Advances
- C61 Morning Report: Multiple Sclerosis
- C62 Genetics in Neurology Overview
- C63 Improving Patients' and Families' Satisfaction and Experiences with Neurologic Care
- C64 Child Neurology I
- C65 Infections of the Nervous System I
- C66 Movement Disorders for the General Neurologist I
- C67 Therapy of Neuromuscular Disease
- C68 REM Sleep Behavior Disorder
- C69 Eye Movement Disorders: A Systematic Approach to the Evaluation of Diplopia
- C70 Update on Endovascular Treatment of Cerebrovascular Diseases
- S10 Child Neurology 44

7:00 a.m.–7:45 a.m.

-  Yoga

7:30 a.m.–8:30 a.m.

- S11 Neuro Trauma and Sports Neurology 44

8:00 a.m.–9:00 a.m.

-  AAN's Axon Registry: Data Powering Neurology's Future

8:30 a.m.–5:30 p.m.

- P2 Poster Session II
Presenters Stand by Posters 4:00 p.m.–5:30 p.m. . . . 46

9:00 a.m.–12:00 p.m.

- Presidential Plenary Session 56**

1:00 p.m.–2:00 p.m.

-  Navigating the World of Mobile Health
-  Physical Exercise and Cognitive Training in Neurology—Application in Aging & Neurodegenerative Disease

1:00 p.m.–3:00 p.m.

- C71 Dementia Update: Imaging Modalities and CTE
- C72 Neurology Update I

- C73 Quality Improvement in Practice
- C74 Child Neurology II
- C75 Myelopathies I
- C76 Infections of the Nervous System II
- C77 Movement Disorders for the General Neurologist II
- C78 Evaluation and Management of Autonomic Disorders I
- C79 Emergency Neurology Topics: Status Epilepticus and Pediatric Neurology Emergencies
- C80 Now You See It, Now You Know It—Pathognomonic Neuro-ophthalmology Findings
- C81 Functional Neurologic Disorders I
- S12 Neuromyelitis Optica and Autoimmune Encephalitis *Presentation of the John Dystel Prize for Multiple Sclerosis Research 57*
- S13 Highlights in Sleep Medicine
Presentation of the Wayne A. Hening Sleep Medicine Investigator Award
Presentation of the Sleep Science Award 57
- S14 Epilepsy: Antiepileptic Drugs and Epidemiology . . . 57
-  Ask the Expert: ICD-10-CM

1:00 p.m.–5:00 p.m.

- C82  Between Mars and Venus: How Great Leadership Adopts Traits from the Best of Both Genders
(registration required)

1:00 p.m.–5:30 p.m.

- C83  Epilepsy Skills Workshop
(registration required)
- I3  New and Emerging Therapeutic Options in Migraine and Other Headache Disorders 58
- I4 Advances in Acquired and Genetic Muscle Diseases . 60
- I5 Sex-related Factors in Neurological Disease . . . 61

3:00 p.m.–4:00 p.m.

-  Integrative Approach to the Management of Chronic Pain Syndromes

3:30 p.m.–4:30 p.m.

-  Policy, Politics, and Presidential Polls
- S15 History of Neurology
Presentation of the Lawrence C. McHenry Award: An Award for the History of Neurology 62

3:30 p.m.–5:30 p.m.

- C84 Dementia Update: Non-Alzheimer Dementias and Dementia Management
- C85 Multiple Sclerosis Essentials
- C86 Neurology Update II

- ③ A registration fee is required
- ⚙ The program is one of the AAN Leadership University sessions
- 📺 The course is part of a Subspecialty in Focus track
- 🗣 The program is one of the I Talk sessions



The program is part of the Experiential Learning Area sessions

- C87 Child Neurology III
- C88 Myelopathies II
- C89 Infections of the Nervous System III
- C90 Movement Disorders for the General Neurologist III
- C91 Evaluation and Management of Autonomic Disorders II
- C92 Emergency Neurology Topics: Acute/Subacute Weakness and Subarachnoid Hemorrhage
- C93 Thinking Outside the Toolbox: Assessment of Clinical Reasoning in the Modern Era of Medical Education
- C94 Functional Neurologic Disorders II
- S16 Prehospital/Emergency Room Stroke Care and Intracerebral Hemorrhage
*Presentation of the Michael S. Pessin
Stoke Leadership Prize 62*

4:45 p.m.–5:30 p.m.

- S17 Pain and Palliative Care
*Presentation of the Mitchell B. Max Award for
Neuropathic Pain. 62*

6:00 p.m.–10:00 p.m.

- Opening Party 162**
- 6:00 p.m.–8:00 p.m. Neurobowl®
- 8:10 p.m.–8:15 p.m. Lighting of Olympic Torch
- 8:15 p.m.–9:00 p.m. Native Thunder Productions Presents
Story Telling Through Native Dancing
- 8:45 p.m.–10:00 p.m. Sixwire

Sun - April 17

My Sunday

Time _____ to _____

Program # _____ Program Name _____

Time _____ to _____

Program # _____ Program Name _____

Time _____ to _____

Program # _____ Program Name _____

9:00 a.m.–12:00 p.m. Presidential Plenary Session

Lunch

Time _____ to _____

Program # _____ Program Name _____

Time _____ to _____

Program # _____ Program Name _____

Time _____ to _____

Program # _____ Program Name _____

6:00 p.m.–10:00 p.m. Opening Party

6:30 a.m.–7:15 a.m.

Scientific Platform Session

S9: Neurorehabilitation: New Targets and Therapies

6:30 a.m. S9.001
Bifrontal Transcranial Direct Current Stimulation Enhances Working Memory in Adults with

High-Functioning Autism —Joseph van Steenburgh, Mark Varvaris, David Schretlen, Tracy Vannorsdall, Barry Gordon

6:45 a.m. S9.002
Impact of a Network-Based Cognitive Rehabilitation Treatment on Quality of Life and Changes on Functional Connectivity: A Study with Relapsing-Remitting Multiple Sclerosis Patients —Micaela Mitolo, Annalena Venneri, Basil Sharrack

7:00 a.m. S9.003
Computer-Assisted Rehabilitation of Attention in Pediatric Onset Multiple Sclerosis and Attention Deficit Hyperactivity Disorder —Pietro Iaffaldano, Marta Simone, Rosa Gemma Viterbo, Lucia Margari, Maria Amato, Maria Trojano

6:30 a.m.–8:30 a.m.

Scientific Platform Session

S10: Child Neurology

6:30 a.m. S10.001
Symptom Profiles of Autism Spectrum Disorder in Tuberous Sclerosis Complex —Shafali Jeste, Kandice Varcin, Gerhard Helleman, Amanda Gulsrud, Mustafa Sahin, Joyce Wu, Connie Kasari, Charles Nelson

6:45 a.m. S10.002
TSC2 Gene Missense Mutations May Be Associated with Non Syndromic Autism —Bharti Manwani, Stormy Chamberlain, Jennifer Twachtman-Basset, Erin Cornell, Christine Stanley, Louisa Kalsner

7:00 a.m. S10.003
Changes in the Microstructural Connectome Underlie Visual Memory Deficits in the Prematurely Born at Age 16 Years —Alyssa Thomas, Dustin Scheinost, Betty Vohr, Cheryl Lacadie, R Constable, Laura Ment

7:15 a.m. S10.004
Neurologic Follow-Up of 12 Colorado Children with Acute Flaccid Myelitis at One Year —Jan Ludke, Kevin Messacar, Michele Yang, John Maloney, Terri Carry, Patricia Kenyon, Jennifer Lindwall, Joyce Oleszek, Kenneth Tyler, Samuel Dominguez, Teri Schreiner

7:30 a.m. S10.005
Treatment of ADHD in Youth with Epilepsy —Michelle Lally, Mary Kral, Andrea Boan

7:45 a.m. S10.006
Quantitative Effects of Botulinum Toxin Treatment on the Modified Ashworth Scale and the Tardieu Scale: Results from a Randomized Controlled Study of AbobotulinumtoxinA in Children with Dynamic Equinus Foot Deformity Due to Cerebral Palsy —Ann Tilton, Edward Dabrowski, Dennis Matthews, Mark Gormley, Jorge Carranza, Magali Volteau, Philippe Picaut

8:00 a.m. S10.007
The Transcriptional Activator Krüppel-Like Factor-6 Is Required for CNS

Myelination —Benjamin Laitman, Linnea Asp, John Mariani, Jingya Zhang, Jia Liu, Dipankar Dutta, Candice Chapouly, Sam Horng, Elisabeth Kramer, Nesanet Mitiku, Hannah Loo, Natalie Burlant, Xiomara Pedre, Yuko Hara, German Nudelman, Elena Zaslavsky, Young-Min Lee, David Braun, Richard Lu, Goutham Narla, Cedric Raine, Scott Friedman, Patrizia Casaccia, Gareth John

8:15 a.m. S10.008
Sleep Dependent Memory Consolidation in Children with Autism Spectrum Disorders —Kiran Maski, Hannah Holbrook, Dara Manoach, Ellen Hanson, Kush Kapur, Robert Stickgold

7:30 a.m.–8:30 a.m.

Scientific Platform Session

S11: Neuro Trauma and Sports Neurology

7:30 a.m. S11.001
Biomarkers of Vascular Integrity After Traumatic Brain Injury (TBI), and Correlation with Cerebrovascular Reactivity and Phosphodiesterase 5 Inhibition —Yunhua Gong, Christopher

Campbell, Bao-Xi Qu, Erika Silverman, Carol Moore, Kimbra Kenney, Ramon Diaz-Arrastia

7:45 a.m. S11.002
A Multimodal MRI Study in Mild Traumatic Brain Injury: Correlation of Imaging Features with Clinical Symptoms —Luca Marinelli, Venkata Chebrolu, Amy Gallenberg, Sandeep Gupta, Suresh Joel, Xia Li, Eve Lo Castro, Radhika Madhavan, Matthew Middione, Rakesh

Mullick, Marcel Prastawa, Hariharan Ravishankar, Ajit Shankaranarayanan, Jonathan Sperl, Ek Tsoon Tan, Pauline Worters, Tianhao Zhang, Sumit Niogi, A. John Tsiouris, Victor Miranda, Teena Shetty

8:00 a.m. S11.003
The Effectiveness of Acute Post-Concussion Cognitive and Physical Rest —Thomas Buckley, Barry Munkasy, Brandy Clouse

8:15 a.m. S11.004
Phosphothreonine175 and Phosphothreonine231 Expression in Chronic Traumatic Encephalopathy (CTE) and Chronic Traumatic Encephalomyelopathy - Therapeutic Implications —Alexander Moszczynski, Ann McKee, Wendy Strong, Michael Strong

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-  The program is one of the AAN Leadership University sessions
-  The course is part of a Subspecialty in Focus track
-  The program is one of the I Talk sessions



The program is part of the Experiential Learning Area sessions

Meeting Schedule

6:30 a.m.–7:15 a.m.

S9 Neurorehabilitation: New Targets and Therapies

6:30 a.m.–8:30 a.m.

S10 Child Neurology

C59 SIF Interventional Treatment of Migraine and Other Headache Disorders

Director: *Morris Levin, MD, FAAN, San Francisco, CA*

C60 Dementia Update: Diagnostic Advances

Director: *John C. Morris, MD, FAAN, St. Louis, MO*

C61 Morning Report: Multiple Sclerosis

Director: *Nancy L. Sicotte, MD, FAAN, Los Angeles, CA*

C62 Genetics in Neurology Overview

Director: *Matthew Harms, MD, New York, NY*

C63 Improving Patients' and Families' Satisfaction and Experiences with Neurologic Care

Director: *David Y. Hwang, MD, New Haven, CT*

C64 Child Neurology I

Director: *Jonathan W. Mink, MD, PhD, FAAN, Rochester, NY*

C65 Infections of the Nervous System I

Director: *Tracey Cho, MD, Boston, MA*

C66 Movement Disorders for the General Neurologist I

Director: *Susan Fox, MD, Toronto, ON*

C67 Therapy of Neuromuscular Disease

Director: *Michael D. Weiss, MD, FAAN, Seattle, WA*

C68 REM Sleep Behavior Disorder

Director: *Alon Y. Avidan, MD, MPH, FAAN, Los Angeles, CA*

C69 Eye Movement Disorders: A Systematic Approach to the Evaluation of Diplopia

Director: *Marc Dinkin, MD, New York, NY*

C70 Update on Endovascular Treatment of Cerebrovascular Diseases

Director: *Dileep R. Yavagal, MD, FAAN, Miami, FL*

7:00 a.m.–7:45 a.m.



Yoga

Instructor: *Sarah Bird Nelson, JD, RYT 200, Minneapolis, MN*

7:30 a.m.–8:30 a.m.

S11 Neuro Trauma and Sports Neurology

8:00 a.m.–9:00 a.m.

1 AAN's Axon Registry: Data Powering Neurology's Future

Director: *Bruce Sigbee, MD, FAAN, Union, ME*

8:30 a.m.–5:30 p.m.

P2 Poster Session II 46

9:00 a.m.–12:00 p.m.

Presidential Plenary Session 56





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8:30 a.m.–5:30 p.m.

Poster Session

P2 Poster Session II

Presenters Stand by Posters 4:00 p.m.–5:30 p.m.

Poster Discussion Session: Epilepsy/Clinical Neurophysiology

Eight abstracts have been selected for presentation during a poster discussion session. Authors will present a 5-minute data blitz presentation.

In addition to the regular poster time, authors also have a specific time slot over lunch. Times below are standard across poster sessions.

Discussion: 11:45 a.m.–11:50 a.m.

P2.001 Healthcare Resource Utilization Among Persons with Epilepsy Treated by Different Healthcare Providers — *Sandra Helmers, Shaloo Gupta, Russell Knott*

Discussion: 11:50 a.m.–11:55 a.m.

P2.002 Use of a Digital Self-Management Platform for Improving Access in Epilepsy Patients — *John Hixson*

Discussion: 11:55 a.m.–12:00 p.m.

P2.003 How Should We Review Ambulatory EEG? — *Pedro Balaguera, Stephan Schuele*

Discussion: 12:00 p.m.–12:05 p.m.

P2.004 Clinical Predictors and Outcomes of Convulsive Status Epilepticus After Subarachnoid Hemorrhage in United States — *Mohammad Owais, Saqib Chaudhry, Mohammad Afzal, Haseeb Rahman, Ali Saeed, Ahmed Riaz, Alex Schulte, Mounzer Kassab, Adnan Qureshi*

Discussion: 12:05 p.m.–12:10 p.m.

P2.005 Hippocampal Subfield Volumes in Temporal Lobe Epilepsy — *Dana Nielsen, Sierra Germeyan, Edythe Wiggs, Alison Austermeuhle, William Theodore*

Discussion: 12:10 p.m.–12:15 p.m.

P2.006 Transition from Pediatric to Adult Care for Patients with Epilepsy: Considerations from the Adult Side — *Felippe Borlot, Jose Tellez-Zenteno, Anita Allen, O. Snead, Danielle Andrade*

Discussion: 12:15 p.m.–12:20 p.m.

P2.007 Integrating High Density EEG in the Presurgical Evaluation of Suspected Midline and Parasagittal Onset Epilepsy — *Anteneh Feyissa, Jeffrey Britton, Cindy Nelson, Gregory Cascino, Gregory Worrell*

Discussion: 12:20 p.m.–12:25 p.m.

P2.008 Absence Seizures in Juvenile Myoclonic Epilepsy: Whole Exome Sequencing Results and Subsyndromes — *Reyna Duron, Marco Medina, Iris Martinez-Juarez, Aurelio Jara-Prado, Adriana Ochoa, Minerva Lopez-Ruiz, Yolli Molina, Laura Guilhoto, Elsa Yacubian, Jenny Wight, Viet-Huong Nguyen, Yu-Chen Lin, Dongsheng Bai, Miyabi Tanaka, Christopher Patterson, Maria Alonso, Julia Bailey, Antonio Delgado-Escueta*

e-Poster Session: General Neurology and Infectious Disease

Ten e-posters in six neurologic topics have been selected for on-site, interactive display. e-Posters will be grouped in a separate area where attendees are invited to explore more deeply through touch screen displays.

P2.009 Superficial Siderosis and Dural Ectasia: A Case Report — *Meabh O'Hare, Conor Fearon, Eoin Kavanagh, Brian Murray, Timothy Lynch*

P2.010 Non-rapid-eye Movement and Rapid-eye-movement Parasomnia with Sleep Breathing Disorder, Chorea and Dementia Associated with Antibodies to IgLON5: Case Report — *Mateus Simabukuro, Tarso Adoni, Rubens Gisbert Cury, Mônica Haddad, Francesc Graus*

P2.011 Rapid Clinical and Dramatic Radiologic Improvement of Spontaneous Intracranial Hypotension After an Epidural Blood Patch: A Case Report — *Emiliya Melkumova, Bushra Javed, Christeena Kurian, Ramandeep Sahni, Michael Tenner, Brij Ahluwalia-Singh*

P2.012 Blind, Deaf and Confused: An Unusual Case of Wernicke's Encephalopathy in a Young Adult — *Daniella Miller*

P2.013 A Rare Presentation of Superficial Siderosis Resulting in Hearing Loss in Conjunction with Neurofibromatosis Type I — *Constance Katsafanas, Sukwinder Sandhu*

P2.014 An MRI Method for Identifying Striosome and Matrix Compartments in the Human Striatum In Vivo — *Jeffrey Waugh, Nikos Makris, Nutan Sharma, Hans Breiter, Anne Blood*

P2.015 Intramedullary Spinal Cord Abscess; Descriptive Review of the Literature — *Sarah Lapointe, Catherine Legault, Robert Altman, Vinh Donald*

P2.016 Lemierre's Syndrome Leading to Bilateral Carotid Stenosis and Watershed Infarcts in a Young Female — *Junaid Siddiqui, Shivam Mittal, Nikita Dedhia, Bashar Katirji*

P2.017 HSV-2 Presenting with Encephalomyelitis and Diffuse White Matter Lesions — *Dominique Rosales, Clotilde Hainline, Nina Kim, Jonathan Howard, Steven Galetta*

P2.018 Fungal Rhinussinusitis and Central Nervous System Involvement: Case Series and Literature Review — *Pedro Augusto Sousa Rodrigues, Antonio Coimbra Neto, Renata Cortellazzi, Bárbara Braga, Priscila Paulin, Nathalie Uski, Cristina Jaques, Flávia Alcantara, Alessandro Sousa, Tauana Leoni, Marcio Balhazar, Clarissa Yasuda, Paula Azevedo*

Epilepsy/Clinical Neurophysiology: AEDs

P2.019 Seizure Freedom with YKP3089 As Adjunctive Therapy for Refractory Partial-Onset Seizures in Double-Blind Placebo-Controlled Trials — *Gregory Krauss, Jacqueline French, Marc Kamin, Palanichamy Ilankumaran*

P2.020 Ganaxolone Administered Intravenously Prevents Behavioral Seizures and Promotes Survival in the Rat Lithium-Pilocarpine Model of Status Epilepticus — *Michael Saporito, Julia Tsai, Albenia Patroneva, Steve White, Cameron Metcalf, Melissa L. Barker-Haliski*

P2.021 Efficacy of Adjunctive Perampanel in Idiopathic Generalized Epilepsy Patients with Drug-Resistant Primary Generalized Tonic-Clonic Seizures by Age, Sex, and Race: Double-Blind Placebo-Controlled Phase III Study — *Bernhard Steinhoff, Terence O'Brien, Haichen Yang, Antonio Laurenza, Anna Patten, Francesco Bibbiani*

P2.022 Efficacy and Safety of Adjunctive Brivaracetam for Partial-Onset (Focal) Seizures: Pooled Results from Three Fixed-Dose, Randomized, Double-Blind, Placebo-Controlled

Phase III Studies — *Pier Paolo Quarato, John Whitesides, Martin Johnson, Jimmy Schiemann*

P2.023 Assessment of Eslicarbazepine Acetate Monotherapy Vs. Other Anti-Epileptic Drugs for Refractory Partial-Onset Seizures: Results of a Network Meta-Analysis Using Historical-Control Trials — *Fulton Velez, Todd Grinnell, Mohd Kashif Siddiqui, David Blum*

P2.024 Relationship Between Perampanel Exposure, Seizure Outcomes and Treatment-Emergent Adverse Events (TEAEs) in Patients with Primary Generalized Tonic-Clonic Seizures

(PGTCS): A Randomized, Double-Blind (DB) Phase III Study — *Gregory Krauss, Robert Wechsler, Francesco Bibbiani, Anna Patten, Betsy Williams, Haichen Yang, Barry Gidal, Ziad Hussein*

P2.025 Use of Pharmacokinetic-Pharmacodynamic (PK-PD) Modeling and Simulations to Predict Efficacy Outcomes with Eslicarbazepine Acetate (ESL) 800mg Once-Daily (QD) As Monotherapy — *Soujanya Sunkaraneni, Julie Passarelli, Janet Pitner, Todd Grinnell, David Blum*

P2.026 Sabril Vision Study: Pharmacokinetic and Pharmacodynamic Analysis of the Effect of Vigabatrin on Taurine Plasma Concentrations —*Dwain Tolbert, Stine Timmermann, Johan Areberb, Deborah Lee, JoAnn Whittle*

P2.027 Efficacy of Brivaracetam (BRV) As Adjunctive Therapy in Partial-Onset (Focal) Seizures Among Patients with Prior Levetiracetam (LEV), Carbamazepine (CBZ), Lamotrigine (LTG), or Topiramate (TPM) Exposure —*Steve Chung, Pavel Klein, Michael Sperling, Anyzeila Diaz, Sami Elmoufti, Jimmy Schiemann, John Whitesides*

P2.028 Patients Treated with Eslicarbazepine Acetate Monotherapy Show Quality of Life Improvement —*Fulton Velez, T. Christopher Bond, Kathryn Anastassopoulos, Xuezhe Wang, Hailong Cheng, Rui Sousa, David Blum, Joyce Cramer*

P2.029 Efficacy and Safety of Eslicarbazepine Acetate (ESL) Monotherapy in Patients Converting from Carbamazepine (CBZ) —*Ladislav Pazdera, Michael Sperling, Jay Harvey, David Blum, Todd Grinnell, Hailong Cheng*

P2.030 Markers of Bone Turnover and Lipid Metabolism During Eslicarbazepine Acetate (ESL) Monotherapy in Patients Taking or Not Taking Enzyme-Inducing Antiepileptic Drugs (EIAEDs) at Baseline (BL) —*Tawnya Constantino, Barry Gidal, Scott Mintzer, Todd Grinnell, David Blum, Hailong Cheng*

P2.031 Eslicarbazepine Acetate Associated with Reduced Seizure Severity in Addition to Reduced Seizure Frequency —*Joyce Cramer, Fulton Velez, Kathryn Anastassopoulos, T. Christopher Bond, Xuezhe Wang, David Blum, Joana Moreira, Francisco Rocha*

P2.032 Seizure and Quality of Life Outcomes in Patients with Long-Term Adjunctive Brivaracetam Treatment for Partial-Onset Seizures —*Manuel Toledo, Patrick Kwan, Martin Johnson, Simon Borghs, Klaus Eckhardt, Jimmy Schiemann, John Whitesides*

P2.033 Evaluation of Reproducibility of Pharmacokinetics and Clinical Outcome Differences with Brand and Generic Lamotrigine Switching in Epilepsy Patients (BEEP FU Study) —*Tricia Ting, Wenlei Jiang, Maureen Kane, James Polli*

P2.034 The Sabril Registry After 6 Years: Patient Characteristics and Vision Loss —*Robert Sergott, Rod Foroozan, John Pellock, R Fought, W. Donald Shields, Adam Ziemann, Deborah Lee, Yekaterina Dribinsky, Sarah Torri, Feisal Othman, Jouko Isojarvi*

P2.035 Tolerability of Adjunctive Eslicarbazepine Acetate (ESL) in Elderly Patients with Partial-Onset Seizures (POS): An Exploratory Post-Hoc Analysis of Three Phase III Studies —*William Rosenfeld, Patricia Penovich, Joanne Rogin, Fernando Cendes, Mar Carreno, Helena Gama, Francisco Rocha, Robert Tosiello, David Blum, Todd Grinnell*

P2.036 Post Hoc Analysis of Time to Sustained 50% Responder Status in Three Phase III Studies of Brivaracetam (BRV)

As Adjunctive Treatment for Partial-Onset (Focal) Seizures (POS) —*Pavel Klein, Martin Johnson, Jimmy Schiemann, John Whitesides*

P2.037 Pill Color Preference Considerations in Clinical Trial Design —*Christopher Stack, James Polli, Tricia Ting*

P2.038 Assessment of the Anticonvulsant Effects and Tolerability of GW Pharmaceuticals' Cannabidiol in the Anticonvulsant Screening Program —*Nicholas Jones, Thomas Hill, Colin Stott, Stephen Wright*

P2.039 Optimizing Clobazam Treatment in Patients with Lennox-Gastaut Syndrome (LGS) —*Robert Wechsler, Barry Gidal, Steve Chung, Guangbin Peng, Jouko Isojarvi*

P2.040 What Drives the Placebo Effect? A Retrospective Study Across Trials —*Daniel Goldenholz, Mark Cook, Robert Moss, William Theodore*

P2.041 Efficacy, Safety, and Tolerability of Brivaracetam (BRV) with Concomitant Lamotrigine (LTG) or Concomitant Topiramate (TPM) in Pooled Phase III Randomized, Double-Blind Trials: A Post Hoc Analysis —*Pavel Klein, John Whitesides, Jimmy Schiemann, Martin Johnson*

P2.042 Efficacy and Safety of Adjunctive Brivaracetam (BRV) for Partial-Onset (Focal) Seizures (POS) in Patients with Type IC Seizures at Baseline: Pooled Results from Three Fixed-Dose, Randomized, Double-Blind, Placebo-Controlled, Phase III Studies —*Anyzeila Diaz, Sami Elmoufti, Jimmy Schiemann, John Whitesides*

P2.043 Response Durability Analyses from a Rufinamide Pivotal Trial in Lennox-Gastaut Syndrome (LGS) —*Yu-tze Ng, Tracy Glauser, Jose Ferreira, Omar Olhaya, Betsy Williams, Carlos Perdomo, Francesco Bibbiani*

P2.044 Systematic Literature Review of Adjunctive Anti-Epileptic Drug Trials in Patients with Primary Generalized Tonic-Clonic Seizures Illustrates Changes in Standard of Care Over 12-20 Years —*Wan Tsong, Huimin Li, Anna Forsythe, David Gomez-Ulloa*

P2.045 Secondary Screening of Patients in Randomized Perampanel Primary Generalized Tonic-Clonic Seizures (PGTCS) Study Excludes 29.9% of Eligible Patients Due to Inaccurate Classification —*Jacqueline French, Bree DiVentura, Eugen Trinka, Francesco Bibbiani, Haichen Yang*

P2.046 Pharmacogenetics of ATP Binding Cassette Transporter -MDR1 Gene Polymorphism (MDR1 - 1236C>T Polymorphism) and Response to Antiepileptic Drug Phenytoin Pharmacokinetics in Epilepsy —*Adel Ali Alhazzani, Murali Munisamy, Gauthaman Karunakaran*

P2.047 Emerging Trends of Antiepileptic Drug (AED) Use Amongst Neonatologists in Intensive Care —*Kaashif*

Ahmad, Shivani Desai, Monica Bennett, Samiya Ahmad, Yu-tze Ng, Reese Clark, Veeral Tolia

P2.048 Development of Unique Dosage Form and Differentiating Features of USL255, Qudexy® XR (Topiramate) Extended-Release Capsules —*Steve Chung, Robert Hogan, Mary Holmay, Vincent Yu, Huy Nguyen, Ilan Blatt, Mark Halvorsen*

P2.049 Anti-Epileptic Drug Withdrawal After Surgery for Focal Cortical Dysplasia —*Lionel Vazquez-Figueroa, Anna Mrelashvili, Lily Wong-Kisiel*

P2.050 Lacosamide Monotherapy for the Treatment of Partial-Onset Seizures: Post-Hoc Analysis of Responder Rates from a Multicenter, Open-Label Extension Trial —*David Vossler, Robert Wechsler, Paulette Williams, William Byrnes, Sheila Thernault*

P2.051 Update from the Georgia Intermediate Expanded Access Study —*Yong Park, Robert Flaminio, Eric Pearlman, Bryan Philbrook, Sunil Mathur, Mary Gregory, Sarah Long, Nancy Starnes, Lisa Jan Wooldridge, Micahel Diamond*

P2.052 The Challenge of Long Term Antiepileptic Treatment in the Post Transplant Population —*Diego Nadile, Maria Gonzalez Toledo, Analía Calle, Agustina Tamargo, Alfredo Thomson, Alejandro Thomson, Jose Molina Melendres, Fatima Pagani Cassara, Maria Elena Fontela, Blas Couto*

P2.053 Narrow Therapeutic Index Classification of Antiepileptic Drugs Using a Comprehensive Literature Search —*Jeff Guptill, Rachel Greenberg, Chiara Melloni, Huali Wu, Daniel Gonzalez, Lawrence Ku, Kevin Hill, Christoph Hornik, Nan Zheng, Wenlei Jiang, Michael Cohen-Wolkowicz*

P2.054 Long-Term Efficacy of USL255 (Qudexy® XR; Topiramate Extended-Release Capsules) by Refractory Status and Age: PREVAIL OLE —*Robert Hogan, Ilan Blatt, Mary Holmay, Huy Nguyen, Vincent Yu, Mark Halvorsen, Steve Chung*

P2.055 Lacosamide Levels in Adult Epilepsy Patients Are Influenced by Race —*Advait Mahulikar, Aashit Shah, Navid Seraji-Bozorgzad, Maysaa Basha*

P2.056 Efficacy of Rufinamide As Adjunctive Treatment for Adults With Lennox-Gastaut Syndrome: Subgroup Analysis From a Phase III Trial —*Pasquale Striano, Rob McMurray*

P2.057 Perampanel As an Adjunctive Treatment in 3 Patients with Glioblastoma Multiforme (GBM) with Refractory Seizures —*Patricio Espinosa, Renato Sotelo, Armand Golchin, Rima Bakhda, Jose Valdes, Patricio Espinosa Del Pozo*

P2.058 Mortality in Phase III Studies of Adjunctive and Monotherapy Eslicarbazepine Acetate (ESL) in Patients with Partial-Onset Seizures (POS) —*Eugen Trinka, Andrew Cole, Eva Andermann, Helena Gama, Francisco Rocha, David Blum, Todd Grinnell, Hailong Cheng, Philippe Ryvlin*

P2.059 Levetiracetam Monotherapy is As Effective As Valproate in Newly Diagnosed Cases with Juvenile Myoclonic Epilepsy (JME) —*Mohammed Alhamrani, Fawzi Babbain, Harsha Bhatia, Muthusamy Velmurugan*

P2.060 An Indirect Comparison of Selected Adjunctive Treatments for Refractory Partial Onset Seizures (POS): Does Evidence Matter? —*Jeremy Slater, Steve Chung, Lynn Huynh, Mei Sheng Duh, Brian Gorin, Carolyn McMicken, Adam Ziemann, Jouko Isojarvi*

MS and CNS Inflammatory Disease: Treatment, Safety, and Tolerance

P2.061 Natalizumab-Related Progressive Multifocal Leukoencephalopathy (PML) in Multiple Sclerosis (MS) Italian Patients: Course, Outcome and Follow-Up —*Nicola De Rossi, Cinzia Cordoli, Maria Pia Amato, Simonetta Gerevini, Marinella Clerico, Luciano Deotto, Milena Alessandra De Riz, Cristina Scarpazza, Maria Letizia Fusco, Angelo Ghezzi, Luigi Maria Grimaldi, Luigi Maria Grimaldi, Alessandra Lugaresi, Lucia Moiola, Patrizia Susanna Mar Perrone, Luca Prosperini, Monica Rezzonico, Marco Rovaris, Giuseppe Salemi, Marco Salvetti, Giuseppe Santuccio, Carla Tortorella, Ruggero Capra*

P2.062 Withdrawal Rebound After Fingolimod in Multiple Sclerosis Patients —*Tuncay Gunduz, Murat Kurtuncu, Mefkure Eraksoy*

P2.063 A Low Percentage of CD4+ Cells Can Predict Disease Reactivation After Natalizumab Discontinuation —*Antonio Bertolotto, Marianna Lo Re, Simona Malucchi, Alessia Di Sapio, Manuela Matta, Maria Malentacchi, Francesca Sperli, Alessandra Oggero, Paola Berchiella, Marisa Pautasso, Marco Capobianco*

P2.064 Therapy with Natalizumab Is Associated with High JCV Sero-Conversion and Rising JCV Index Values —*Nicholas Schwab, Tilman Schneider-Hohendorf, Beatrice Pignolet, Johanna Breuer, Catharina Gross, Kerstin Goebel, David Brassat, Heinz Wiendl*

P2.065 Real-World Fingolimod First-Dose Effects in Patients with Pre-Existing Hypertension, Pre-Existing Cardiac Conditions and in Those Receiving Selective Serotonin-Reuptake Inhibitors —*Daniel Wynn, Christopher LaGanke, Lesley Schofield, Xiangyi Meng, Nadia Tenenbaum*

P2.066 Immediate Thrombocytopenia at the Time of Initial Exposure to Alemtuzumab Infusion —*Jai Perumal, Stacy-Ann Foster, Ulrike Kaunzner, Timothy Vartanian*

P2.067 Characteristics of Poor Adherence to the Injectable Disease-Modifying Therapies in Multiple Sclerosis: A Cross-Canada Prospective Study —*Kyla McKay, Helen Tremlett, John Fisk, Scott Patten, Kirsten Fiest, Lindsay Berrigan, Trudy Campbell, Ruth-Ann Marie*

P2.068 Teriflunomide Mechanism of Action: Linking Species' Sensitivities to Pregnancy Outcomes —Lynn Davenport, Andrea Edling, Patrick Finn, Philippe Truffinet, Steve Cavalier

P2.069 Real-World Safety and Efficacy of Natalizumab After Switching from Other Disease-Modifying Therapies (DMTs): Data from the Tysabri® Observational Program (TOP)—Helmut Butzkueven, Ludwig Kappos, Maria Trojano, Heinz Wiendl, Radhika Patel, Harold Koendgen, Cynthia Carrillo-Infante, Yi Chen, Pei-Ran Ho, Nolan Campbell

P2.070 Safety of Teriflunomide in Multiple Sclerosis Treatment. Management of Hepatic Disorders in Real World Experience —Jose E Meca-Lallana, Rocio Hernández-Clares, Ester Carreón-Guarnizo, María Cerdán-Sánchez, Cristina Sánchez-Vizcaino Buendia, Judith Jimenez-Veiga, Gema Salgado-Cecilia, Adelaida Leon-Hernández, Jose Javier Martín-Fernández

P2.071 Altered Objective Exertion Tolerance in MS Patients Treated with Fingolimod: A Prospective, Longitudinal Ergospirometry Study—Christoph Mayer, Hanna Schnitzbauer, Christine Schuhmann, Ulf Ziemann

P2.072 Fingolimod Suppresses Bone Resorption in Patients with Multiple Sclerosis —Yusei Miyazaki, Masaaki Niino, Ipppei Kanazawa, Masako Suzuki, Masanori Mizuno, Shin Hisahara, Toshiyuki Fukazawa, Eri Takahashi, Itaru Amino, Ryutaro Ochi, Naoya Minami, Naoto Fujiki, Shizuki Doi, Seiji Kikuchi

P2.073 Natalizumab Associated Progressive Multifocal Leukoencephalopathy: Successful Treatment Without Plasmaexchange and Its Associated Risks —Eimer Maloney, Anna Molloy, Mariam Al Hussona, Luke O'Donnell, Ronan Killeen, Christopher McGuigan

P2.074 Rapid-Onset Immune Thrombocytopenia Following Alemtuzumab Treatment in Relapsing, Remitting Multiple Sclerosis —Mark Obermann

P2.075 Progressive Multifocal Leukoencephalopathy in the Setting of Idiopathic CD4 Lymphocytopenia: Case Report and Literature Review of the Epidemiology —Tareq Yaqub, Talal Derani, Tariq Gheith, Rany Aburashed

P2.076 Cardiac Safety Profile of the First Dose Observation. Interim Analysis of the Argentinean Registry of Patients Treated with Fingolimod (REAL Study)—Gustavo Seifer, Fernando Caceres, Marcela Parada Marcella, Vladimiro Sinay, Miguel Jacobo, Roberto Rey, Maria Saladino, Andres Villa, Marcos Burgos, Norma Deri, Rossana Neme, Graciela Arguello De Alday, Jose Maria Blasco, Patricio Labal, Christian Calvo Vildoso, Santiago Vetere, Gabriel Volman, Carlos Ballario, Jorge Blanche, Marcelo Matiazzi, Alberto Rodriguez Alfici, Herrera Gustavo, Ramiro Linares, Virginia Laura Parisi, Andres Barboza, Pedro Nofal, Margarita Moreno, Alborno Liliana, Gaston Kuperman, Andres Greco

P2.077 4 Years Safety of Fingolimod in Real World: PANGAEA, a Non-Interventional Study of Safety, Effectiveness and Pharmacoeconomic Data for Fingolimod Patients in Daily Clinical Practice —Tjalf Ziemssen, Holger Albrecht, Judith Haas, Luisa Klotz, Michael Lang, Christoph Lassek, Stephan Schmidt, Bjorn Tackenberg, Christian Cornelissen

P2.078 Dimethyl Fumarate (DMF)-Induced Necrotizing Myopathy: A Case Report —Charlotte Zisman, Emilia Melkumova, Jin Li

P2.079 Rebound Syndrome in Multiple Sclerosis Patients After Cessation of Fingolimod —Stacy Hatcher, Emmanuelle Waubant, Bardia Nourbakhsh, Elizabeth Crabtree-Hartman, Jennifer Graves

P2.080 Effect of Siponimod Treatment on Vaccination-Induced Immune Response: A Randomized, Double-Blind, Placebo-Controlled Study —Mike Ufer, Kiran Dole, Jude Ngang, Anne Gardin, Zhenzhong Su, Swathi Peteri, Kasa Shakeri-Nejad, Eric Legangneux

P2.081 Rebound of Disease Activity After Fingolimod Discontinuation: Report of Six Cases —Aksel Siva, Ugur Uygungoglu, Melih Tutuncu, Ayse Altintas, Sabahattin Saip

P2.082 Longterm Fingolimod Treatment of Multiple Sclerosis Induces Phenotypical Immunosenesence —Nicole Schwanitz, Andreas Boldt, Muriel Stoppe, Johannes Orthgiess, Stefan Borte, Ulrich Sack, Florian Then Bergh

P2.083 Experience with Serious Cutaneous Events in the DECIDE Study —Corey Ford, Bhupendra Khatri, Tomas Olsson, Tjalf Ziemssen, Xiaojun You, Wanda Castro-Borrero, Peter McCroskey

P2.084 Disease Course in Elderly MS Patients —Florian Deisenhammer, Felix Bayer, Gabriel Bsteh, Michael Auer, Franziska Di Pauli, Harald Hegen, Thomas Berger

P2.085 The Prevalence of a History of Prior VZV/HSV Infection in MS: A Survey Study with Serological Validation Sub-Study —Cris Constantinescu, Ali Manouchehrinia, Radu Tanasescu, Huner Kareem, Oltita Jerca, William Irving

P2.086 Incidence and Timing of Thyroid Adverse Events in Patients with RRMS Treated with Alemtuzumab Through 5 Years of the CARE-MS Studies —Peter Senior, Douglas Arnold, Jeffrey Cohen, Edward Fox, Hans-Peter Hartung, Eva Havrdova, Krzysztof Selmaj, David Margolin, Linda Kasten, Alasdair Coles

P2.087 Immunogenicity with Repeated Dosing of Ocrelizumab in Patients with Multiple Sclerosis —An Song, Robert Hendricks, Shan Chung, Qing Wang, Peter Chin, Hideki Garren

P2.088 Is Aging and Immunosenesence a Risk Factor For Dimethyl Fumarate Induced PML? —John Foley, Angelene Christensen, Tamara Hoyt, Angela Foley, Ryan Metzger

P2.089 The Effects of High Dose Corticosteroids for MS Relapse on Blood Pressure: A Pilot Study —Ryan Renn, George Dresser, Sarah Morrow

P2.090 First-Dose Effects of Fingolimod in Patients with RRMS Receiving Concomitant SSRIs on Day 1: Pooled Analysis of the Real-World PREFERMS and EPOC Studies —Bruce Hughes, Mark Cascione, Edward Fox, Xiangyi Meng, Brandon Brown

P2.091 Cytomegalovirus Reactivation During Alemtuzumab Treatment for Multiple Sclerosis: A Case Report —Stefania De Mercanti, Luca Durelli, Marco Iudicello, Carlo Alberto Artusi, Pierangelo Barbero, Angelo Guerrasio, Marinella Clerico

P2.092 Clinical Safety of the Novel, Selective S1P Receptor Modulator, Ozanimod, from Phase 2 Trials in Relapsing Multiple Sclerosis (RADIANCE) and Moderate to Severe Ulcerative Colitis (TOUCHSTONE) —Paul Frohna, Allan Olson, Matthew Gravets, Jeffrey Hartung, Heather Smith, Richard Aranda, Sheila Gujrathi

P2.093 NMDA Receptor Encephalitis in an MS Patient on Fingolimod —Rebecca Straus Farber, Elina Zakin, Aaron Miller

P2.094 PML-IRIS Associated with Fingolimod in a Multiple Sclerosis Patient with Prior Immunosuppression —Trisham Gyang, Johanna Hamel, Andrew Goodman, Lawrence Samkoff

P2.095 Case Report: Atypical Presentation of PML in a Patient with Alcoholic Cirrhosis —Nassima Baba-Ahmed, Robert Neel

P2.096 Reversal of Relapse Pattern During Pregnancy in Women Treated with Natalizumab Up to Pregnancy —Charlotte Spicher, Sandra Thiel, Renate Klaaßen-Mielke, Katja Brandau, Ralf Gold, Kerstin Hellwig

P2.097 Delayed-Release Dimethyl Fumarate Does Not Adversely Affect the Pharmacokinetics of a Commonly Used Oral Contraceptive (Norgestimate/Ethinyl Estradiol) in Healthy Women: Drug-Drug Interaction Study Results —Bing Zhu, Karin Galil, Ivan Nestorov, Guolin Zhao, Venkata Meka, Jeanelle Kam, Sarah Sheikh

P2.098 Lymphopenia in Patients with Multiple Sclerosis Treated with Delayed-Release Dimethyl Fumarate: Analysis of Two United States Electronic Health Record Databases —Madé Wenten, Teesta Soman, Cathy Lally, Maneesh Juneja, Susan Eaton, Claudia Prada, Anne Dilley

P2.099 Characterization of Absolute Lymphocyte Count Profiles in MS Patients Treated with Delayed-Release Dimethyl Fumarate: Considerations for Patient Management —Robert Fox, Andrew Chan, Ralf Gold, J. Theodore Phillips, Krzysztof Selmaj, Ray Zhang, Ih Chang, Claudia Prada, Catherine Taylor, Jing Marantz

P2.100 Quality Control of Autologous Bone Marrow Mesenchymal Stem Cell-Derived Neural Progenitors (MSC-NPs) from Patients with Multiple Sclerosis Prior to Intrathecal Injection —Tamara Vyshkina, Valentina Stefanova, Violaine Harris, Saud Sadiq

P2.101 Longitudinal Data on Lymphopenia in Multiple Sclerosis Patients Treated with Dimethyl Fumarate —Meghan Romba, Annette Wundes, Gloria Von Geldern

P2.102 A Longitudinal Study of JC Virus Serostatus Stability Among Multiple Sclerosis Patients —Raed Alroughani, Saeed Akhtar, Samar Ahmed, Jassem Al-Hashel

P2.103 Fatal Autoimmune Hemolytic Anemia Associated with Alemtuzumab in a MS Patient with Severe Relapsing Remitting Disease Course and Prior Immune Therapies —Peter Rieckmann, Arne Lenz, Markus Hoffmann, Udo Poske, Karin Behr, Boris Kallmann

P2.104 Defective Induction of Tolerogenic Myeloid DCs by IL-27 in Relapsing MS —Felipe Von Glehn Silva, Gopal Murugaiyan, Keren Regev, Chantal Kuhn, Radhika Raheja, Maria Antonietta Mazzola, Anu Paul, Sushrut Jangi, Pia Kivisakk, Roopal Gandhi, Howard Weiner

P2.105 Role of Family Planning in Women of Child-Bearing Age with Multiple Sclerosis (MS) in Switzerland: Results of the Women with MS (WWWMS) Patient Survey —Sarah Muehl, Stefanie Mueller, Adam Czaplinski, Petra Stellmes, Christian Kamm

P2.106 Medication Adherence in Pediatric MS: Barriers and Facilitators —Stephanie Grover, Kim Edwards, Gulay Alper, Brenda Banwell, Petra Breiner, Mark Gorman, Jennifer Graves, Janace Hart, Timothy Lotze, Soe Mar, Lauren Mednick, Jayne Ness, Austin Noguera, Elizabeth Quon, Teri Schreiner, Carolyn Schwartz, Amy Waldman, Emmanuelle Waubant, Ruth Slater, E. Ann Yeh

P2.107 Clinical Features of CNS-Autoimmunity After Allogeneic Bone Marrow Transplantation —Felix Bischof, Maria-Ioanna Stefanou

MS and CNS Inflammatory Disease: Treatment Outcome Measures

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P2.109 Multiple Sclerosis and EDSS: A Walking Scale Standing on No Apparent Legs —Myassar Zarif, Karl Wissemann, Peter Marcotte, Barbara Bumstead, Christina Burke, Lori Fafard, Smitha Thotam, Marijean Buhse, Jacob Sosnof, Lisa Muratori, Mark Gudesblatt

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P2.359 Longer Door to Needle Times When Fellows Administer Tissue Plasminogen Activator Via Telemedicine —Amanda Jagolino, Shima Bozorgui, Tiffany Cossey, Christy Ankrom, Jignesh Patel, Malcolm Irani, Farahan Vahidy, Sean Savitz, Tzu-Ching Wu

P2.360 Neurology Resident Comfort with Ethics and Professionalism —Stephen Trevis, Ram Gowda, Aaron Geller, Perrin Pleninger, Ariane Lewis

P2.361 Why Does Everyone Call Such Inappropriate Consults? Dual Fallacies in Assessing Self and Other's Knowledge in Neurology Residency Training —Eric Bortnick, Stephen Krieger

P2.362 Fear and Loathing in Neurology Residency Night-Float, a Pilot Study —Varun Pulakanti

P2.363 An International Medical Education Network for Physicians Treating Cervical Dystonia and Spasticity —Kailash Bhatia, Carlo Colosimo, Roongroj Bhidayasiri, Tae Mo Chung, Luis Jorge Jacinto, Therese Landreau, Klemens Theodoroff

P2.364 An Educational Intervention for Neurology Residents on Post-Residency/Fellowship Practice —Sara Dawit, Bert Vargas

P2.365 Reviving the Lost Art of Learning Neuroanatomy: Evaluation of the Current Status and Feasibility of a Novel Curriculum for Neurology Residents —Laura Donovan, Sachin Agarwal, Christina Ulane

P2.366 Increasing Faculty Involvement in Educational Activities —Augusto Miravalle, Alina Rich

Education Research: Undergraduate Medical Education

P2.367 Interprofessional Education in Neurology: Student Experience —Elena Shanina, Robert Smith, Karen Aranha, Jill Seale, Judith Rowen

P2.368 Deficient Neuroscience Teaching in the Basic Science Curriculum: Is This the Origin of the Neurophobia? —Ibeth Regato-Ugalde, Daniel Moreno-Zambrano, Daniela Salas-García, María Massuh-Coello, Evelyn López-García, Diego Vázquez-Cedeño, Rocío García-Santibáñez, Rocío Santibáñez-Vázquez

P2.369 Difficult Conversations in Neurology: Defining Medical Student Exposure and Educational Opportunities —Monica Lemmon, Charlene Gamaldo, Rachel Marie Salas, Ankita Saxena, Tiana Cruz, Renee Boss, Roy Strowd

P2.370 Turning Neurophobia into Neurophoria: A Needs Assessment of Medical Student Education —Pearce Korb, Holly Ables, Trevor Hawkins, Michael Persenaire, Augusto Miravalle

P2.371 Use of a Two-Day Sleep Log to Assess Relationship of Sleep with Resident Well-Being and Satisfaction with Education: A Pilot Study —Jayson Rodriguez, Jeanie McGee, David McCarty, Debra Davis

P2.372 Student Self-Regulated Learning: How Collaboration and the Clinical Environment Impact Success —Douglas Larsen, Austin Wesevich, Jana Lichtenfeld, Lara Varpio

P2.373 Does Team-Based Learning Improve Clinical Reasoning in Neurology? —Nigel Tan, Kevin Tan, Cherie Ng

Research Methodology and Education: Patient Safety and Quality

P2.374 The Electronic Resident Handbook Application: An Essential Quality Improvement Measure for Neurology Residents —Matthew Holtkamp, Philip Eye, Douglas McAdams, Kaye Sedarsky, Brett Theeler

P2.375 Stroke Code Simulation Lab: Save Time Save Brain! —Yi Mao, Awss Zidan, Umair Afzal, Ramesh Cherukuri, Usman Qadeer, Deborah Bradshaw

P2.376 Simulation-Based Training in Brain Death Determination Incorporating Family Discussion: A Pilot Project —Jorge Ortiz-Garcia, Michael Doerfler, Preston Douglas, Michael Schneck, Matthew McCoyd

P2.377 Development of Neurology-Specific Scenarios for Assessing Quality Improvement Knowledge Application During Residency Using the Revised Quality Improvement Knowledge Application Tool (QIKAT-R) —Charles Kassardjian, Andrea Leep Hunderfund

P2.378 An Evidence Based Quality Intervention in Polyneuropathy Assessment —Iris Marin Collazo, Elizabeth Mauricio, Elliot Dimberg

P2.379 The Example We Set for Our Trainees: Inversely Correlated Neurology Faculty Evaluations by Residents and Patients —Michael Dobbs, Jonathan Smith

P2.380 Incorporating Quality Improvement into the Third-Year Neurology Curriculum —Nadia Liyanage-Don, Anna Hahler

P2.381 Overcoming Challenges in the Collection of Patient-Reported Outcomes in an Ambulatory Academic Neurology Clinic —Lidia Maria Moura, Eli Schwamm, Valderly Moura, Lee Schwamm

Research Methodology and Patient Education

P2.382 The "Uncertainty Principle" As an Entry Criterion in Stroke Clinical Trials: Bias Towards Null Findings —Annasha Vyas, Jeffrey Saver

P2.383 Using a Knowledge-Based Survey on Urban, Minority Hypertensive Patients to Develop a Patient-Focused Stroke Risk Educational Video —*Anthony Kwan, Marilyn Fraser, Susan Law, Daniel Cukor, Clinton Brown, Clotilde Balucani, Steven Levine*

P2.384 Ask the Database or Ask the Expert? Estimating Eligible Clinical Trial Subjects —*Sara DeGregorio, Alison Ayres, James Berry, Steven Greenberg*

P2.385 Current Anti-Seizure Drug Prescription Patterns —*Lidia Maria Moura, Mary Price, Michael Seitz, Andrew Cole, Daniel Hoch, John Hsu*

P2.386 Factors Determining Consent in a Randomized Trial of Intra-arterial Stem Cell Therapy for Sub-Acute Ischemic Stroke —*Kevin Ramdas, Ryan Pafford, Diogo Haussen, Delmas McBee, J Rutledge, David Huang, Sean Savitz, Jim Hinson, Dileep Yavagal*

P2.387 Factors Associated with Patients Level of Understanding of Stroke Following Hospital Discharge —*Susan Taboada*

P2.388 Clinico-Topographical Relationship of Cerebellar Symptoms: An Analysis of the Literature —*Scott Myers, Gustavo Patino*

History of Neurology

P2.389 Non Pharmacologic Treatments of Headache from the 19th to 21st Centuries —*Noah Rosen, Robert Duarte*

P2.390 Days of the Giantesses: Voices of Women Pioneers in Neurology —*Eliza Miller, Mitchell Elkind*

P2.391 The History of Aspirin: from Willow Bark to Thomas Edison in the 20th Century —*Andrew Southerland*

P2.392 The Use of L Dopa in Child Neurology, A Historical Perspective —*Bennett Lavenstein*

P2.393 Examination of the Usage of Unethical Nazi Era Brain Research Over Time —*Michael Liu, Lawrence Zeidman*

P2.394 On the Neurological and Ophthalmological Causes of Visual Impairment in 2 Medieval Texts Describing Medical Miracles —*Francisco De Assis Gondim, Joana Holanda Filha, Florian Thomas*

P2.395 Publication Trends in Neurology, the Official Journal of the American Academy of Neurology —*Scott Adams, Sydney Lee, Ryan Verity, Joel Molder, Shahmir Sohail*

P2.396 S. Weir Mitchell and William Hammond: Colleagues in Early American Neurology —*Eric Prince, E. Massey*

P2.397 From 'Sweet Clover Disease' to NOACs: A Historical Perspective on Oral Anticoagulation for Prevention of Cardioembolic Stroke —*Nicole Chiotac-McCollum*

P2.398 George Washington Crile: Internationally Known Surgeon, Founder of the Cleveland Clinic and Neuroscientist? —*Alexander Rae-Grant*

P2.399 Henry Agard Wallace - The First Vice-President to Develop Amyotrophic Lateral Sclerosis and the Early ALS Research Program at the National Institutes of Health - "Reflections of an ALSer" —*Benjamin Brooks*

P2.400 Lies and Sweats: History of Use of the Psychogalvanic Response —*Edward Fine, Poojah Sofat*

P2.401 Gowers and Osler: Good Friends "All Through" —*Christopher Boes*

P2.402 The Ideas, Events, and Personalities That Led to the Discovery of the L-DOPA Treatment —*Bernard Patten*

P2.403 The Iron Lung - Halfway Technology Revisited —*Douglas Lanska*

SUN • April 17

AAN GivesBack & UBC Science

Help Bring Science Education to Vancouver's Inner City!

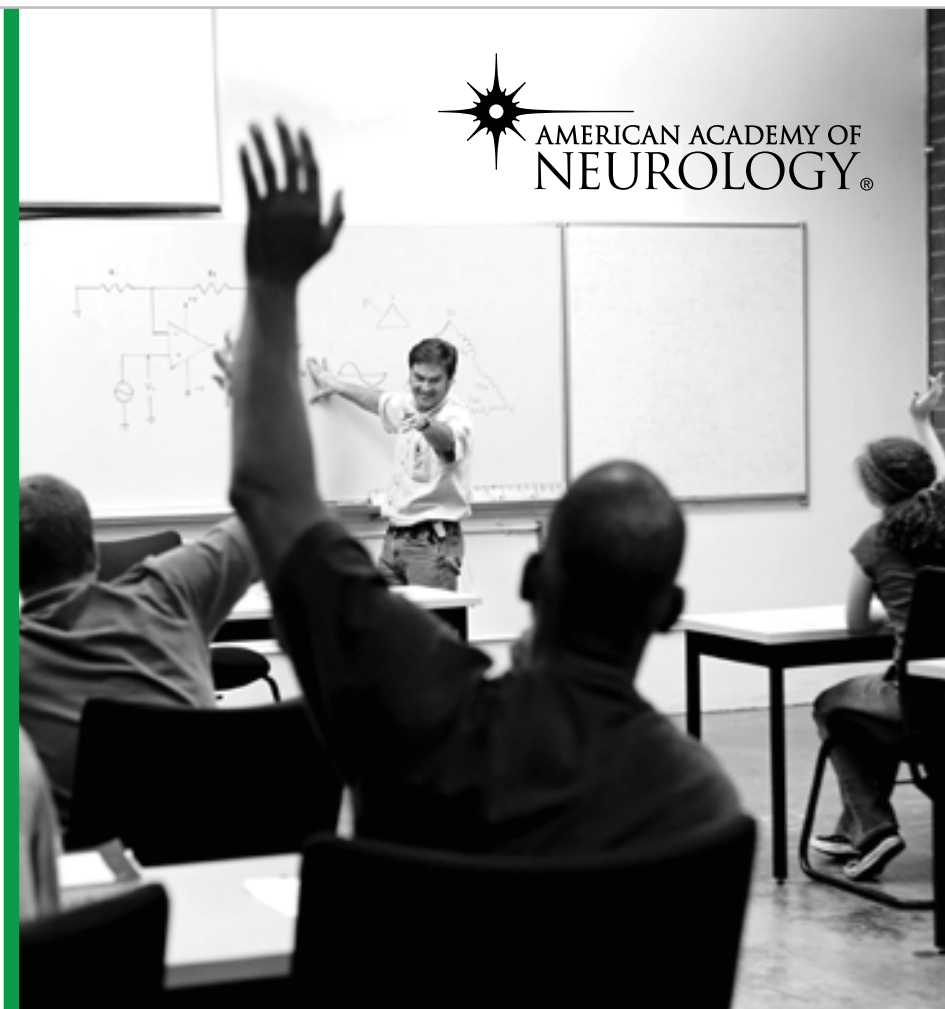
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Presidential Plenary Session

Sunday, April 17, 2016 9:00 a.m. to 12:00 p.m.

Features the AAN's premier lecture awards for clinically relevant research and a presentation by a leading lecturer. Top researchers speak on some of the most significant findings in neurology in 2016.



Moderator

Lisa M. DeAngelis, MD, FAAN
 Chair, AAN Science Committee



Presidential Lecture

Brent C. James, MD
 Institute for Health Care Delivery
 Research at Intermountain Health
 Care, Salt Lake City, UT

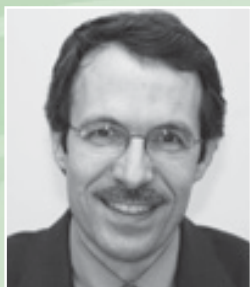


Sidney Carter Award in Child Neurology

Endowed by an Anonymous Donor.

**Elizabeth M. Berry-Kravis,
MD, PhD**
 Rush University Medical Center
 Chicago, IL

*Targeted Treatments for Fragile X
 Syndrome: Modifying the
 Translational Pathway*



George C. Cotzias Lecture

Endowed by Roche Pharmaceuticals.

Josep O. Dalmau, MD, PhD
 University of Barcelona
 Barcelona, Spain
 University of Pennsylvania
 Philadelphia, PA

*Antibody Mediated Disorders
 of the Synapse*



Robert Wartenberg Lecture

**Jerome Engel Jr.,
MD, PhD, FAAN**
 Reed Neurological Research Center
 UCLA, Los Angeles, CA

*What Can We Do For the Patient
 with Pharmacoresistant Epilepsy?*

1:00 p.m.–3:00 p.m.

Scientific Platform Sessions

S12: Neuromyelitis Optica and Autoimmune Encephalities

1:00 p.m. Presentation of the John Dystel Prize for Multiple Sclerosis Presented by the American Academy of Neurology and the National Multiple Sclerosis Society and made possible through a special contribution from the John Dystel Multiple Sclerosis Research Fund at the National Multiple Sclerosis Society.

Recipient:

Claudia F. Lucchinetti, MD, FAAN
Rochester, MN

1:30 p.m. S12.003
Clinical Utility of Testing Cerebrospinal Fluid (CSF) for AQP4-IgG: A Guideline to Improve Physician Ordering of AQP4-IgG Diagnostic Test. —Masoud Majed, James Fryer, Andrew McKeon, Vanda Lennon, John Schmeling, Jessica Sagen, Sean Pittock

1:45 p.m. S12.004
Therapy of Neuromyelitis Optica Attacks: A Retrospective Study of 871 Attacks and 1153 Treatment Courses —Ingo Kleiter, Corinna Trebst

2:00 p.m. S12.005
Hormonal Exposures Relate to Clinical Phenotype in Women with Neuromyelitis Optica —Riley Bove, Liene Elson, Enrique Alvarez, Nadja Borisow, Melissa Cortez, Farrah Mateen, Maureen Mealy, Jaime Sorum, Kerry Mutch, Sean Tobyn, Klemens Ruprecht, Guy Buckle, Michael Levy, Dean Wingerchuk, Paul Friedemann, Anne Cross, Brian Weinshenker, Anu Jacob, Eric Klawiter, Tanuja Chitnis

2:15 p.m. S12.006
MRI Correlates of Pediatric Neuromyelitis Optica Spectrum Disorder Syndromes —Jessica Hauser, Timothy Lotze

2:30 p.m. S12.007
Cross-Modal Plasticity Among Sensory Networks in Neuromyelitis Optica Spectrum Disorders —Filippo Savoldi, Maria Rocca, Paola Valsasina, Marta Radaelli, Paolo Preziosa, Giancarlo Comi, Andrea Falini, Massimo Filippi

2:45 p.m. S12.008
The Clinical Spectrum of Caspr2-Antibody Associated Disease —Agnes Sonderer, Helena Arino, Mar Petit-Pedrol, Frank Leypoldt, Peter Körtevellyessy, Eric Lancaster, Paul Wirtz, Marco Schreurs, Peter Sillevs Smitt, Francesc Graus, Josep Dalmau, Maarten Titulaer

S13: Highlights in Sleep Medicine

1:00 p.m. Presentation of the Wayne A. Hening Sleep Medicine Investigator Award Sponsored by the American Academy of Neurology and endowed by UCB, Inc., Lilly USA, Elite Home Medical & Respiratory, Inc., Raleigh Neurology Associates, and friends of Dr. Wayne A. Hening.

Recipient:

Bryce Mander, PhD
Berkeley, CA

1:15 p.m. Presentation of the Sleep Science Award Sponsored by the American Academy of Neurology and the AAN Sleep Section and endowed by Cephalon, Inc.

Recipient:

Juliane Winklemann, MD
Palo Alto, CA

1:45 p.m. S13.004
Sleep Deprivation/Insomnia and Exposure to Street Lights in the American General Population —Maurice Ohayon, Cristina Milesi

2:00 p.m. S13.005
Human Sleep- and Wake-Promoting Networks Are Anticorrelated —Aaron Boes, Joel Geerling, David Fischer, Clifford Saper, Michael Fox

2:15 p.m. S13.006
Narcolepsy Symptomatology Evolution in a Longitudinal Study of a Cohort of Narcoleptic Family Members —Maurice Ohayon

2:30 p.m. S13.007
Association Between Sleep Problems and Brain Volume in the Elderly —Angeliki Tsapanou, Yian Gu, Jennifer Manly, Nicole Schupf, Nikolaos Scarmeas, Sandra Barral, Adam Brickman, Yaakov Stern

2:45 p.m. S13.008
Excessive GABAergic Activity in Striatal and Frontal Cortical Regions Rather Than Dopaminergic Functions Are Related to Daytime Sleepiness in Parkinson Disease —Nicolaas Bohnen, Melanie Beaulieu, Martijn Muller

S14: Epilepsy: Antiepileptic Drugs and Epidemiology

1:00 p.m. S14.001
Importance of Monitoring Clobazam and N-Desmethyclobazam Levels in Treatment with Cannabidiol (CBD) for Epilepsy —Tyler Gaston, E Bebin, Jerzy Szaflarski

1:15 p.m. S14.002
Deconstructing Tolerance with Clobazam: Post Hoc Analyses from an Open-Label Extension Study —Barry Gidal, Robert Wechsler, Raman Sankar, Georgia Montouris, H. Steve White, James Cloyd, Guangbin Peng, David Tworek, Vivienne Shen, Jouko Isojarvi

1:30 p.m. S14.003
547-SSE-201 for Super-Refractory Status Epilepticus: Response and Relationship to Underlying Patient Characteristics —Stephen Kanes, Eric Rosenthal, Henrikas Vaitkevicius, Jan Claassen, Mark Wainwright, Ethan Hoffman, Mollie Baird, Mike Quirk, Helen Colquhoun

1:45 p.m. S14.004
Sabril Vision Study: Retinal Structure and Function in Adult Patients with Refractory Complex Partial Seizures (CPS) Treated with Vigabatrin —Jouko Isojarvi, Robert Sergott, Chris Johnson, Kenneth Laxer, Robert Wechsler, Yekaterina Dribinsky, JoAnn Whittle, Ge Feng, Deborah Lee

2:00 p.m. S14.005
A Prospective Study of Add-On Anti-Epileptic Medication in Chronic Drug-Resistant Epilepsy —Jacqui-Lyn Saw, Nicholas Lawn, Josephine Chan, John Dunne

2:15 p.m. S14.006
Seizure Response to Cannabidiol in a State-Sponsored Open-Label Program —Jerzy Szaflarski, E Bebin, Jennifer DeWolfe, Leon Dure, Tyler Gaston, Kristina Harsanyi, James Houston, Tony McGrath, Leslie Perry, Rani Singh, Ashley Thomas, Lawrence Ver Hoef

2:30 p.m. S14.007
Investigating the Effect of Cannabidiol on the EEG —Leslie Perry, Jerzy Szaflarski, E Bebin

2:45 p.m. S14.008
Prevalence and Incidence of Epilepsy in the Elderly: The Cardiovascular Health Study —Hyunmi Choi, Alison Pack, Mitchell Elkind, W. T. Longstreth, Frankline Onchiri

Meeting Schedule

1:00 p.m.–2:00 p.m.

1 Navigating the World of Mobile Health
Director: Eric Anderson, MD, PhD, Decatur, GA

2 Physical Exercise and Cognitive Training in Neurology—Application in Aging & Neurodegenerative Disease
Director: Ergun Y. UC, MD, Iowa City, IA

1:00 p.m.–3:00 p.m.

S12 Neuromyelitis Optica and Autoimmune Encephalities

S13 Highlights in Sleep Medicine

S14 Epilepsy: Antiepileptic Drugs and Epidemiology

3 Ask the Expert: ICD-10-CM
Director: Korwyn William, MD, PhD, Phoenix, AZ

C71 Dementia Update: Imaging Modalities and CTE
Director: John C. Morris, MD, FAAN, St. Louis, MO

C72 Neurology Update I
Director: Joseph E. Saffdieh, MD, FAAN, New York, NY

C73 Quality Improvement in Practice
Director: Christopher Bever, Jr., MD, MBA, FAAN, Baltimore, MD

C74 Child Neurology II
Director: Jonathan W. Mink, MD, PhD, FAAN, Rochester, NY

C75 Myelopathies I
Director: Benjamin M. Greenberg, MD, FAAN, Dallas, TX

C76 Infections of the Nervous System II
Director: Tracey Cho, MD, Boston, MA

C77 Movement Disorders for the General Neurologist II
Director: Susan Fox, MD, Toronto, ON

C78 Evaluation and Management of Autonomic Disorders I
Director: Paola Sandroni, MD, PhD, FAAN, Rochester, MN

C79 Emergency Neurology Topics: Status Epilepticus and Pediatric Neurology Emergencies
Director: Laurie Gutmann, MD, FAAN, Iowa City, IA

C80 Now You See It, Now You Know It—Pathognomonic Neuro-ophthalmology Findings
Director: Wayne T. Cornblath, MD, FAAN, Ann Arbor, MI

C81 Functional Neurologic Disorders I
Director: Janis Miyasaki, MD, FAAN, Edmonton, AB

1:00 p.m.–5:30 p.m.

Integrated Neuroscience Session

13

SIF New and Emerging Therapeutic Options in Migraine and Other Headache Disorders

This program is offered in partnership with the American Headache Society and the Headache and Facial Pain Section.

Coordinators: Peter Goadsby, MD, PhD, and Todd J. Schwedt, MD, FAAN



Program Description: New and emerging therapies are changing the way clinicians practice headache medicine. This program will provide attendees with information on the latest therapies for migraine and cluster headache including CGRP based therapeutics, neurostimulation, and behavioral treatments.

Upon Completion: Participants will be more knowledgeable about new breakthroughs in the treatment of migraine and cluster headache.

Part I

1:00 p.m.–3:00 p.m.

1:00 p.m.–1:10 p.m. Introduction

Peter Goadsby, MD, PhD, and Todd J. Schwedt, MD, FAAN

1:10 p.m.–1:45 p.m. Invited Speaker

*CGRP Based Targets—A New Era of Prevention for Migraine
David W. Dodick, MD, Phoenix, AZ*

1:45 p.m.–1:50 p.m. 13.001 Data Blitz

Prevention of Episodic Migraine with AMG 334, a Human Anti-Calcitonin Gene-Related Peptide Receptor Monoclonal Antibody: Phase 2 Study Results and 52-Week Analysis of Open-Label Extension —Robert Lenz, David Dodick, Peter Goadsby, Stephen Silberstein, Uwe Reuter, Messoud Ashina, Joel Saper, Roger Cady, Feng Zhang, Marie-Louise Trotman, Julie Dietrich, Hong Sun

1:50 p.m.–1:55 p.m. 13.002 Data Blitz

Peripheral and Central Nervous System Distribution of a CGRP Neutralizing Antibody [¹²⁵I]-LY2951742 in Male Rats —Michael Johnson, Bernice Ellis, Deanna Maren, S. Michelle Morin, Victor Wroblewski, Kirk Johnson

1:55 p.m.–2:05 p.m. Audience Q&A

2:05 p.m.–2:40 p.m. Invited Speaker

*Emerging Behavioral Treatments for Migraine
Todd Smitherman, PhD, FAHS, University, MS*

2:40 p.m.–2:45 p.m. 13.003 Data Blitz

Mindfulness Versus Pharmacological Preventative Treatment for Chronic Migraine (CM) with Medication Overuse (MO): Preliminary Findings —Licia Grazi, Emanuela Sansone, Alberto Raggi, Matilde Leonardi, Domenico D'Amico, Frank Andrasik

2:45 p.m.–2:50 p.m. 13.004 Data Blitz

Non Pharmacologic Treatments of Headache from the 19th to 21st Centuries —Noah Rosen, Robert Duarte

2:50 p.m.–3:00 p.m. Audience Q&A

Guided Poster Rounds

3:00 p.m.–3:30 p.m.

13.001 Prevention of Episodic Migraine with AMG 334, a Human Anti-Calcitonin Gene-Related Peptide Receptor Monoclonal Antibody: Phase 2 Study Results and 52-Week Analysis of Open-Label Extension —Robert Lenz, David Dodick, Peter Goadsby, Stephen Silberstein, Uwe Reuter, Messoud Ashina, Joel Saper, Roger Cady, Feng Zhang, Marie-Louise Trotman, Julie Dietrich, Hong Sun

13.002 Peripheral and Central Nervous System Distribution of a CGRP Neutralizing Antibody [¹²⁵I]-LY2951742 in Male Rats —Michael Johnson, Bernice Ellis, Deanna Maren, S. Michelle Morin, Victor Wroblewski, Kirk Johnson

13.003 Mindfulness Versus Pharmacological Preventative Treatment for Chronic Migraine (CM) with Medication Overuse (MO): Preliminary Findings —Licia Grazi, Emanuela Sansone, Alberto Raggi, Matilde Leonardi, Domenico D'Amico, Frank Andrasik

13.004 Non Pharmacologic Treatments of Headache from the 19th to 21st Centuries —Noah Rosen, Robert Duarte

13.005 Anodal Transcranial Direct Stimulation (tDCS) Targeting the Anterior Cingulate Gyrus for the Treatment of Chronic Cluster Headache: A Proof-of-Concept Trial —Delphine Magis, Kevin D'Ostilio, Anna Cosseddu, Romain Nonis, Simona Sava, Jean Schoenen

13.006 Non-Invasive Vagus Nerve Stimulation with the GammaCore in Healthy Subjects: Is There Electrophysiological Evidence for Activation of Vagal Afferents? —Jean Schoenen, Romain Nonis, Kevin D'Ostilio, Simona Sava, Delphine Magis

13.007 Short-Term Non-Invasive Vagus Nerve Stimulation (nVNS) for the Prevention of Menstrual Migraine —Licia Grazi, Gabriella Egeo, Anna Padovan, Eric Liebler, Piero Barbanti

13.008 Transcranial Direct Current Stimulation and Transcutaneous Occipital Nerve Stimulation in Chronic Migraine: A Pilot-Comparison of Therapeutic and Electrophysiological Effects —Jean Schoenen, Kevin D'Ostilio, Anna Cosseddu, Romain Nonis, Simona Sava, Delphine Magis

13.009 Total Migraine Freedom for Breath Powered Intranasal Delivery System Containing 22 Mg Sumatriptan Powder (AVP-825) Vs 100 Mg Oral Sumatriptan from the COMPASS Study of Acute Treatment of Migraine —Rashmi Halker, Stewart Tepper, Kenneth Shulman, Christopher Wallick

13.010 Pharmacogenomics in Headache Practice —Martin Bringham, Monika Kumar, Suresh Kumar

13.011 Effect of CGRP Inhibition with TEV-48125 on Cardiovascular Parameters As a Function of Triptan Use Among Individuals with Chronic Migraine —Juliana VanderPluym, David Dodick, Marcelo Bigal

13.012 Factors Predicting the Response to the First Epidural Blood Patch in Spontaneous Intracranial Hypotension —Jr-Wei Wu, Shu-Shya Hseu, Jong-Ling Fuh, Jiing-Feng Liang, Yen-Feng Wang, Wei-Ta Chen, Shuu-Jiun Wang

13.013 Predictors of Inadequate 24-Hour Sustained Response in Episodic Migraine: Results from American Migraine Prevalence and Prevention Study (AMPP) —Sagar Munjal, Michael Reed, Dawn Buse, Alexandre Bennett, Kristina Fanning, Richard Lipton

Part II

3:30 p.m.–5:30 p.m.

3:30 p.m.–4:05 p.m. Invited Speaker

*Cluster Headache—A Glimpse of Change
Peter Goadsby, MD, PhD, San Francisco, CA*

4:05 p.m.–4:10 p.m. 13.005 Data Blitz

Anodal Transcranial Direct Stimulation (tDCS) Targeting the Anterior Cingulate Gyrus for the Treatment of Chronic Cluster Headache: A Proof-of-Concept Trial —Delphine Magis, Kevin D'Ostilio, Anna Cosseddu, Romain Nonis, Simona Sava, Jean Schoenen

4:10 p.m.–4:15 p.m. 13.006 Data Blitz

Non-Invasive Vagus Nerve Stimulation with the GammaCore in Healthy Subjects: Is There Electrophysiological Evidence for Activation of Vagal Afferents? —Jean Schoenen, Romain Nonis, Kevin D'Ostilio, Simona Sava, Delphine Magis

4:15 p.m.–4:25 p.m. Audience Q&A

4:25 p.m.–5:00 p.m. Invited Speaker

*Neurostimulation for Migraine
Stewart J. Tepper, MD, South Chatham, MA*

5:00 p.m.–5:05 p.m. 13.007 Data Blitz

Short-Term Non-Invasive Vagus Nerve Stimulation (nVNS) for the Prevention of Menstrual Migraine —Licia Grazi, Gabriella Egeo, Anna Padovan, Eric Liebler, Piero Barbanti

5:05 p.m.–5:10 p.m. 13.008 Data Blitz

Transcranial Direct Current Stimulation and Transcutaneous Occipital Nerve Stimulation in Chronic Migraine: A Pilot-Comparison of Therapeutic and Electrophysiological Effects —Jean Schoenen, Kevin D'Ostilio, Anna Cosseddu, Romain Nonis, Simona Sava, Delphine Magis

5:10 p.m.–5:20 p.m. Audience Q&A

5:20 p.m.–5:30 p.m. Conclusion

Meeting Schedule

1:00 p.m.–5:00 p.m.

C82  **Between Mars and Venus:
How Great Leadership Adopts Traits
from the Best of Both Genders**
(registration required)

Directors: Orly Avitzur, MD, MBA, FAAN, Tarrytown, NY,
Stefan M. Pulst, MD, FAAN, Salt Lake City, UT, Barbara L.
Hoese, President, Penticore Coaching, Minneapolis, MN

1:00 p.m.–5:30 p.m.

C83  **Epilepsy Skills Workshop**
(registration required)

Director: William O. Tatum, IV, DO, FAAN,
Ponte Veda Beach, FL

I3  **New and Emerging Therapeutic Options
in Migraine and Other Headache Disorders**

I4 **Advances in Acquired and Genetic Muscle
Diseases** 60

I5 **Sex-related Factors in Neurological Disease** . 61

3:00 p.m.–4:00 p.m.

 **Integrative Approach to the Management of
Chronic Pain Syndromes**

Director: Jessica Robinson-Papp, MD, FAAN, New York, NY

-  A registration fee is required
-  The program is one of the AAN Leadership University sessions
-  The course is part of a Subspecialty in Focus track
-  The program is one of the ITalk sessions
-  The program is part of the Experiential Learning Area sessions



Real World of Neurology: Solutions for Every Day Practice

Friday, April 15–Thursday, April 21: 7:00 a.m.–5:30 p.m.
Location: West Level 1

Get practical information you can apply in your day-to-day work in the real world at the Real World in Neurology, an exciting new Experiential Learning Area at the 2016 AAN Annual Meeting. Engage with subject matter experts in a 1-on-1 setting about neurology business strategies, solo/small practitioners, ICD-10-CM, advance care planning, PQRS, and telemedicine; learn how to use the customizable data from the Neurology Compensation and Productivity Report; view an interactive display on MACRA, the recently passed Medicare Access and CHIP Reauthorization Act; and more. The Real World of Neurology has something for everyone regardless of subspecialty, practice setting or geographic location.

Learn more at AAN.com/view/RealWorld.

Sun • April 17



1:00 p.m.–5:30 p.m.

Integrated Neuroscience Session

14 Advances in Acquired and Genetic Muscle Diseases

Coordinators: Matthew P. Wicklund, MD, FAAN, and Namita Goyal, MD

Program Description: This program will update the audience on recent advances in acquired and genetic muscle diseases in both the basic science and clinical spheres. This content is important for understanding advances in biomarkers (such as antibodies, genetic testing, and neuroimaging) associated with diagnosis of muscle diseases that guide emerging therapies, both genetic and immunologic.

Upon Completion: Participants should be more familiar with the diagnosis and emerging therapies in genetic and immune-mediated muscle disease, and also get an update on new breakthroughs in the field.

Part I

1:00 p.m.–3:00 p.m.

1:00 p.m.–1:10 p.m. Introduction
Matthew P. Wicklund, MD, FAAN, and Namita Goyal, MD

1:10 p.m.–1:45 p.m. Invited Speaker
Emerging Concepts in Inflammatory Muscle Disease
Andrew Mammen, MD, PhD, Baltimore, MD

1:45 p.m.–1:50 p.m. 14.001 Data Blitz
Anti-cN1A Autoantibody Seropositivity Is Associated with Increased Mortality Risk in Inclusion Body Myositis —James Lilleker, Anke Rietveld (joint first author), Umesh Badrising, Olivier Benveniste, Karina Gheorghe, Michael Hanna, Megan Herbert, David Hilton-Jones, Janine Lamb, Bryan Lecky, Ingrid Lundberg, Pedro Machado, Kubéraka Mariampillai, James Miller, Matt Parton, Maikel Peeters, Stephen Pye, Mark Roberts, Sabrina Sacconi, Christiaan Saris, Robert Cooper, Ger Puijn, Hector Chinoy, Baziél van Engelen

1:50 p.m.–1:55 p.m. 14.002 Data Blitz
NKG2D - IL-15 Signaling Is Critically Involved in the Pathogenesis of Inflammatory Myopathies —Tobias Ruck, Ali Afzali, Stefan Bittner, Heinz Wiendl, Sven Meuth

1:55 p.m.–2:05 p.m. Audience Q&A

2:05 p.m.–2:40 p.m. Invited Speaker
Advances in Muscle Imaging
Janannaz Dastgir, DO, New York, NY

2:40 p.m.–2:45 p.m. 14.003 Data Blitz
Electrical Impedance Myography and Quantitative Ultrasound Detect Steroid Related Improvements in Duchenne Muscular Dystrophy —Seward Rutkove, Craig Zaidman, Jim Wu, Amy Pasternak, Lavanya Madabusi, Heather Szelag, Tim Harrington, Adam Pachack, Sung Yim, Kush Kapur, Basil Darras

2:45 p.m.–2:50 p.m. 14.004 Data Blitz
Role of MRI STIR Sequence in Inflammatory Muscle Disease to Increase the Diagnostic Yield and As a Radiological Biomarker in Monitoring Disease Course —Balakrishnan Shankar, Lakshmi Narasimhan Ranganathan, Kesavamurthy Bhanu

2:50 p.m.–3:00 p.m. Audience Q&A

Guided Poster Rounds

3:00 p.m.–3:30 p.m.

14.001 Anti-cN1A Autoantibody Seropositivity Is Associated with Increased Mortality Risk in Inclusion Body Myositis —James Lilleker, Anke Rietveld (joint first author), Umesh Badrising, Olivier Benveniste, Karina Gheorghe, Michael Hanna, Megan Herbert, David Hilton-Jones, Janine Lamb, Bryan Lecky, Ingrid Lundberg, Pedro Machado, Kubéraka Mariampillai, James Miller, Matt Parton, Maikel Peeters, Stephen Pye, Mark Roberts, Sabrina Sacconi, Christiaan Saris, Robert Cooper, Ger Puijn, Hector Chinoy, Baziél van Engelen

14.002 NKG2D - IL-15 Signaling Is Critically Involved in the Pathogenesis of Inflammatory Myopathies —Tobias Ruck, Ali Afzali, Stefan Bittner, Heinz Wiendl, Sven Meuth

14.003 Electrical Impedance Myography and Quantitative Ultrasound Detect Steroid Related Improvements in Duchenne Muscular Dystrophy —Seward Rutkove, Craig Zaidman, Jim Wu, Amy Pasternak, Lavanya Madabusi, Heather Szelag, Tim Harrington, Adam Pachack, Sung Yim, Kush Kapur, Basil Darras

14.004 Role of MRI STIR Sequence in Inflammatory Muscle Disease to Increase the Diagnostic Yield and As a Radiological Biomarker in Monitoring Disease Course —Balakrishnan Shankar, Lakshmi Narasimhan Ranganathan, Kesavamurthy Bhanu

14.005 Limb Girdle Muscular Dystrophy Due to Calpainopathy Also Exists in a Dominantly Inherited Form —John Vissing, Rita Barresi, Nanna Witting, Marijke van Ghelue, Laurence Bindoff, Straub Volker, Hanns Lochmuller, Christoph Wahl, Christoffer Jonsrud, Morten Duno

14.006 Disease Burden and Functional Outcomes in Congenital Myotonic Dystrophy: A Cross-Sectional Study —Nicholas Johnson, Man Hung, Melissa Dixon, Deanna DiBella, Evan Pucillo, Kiera Berggren, Heather Hayes, Wei Chen, Russell Butterfield, Chad Heatwole, Craig Campbell

14.007 Intravenous Trehalose Improves Dysphagia and Muscle Function in Oculopharyngeal Muscular Dystrophy (OPMD): Preliminary Results of 24 Weeks Open Label Phase 2 Trial —Zohar Argov, Irit Gliko-Kabir, Bernard Brais, Yoseph Caraco, Dalia Megiddo

14.008 Silencing of Myotonic Dystrophy Protein Kinase (DMPK) Does Not Affect Cardiac or Muscle Function in Mice —Samuel Carrell, Ellie Carrell, David Auerbach, Sanjay Pandey, Frank Bennett, Robert Dirksen, Charles Thornton

14.009 Effect of Deflazacort and Prednisone Versus Placebo on Pulmonary Function in Boys with Duchenne Muscular Dystrophy Who Have Lost Ambulation —Jordan Dubow, Timothy Cunniff, Stephen Wanaski, James Meyer

14.010 Exercise Training Normalizes Mitochondrial Function in Myopathies Due to Heteroplasmic Mitochondrial DNA (mtDNA) Mutations —Ronald Haller

14.011 Phase 1 Exploratory Efficacy of the Novel Enzyme Replacement Therapy NeoGAA in Treatment-Naïve and Alglucosidase Alfa-Treated Late-Onset Pompe Disease Patients —Loren Pena, Richard Barohn, Barry Byrne, Claude Desnuelle, Ozlem Goker-Alpan, Shafeeq Ladha, Pascal Laforet, Eugen Mengel, Alan Pestronk, Jean Pouget, Benedikt Schoser, Volker Straub, Jaya Trivedi, Philip Van Damme, John Vissing, Peter Young, Beth Thurberg, Kerry Culm-Merdek, Gerard Short, Ans van der Ploeg, and the NeoGAA Investigator Group

14.012 Diagnostic Algorithm in Adult-Onset Mendelian PEO Associated with Mitochondrial Disease —Grainne Gorman, Yi Shiao Ng, Ewen Sommerville, Andrew Schaefer, Robert Taylor, Robert McFarland, Doug Turnbull

14.013 Brain MRI Findings in the Dystroglycanopathies; Comparison with Language and Motor Function —Brianna Brun, Shelley Mockler, Katie Laubscher, Carrie Stephan, Anne Wallace, Julia Collison, William Dobyns, Katherine Mathews

Part II

3:30 p.m.–5:30 p.m.

3:30 p.m.–4:05 p.m. Invited Speaker
Muscle Disease: Is Any of It Not Genetic?
Kevin M. Flanigan, MD, FAAN, Columbus, OH

4:05 p.m.–4:10 p.m. 14.005 Data Blitz
Limb Girdle Muscular Dystrophy Due to Calpainopathy Also Exists in a Dominantly Inherited Form —John Vissing, Rita Barresi, Nanna Witting, Marijke van Ghelue, Laurence Bindoff, Straub Volker, Hanns Lochmuller, Christoph Wahl, Christoffer Jonsrud, Morten Duno

4:10 p.m.–4:15 p.m. 14.006 Data Blitz
Disease Burden and Functional Outcomes in Congenital Myotonic Dystrophy: A Cross-Sectional Study —Nicholas Johnson, Man Hung, Melissa Dixon, Deanna DiBella, Evan Pucillo, Kiera Berggren, Heather Hayes, Wei Chen, Russell Butterfield, Chad Heatwole, Craig Campbell

4:15 p.m.–4:25 p.m. Audience Q&A

4:25 p.m.–5:00 p.m. Invited Speaker
Therapeutic Strategies in Acquired and Inherited Myopathies
Michael Hanna, London, England

5:00 p.m.–5:05 p.m. 14.007 Data Blitz
Intravenous Trehalose Improves Dysphagia and Muscle Function in Oculopharyngeal Muscular Dystrophy (OPMD): Preliminary Results of 24 Weeks Open Label Phase 2 Trial —Zohar Argov, Irit Gliko-Kabir, Bernard Brais, Yoseph Caraco, Dalia Megiddo

5:05 p.m.–5:10 p.m. 14.008 Data Blitz
Silencing of Myotonic Dystrophy Protein Kinase (DMPK) Does Not Affect Cardiac or Muscle Function in Mice —Samuel Carrell, Ellie Carrell, David Auerbach, Sanjay Pandey, Frank Bennett, Robert Dirksen, Charles Thornton

5:10 p.m.–5:20 p.m. Audience Q&A

5:20 p.m.–5:30 p.m. Conclusion

15 Sex-related Factors in Neurological Disease

Coordinators: Amy Hessler, DO, and Jennifer Graves, MD, PhD

Program Description: This session will include clinical and translational research paradigms for understanding sex-related factors in neurological disease and introduce how sex may be incorporated into diagnostic or therapeutic management algorithms. In INS format, abstracts will be elicited for blitz and poster presentations to reinforce and complement invited speakers.

Upon Completion: Participants should be able to identify clinically relevant differences in phenotype or risk factors between males and females with neurological diseases.

Part I

1:00 p.m.–3:00 p.m.

1:00 p.m.–1:10 p.m. Introduction

Jennifer Graves, MD, PhD, and Amy Hessler, DO

1:10 p.m.–1:45 p.m. Invited Speaker

Sex Related Factors in Epilepsy
Page B. Pennell, MD, Boston, MA

1:45 p.m.–1:50 p.m. 15.001 Data Blitz

A Prospective Study of Pregnancy in Women with Epilepsy Seeking Conception (The WEPOD Study)—*Jacqueline French, Cynthia Harden, Page Pennell, Emilia Bagiella, Evie Andreopoulos, Connie Lau, Stephanie Cornely, Sarah Barnard, Anne Davis*

1:50 p.m.–1:55 p.m. 15.002 Data Blitz

Differential Effects of Hormonal Versus Non-Hormonal Contraception on Seizures: Prospective Pilot Findings of the Epilepsy Birth Control Registry—*Andrew Herzog, Hannah Mandle*

1:55 p.m.–2:05 p.m. Audience Q&A

2:05 p.m.–2:40 p.m. Invited Speaker

Sex Related Factors in Headache
Deborah I. Friedman, MD, FAAN, Dallas, TX

2:40 p.m.–2:45 p.m. 15.003 Data Blitz

Delivery Outcomes After Acute Migraine Treatment in Pregnancy—*Matthew Robbins, Tracy Grossman, Shravya Govindappagari, Ashlesha Dayal*

2:45 p.m.–2:50 p.m. 15.004 Data Blitz

Menstrual-Related Migraine in Adolescents: What's the Difference?—*Suzanne Hagler, Hope O'Brien, Marielle Kabbouche, Joanne Kacperski, Scott Powers, Andrew Hershey*

2:50 p.m.–3:00 p.m. Audience Q&A

Guided Poster Rounds

3:00 p.m.–3:30 p.m.

15.001 A Prospective Study of Pregnancy in Women with Epilepsy Seeking Conception (The WEPOD Study)—*Jacqueline French, Cynthia Harden, Page Pennell, Emilia Bagiella, Evie Andreopoulos, Connie Lau, Stephanie Cornely, Sarah Barnard, Anne Davis*

15.002 Differential Effects of Hormonal Versus Non-Hormonal Contraception on Seizures: Prospective Pilot Findings of the Epilepsy Birth Control Registry—*Andrew Herzog, Hannah Mandle*

15.003 Delivery Outcomes After Acute Migraine Treatment in Pregnancy—*Matthew Robbins, Tracy Grossman, Shravya Govindappagari, Ashlesha Dayal*

15.004 Menstrual-Related Migraine in Adolescents: What's the Difference?—*Suzanne Hagler, Hope O'Brien, Marielle Kabbouche, Joanne Kacperski, Scott Powers, Andrew Hershey*

15.005 Risk of Pregnancy-Associated Stroke Across Age Groups: Population-Based Data from New York State—*Eliza Miller, Hajere Gatollari, Gloria Too, Amelia Boehme, Anna Colello, Lisa Leffert, Mitchell Elkind, Joshua Willey*

15.006 COLADAS: Caribbean Origin Latin American's Disparities in Acute Stroke—*Ina Teron Molina, Abiezer Rodríguez Centeno, Fernando Santiago, Mariel López Valentín*

15.007 Hormone Therapy Use and Physical Quality of Life in Postmenopausal Women with Multiple Sclerosis—*Riley Bove, Charles White, Kathryn Fitzgerald, Tanuja Chitnis, Lori Chibnik, Alberto Ascherio, Cassandra Munger*

15.008 Gender Identity Disorders and Multiple Sclerosis Risk: A National Record-Linkage Study—*Julia Pakpoor, Clare Wotton, Klaus Schmierer, Gavin Giovannoni, Michael Goldacre*

15.009 Treatment of Seizures Related to Eclampsia: A Multi-Center Retrospective Analysis, 1995-2015—*Gina Deck, Christina Yarrington, Daniel Hoch, Thomas McElrath, Page Pennell*

15.010 Effects of Oral Hormonal Contraceptives on the Clinical Course of Relapsing-Remitting Multiple Sclerosis—*Rocio Hernandez Clares, Ester Carreon Guarnizo, Maria Cerdan Sanchez, Cristina Sanchez-Vizcaino Buendía, Juan Carlos Navarro García, J. Javier Martín Fernández, Jose Meca Lallana*

15.011 Previous Use of Unopposed Estrogen Hormone Replacement Therapy Continues to Cause Increased Risk for Future Ischemic Strokes—*Haseeb Rahman, Abraham Thomas, Ahmed Malik, Omar Saeed, Adnan Qureshi*

15.012 Estrogen Receptor- α (ER α) Expression in Lymphocyte Subsets of Parous and Nulliparous Women with Multiple Sclerosis—*Giuseppe Salemi, Giovanni Di Liberto, Paolo Ragonese, Diana Di Liberto, Marianna Lo Pizzo, Sabrina Realmuto, Francesco Dieli*

15.013 Clinical Features and Prognosis of Headache in Preeclampsia and Eclampsia—*Fiorito-Torres Franchesca, Matthew Robbins*

Part II

3:30 p.m.–5:30 p.m.

3:30 p.m.–4:05 p.m. Invited Speaker

Sex Related Factors in Stroke
Cheryl Bushnell, MD, MHS, Winston Salem, NC

4:05 p.m.–4:10 p.m. 15.005 Data Blitz

Risk of Pregnancy-Associated Stroke Across Age Groups: Population-Based Data from New York State—*Eliza Miller, Hajere Gatollari, Gloria Too, Amelia Boehme, Anna Colello, Lisa Leffert, Mitchell Elkind, Joshua Willey*

4:10 p.m.–4:15 p.m. 15.006 Data Blitz

COLADAS: Caribbean Origin Latin American's Disparities in Acute Stroke—*Ina Teron Molina, Abiezer Rodríguez Centeno, Fernando Santiago, Mariel López Valentín*

4:15 p.m.–4:25 p.m. Audience Q&A

4:25 p.m.–5:00 p.m. Invited Speaker

Sex Related Factors in Multiple Sclerosis
Rhonda Voskuhl, MD, Los Angeles, CA

5:00 p.m.–5:05 p.m. 15.007 Data Blitz

Hormone Therapy Use and Physical Quality of Life in Postmenopausal Women with Multiple Sclerosis—*Riley Bove, Charles White, Kathryn Fitzgerald, Tanuja Chitnis, Lori Chibnik, Alberto Ascherio, Cassandra Munger*

5:05 p.m.–5:10 p.m. 15.008 Data Blitz

Gender Identity Disorders and Multiple Sclerosis Risk: A National Record-Linkage Study—*Julia Pakpoor, Clare Wotton, Klaus Schmierer, Gavin Giovannoni, Michael Goldacre*

5:10 p.m.–5:20 p.m. Audience Q&A

5:20 p.m.–5:30 p.m. Conclusion

Sunday, April 17

3:30 p.m.–4:30 p.m. Scientific Platform Session

S15: History of Neurology

3:30 p.m. Presentation of the Lawrence C. McHenry Award: An Award for the History of Neurology
Sponsored by the American Academy of Neurology.

Recipients:

Kimberley Fleuren

Heerlen, Netherlands

Peter J. Koehler, MD, PhD, FAAN

Heerlen, Netherlands

4:00 p.m. S15.003
The Sherrington and Cushing Correspondence: Evidence of a Form of Bench to Bedside Collaboration at the Dawn of the 20th Century —*Elan Louis*

4:15 p.m. S15.004
The Relative Contributions of Duchenne and Trendelenburg to Description of Myopathic Gaits —*Douglas Lanska*

3:30 p.m.–5:30 p.m. Scientific Platform Session

S16: Prehospital/Emergency Room Stroke Care and Intracerebral Hemorrhage

3:30 p.m. Presentation of the Michael S. Pessin Stroke Leadership Prize
Sponsored by the American Academy of Neurology and endowed by Dr. Pessin's family, friends, and colleagues.

Recipient:

Bijoy Menon, MD

Calgary, AB, Canada

3:45 p.m. S16.002
Effect of Annual Hospital Procedure Volume on Outcomes After Mechanical Thrombectomy in Acute Ischemic Stroke Patients: An Analysis of 13,502 Procedures —*Achint Patel, Harshil Shah, Abhishek Lunagariya, Sanjeeva Onteddu, Sonal Mehta*

4:00 p.m. S16.003
Acute Stroke Code Accuracy in the Inpatient Versus Emergency Department (ED) Setting —*Michael Schneck, Maria Bruzzzone, Luka Vlahovic, Ramon Durazo-Arzu, Jose Biller, Murray Flaster, Sarkis Morales-Vidal, Sean Ruland, Jessica Ray*

4:15 p.m. S16.004
Comparison of Large Vessel Occlusion Prediction Scores —*Toby Gropen, Amelia Boehme, Sheryl Martin-Schild, Karen Albright, Brian Perrin, Alyana Samai, Sammy Pishanidar, Nazli Janjua, Steven Levine, Ethan Brandler, Dov Rosenbaum*

4:30 p.m. S16.005
Gaze Deviation and Acute Stroke Care Strategies —*Zaid Mahdi, Anup Kumar Trikanad Ashwini Kumar, Pratik Bhattacharya, Ramesh Madhavan*

4:45 p.m. S16.006
Nurse-Activated Acute Stroke Codes in the Emergency Setting Improves Process and Clinical Outcomes —*Sarah Song, Elizabeth Diebolt, Sarah Livesay, Marites Gonzaga-Reardon, Louis Hondros, Deborah Lynch, James Connors*

5:00 p.m. S16.007
Current Practices and Variability in Feeding Tube Placement for Inpatients with Intracerebral Hemorrhage in US Hospitals —*David Hwang, Benjamin George, Adam Kelly, Eric Schneider, Kevin Sheth, Robert Holloway*

5:15 p.m. S16.008
Intracranial Hemorrhage on Warfarin: Time to Reversal Is of the Essence —*Chandan Mehta, Mathew Jones, Mauricio Ruiz Cuero, Jody Wellwood, Mohammed Rehman, Panayiotis Mitsias, Panayiotis Varelas*

4:45 p.m.–5:30 p.m. Scientific Platform Session

S17: Pain and Palliative Care

4:45 p.m. Presentation of the Mitchell B. Max Award for Neuropathic Pain
Sponsored by the American Academy of Neurology and endowed by the United States Cancer Pain Relief Committee, the Mayday Fund, and friends of Dr. Mitchell Max.

Recipient:

Michael C. Rowbotham, MD

San Francisco, CA

5:00 p.m. S17.002
Ethical Conflicts at the End of Life in Patients with Malignant Brain Tumors —*Elizabeth Neil, Mary McCabe, Alan Carver, Holly Prigerson, Eli Diamond*

5:15 p.m. S17.003
Tetradotoxin (TTX) for Chemotherapy Induced Neuropathic Pain (CINP): A Randomized, Double-Blind, Dose-Finding, Placebo Controlled, Multicenter Study —*Samuel Goldlust, Mehran Kavoosi, Walter Korz, Kenneth Deck*

Meeting Schedule

3:30 p.m.–4:30 p.m.

S15 History of Neurology

1 Policy, Politics, and Presidential Polls

Directors: Mike Amery, Derek Brandt

3:30 p.m.–5:30 p.m.

S16 Prehospital/Emergency Room Stroke Care and Intracerebral Hemorrhage

C84 Dementia Update: Non-Alzheimer Dementias and Dementia Management

Director: John C. Morris, MD, FAAN, St. Louis, MO

C85 Multiple Sclerosis Essentials

Director: Stephen Krieger, MD, New York, NY

C86 Neurology Update II

Director: Joseph E. Saffdieh, MD, FAAN, New York, NY

C87 Child Neurology III

Director: Jonathan W. Mink, MD, PhD, FAAN, Rochester, NY

C88 Myelopathies II

Director: Benjamin M. Greenberg, MD, FAAN, Dallas, TX

C89 Infections of the Nervous System III

Director: Tracey Cho, MD, Boston, MA

C90 Movement Disorders for the General Neurologist III

Director: Susan Fox, MD, Toronto, ON

C91 Evaluation and Management of Autonomic Disorders II

Director: Paola Sandroni, MD, PhD, FAAN, Rochester, MN

C92 Emergency Neurology Topics: Acute/Subacute Weakness and Subarachnoid Hemorrhage

Director: Laurie Gutmann, MD, FAAN, Iowa City, IA

C93 Thinking Outside the Toolbox: Assessment of Clinical Reasoning in The Modern Era of Medical Education

Director: Stuart Lubarsky, MD, Montreal, QC

C94 Functional Neurologic Disorders II

Director: Janis Miyasaki, MD, FAAN, Edmonton, AB

4:45 p.m.–5:30 p.m.

S17 Pain and Palliative Care

6:00 p.m.–8:00 p.m.

Opening Party

6:00 p.m.–8:00 p.m.

Neurobowl®

8:10 p.m.–8:15 p.m.

Lighting of Olympic Torch

8:15 p.m.–9:00 p.m.

Native Thunder Productions Presents Story Telling Through Native Dancing

8:45 p.m.–10:00 p.m.

Sixwire

Opening Party

Experience New Ways to Connect and Thrive

Sunday, April 17 6:00 p.m.–10:00 p.m.



Neurobowl® 6:00 p.m.–8:00 p.m.

This popular event hosted by AAN former president Thomas R. Swift, MD, FAAN, is one of the Annual Meeting's premier happenings. Neurobowl showcases the best and brightest in neurology competing for the coveted Neurobowl trophy in an entertaining game-show format.

**Native Thunder Productions Presents
Story Telling Through Native Dancing** 8:15 p.m.–9:00 p.m.

Dressed in colorful, vibrant, handmade traditional clothing, Native Thunder Productions uses compelling dance, vocal, and drum performances to tell the story of their people, while a three-time world champion hoop dancer uses 22 hoops to tell a story of the creation of life.

Sixwire 8:45 p.m.–10:00 p.m.

Five veterans of touring, recording, and songwriting who adopted their name from the six-string guitar—a fitting tribute to the instrument around which their sound is based—will bring their unique pop-country-meets-classic-rock, high-energy show to the Annual Meeting. Since 2000, Sixwire has achieved chart success, made many television appearances—including regular spots on ABC's "Nashville"—and performed around the world with dozens of iconic musical stars.



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AAN

●●●●● 2016
Annual Meeting

Monday, April 18

Plan Your Experience

6:30 a.m.–8:30 a.m.

- C95  Stroke Team Action Therapy (STAT): Current State of the Art
- C96 Neurotoxicology
- C97 Severe TBI: From ICU to Rehabilitation
- C98 Cerebrovascular Disease I: Prevention
- C99 Morning Report: Memory Disorders
- C100 Neuro Flash: Epilepsy
- C101 Controversies in Multiple Sclerosis Therapy
- C102 Neuro-oncologic Emergencies
- C103 Idiopathic Intracranial Hypertension
- S18 Autonomic Disorders 66
- S19 Movement Disorders: Parkinson's Disease and Atypical Parkinsonian Syndromes: Phenomenology . 66
- S20 General Neurology 66

7:00 a.m.–7:45 a.m.

 Yoga

8:00 a.m.–9:00 a.m.

-  Live Intraoperative Monitoring

8:30 a.m.–7:00 p.m.

- P3 Poster Session III
Presenters Stand by Posters 5:30 p.m.–7:00 p.m. . . 68

11:30 a.m.–12:30 p.m.

State Society Leadership Roundtable

Leadership representatives of state neurological societies are invited to discuss challenges, strategies, and practices related to state neurosociety creation and maintenance. Discussion will be facilitated by Academy staff. Participants will learn from the experiences of established societies and be introduced to the resources available from the Academy.

9:00 a.m.–11:30 a.m.

Controversies in Neurology Plenary Session 78

11:45 a.m.–12:45 p.m.

-  Neurological Exam Tips and Tricks

1:00 p.m.–2:00 p.m.

-  There's an AAN App for That!
Engaging with the AAN Using eMedia
-  Vital Signs of Well Being™

1:00 p.m.–3:00 p.m.

- C104 Clinical Approach to Muscle Disease I
- C105 Therapy in Neurology I
- C106 Common Spine Disorders I: Evaluation
- C107 Cerebrovascular Disease II: Hemorrhagic Stroke
- C108 Nonmotor Manifestations of Parkinson's Disease I
- C109 Pediatric MS: Diagnosis and Treatment
- C110 Core Concepts in Pain Management I: Refractory Neuropathic Pain—Practical Pharmacologics, Advances in Neuromodulation, and a Balanced look at Cannabinoids
- C111 Sleep for the Practicing Neurologist I: Can't Fall Asleep—Insomnia, RLS and Related Disorders
- C112  Bedside Evidence-based Medicine: How to Find and Deconstruct Articles in Order to Take Care of Patients I
(registration required)
- C113 Humanism in Medicine, Humanizing Medicine, and the Role of Education
- C114 Contemporary Ethical Issues
- S21 Aging and Dementia: Genetics
Presentation of the Potamkin Prize for Research in Pick's, Alzheimer's, and Related Diseases 80
- S22 Epilepsy/Clinical Neurophysiology: Cognition, Emotion, Women, and Injury
Presentation of the Dreifuss-Penry Epilepsy Award . . . 80
- S23 Section Topic Controversies: The Role of Rest vs. Active Intervention Following Concussion 80
-  Ask the Expert: Advance Care Planning

1:00 p.m.–5:00 p.m.

- C115   Improving Your Leadership Skills: A Practical Approach
(registration required)

1:00 p.m.–5:30 p.m.

- C116  Clinical Uses of Botulinum Toxin for Dystonia Skills Workshop
(registration required)
- I6  Future Directions and Challenges in Stroke Team Action Therapy (STAT) 82
- I7 The Human Connectome: Implications for Clinical Neurology 84
- I8 Emerging Technologies for Neurological Research and Care: #Emerging-Tech
#Neurologist @AAN 85

2:00 p.m.–3:00 p.m.

-  Mindfulness Meditation for Healthcare Practitioners

- A registration fee is required
- The program is one of the AAN Leadership University sessions
- The course is part of a Subspecialty in Focus track
- The program is one of the I Talk sessions



The program is part of the Experiential Learning Area sessions

3:00 p.m.–4:00 p.m.



“Physical Exercise and Cognitive Training in Neurology”—Exercise in Stroke

3:30 p.m.–4:30 p.m.



The Future of Payment

3:30 p.m.–5:30 p.m.

- C117 Clinical Approach to Muscle Disease II
- C118 Therapy in Neurology II
- C119 Common Spine Disorders II: Treatment
- C120 Cerebrovascular Disease III: Acute Ischemic Stroke
- C121 Emotional Communication: Chalk Talk
- C122 Nonmotor Manifestations of Parkinson’s Disease II
- C123 Status Epilepticus
- C124 Core Concepts in Pain Management II: Safe Opioid Prescribing—Practical Considerations, Unintended Consequences, and Legal Issues
- C125 Sleep for the Practicing Neurologist II: Sleep Duration, CNS Hypersomnias, and Treating Physician Fatigue

C126 Bedside Evidence-based Medicine: How to Find and Deconstruct Articles in Order to Take Care of Patients II *(registration required)*

S24 Clinical Outcomes and Treatment Strategies in Multiple Sclerosis 86

S25 Movement Disorders: Huntington’s Disease *Presentation of the Movement Disorder Research Award* . 86

S26 Headache *Presentation of the Harold Wolff-John Graham: An Award for Headache/Facial Pain Research* 86

4:00 p.m.–5:00 p.m.



Introduction to Stress Mastery—Going Beyond Stress Management

4:30 p.m.–6:30 p.m.

Exhibit Hall Opening Reception. 162

Attend the opening reception to mingle with fellow attendees and preview the latest products and services available in the neurologic industry. Light hors d’oeuvres and beverages will be served. The exhibits will be open at this time.

Sponsored by: ACADIA[®] Pharmaceuticals

Mon • April 18

My Monday

Time _____ to _____

Program # _____ Program Name _____

Time _____ to _____

Program # _____ Program Name _____

9:00 a.m.–11:30 a.m. Controversies in Neurology Plenary Session

Lunch

Time _____ to _____

Program # _____ Program Name _____

Time _____ to _____

Program # _____ Program Name _____

4:30 p.m.–6:30 p.m. Exhibit Hall Opening Reception

6:30 a.m.–8:30 a.m.

Scientific Platform Sessions

S18: Autonomic Disorders

6:30 a.m. S18.001
Sleep Disordered Breathing in Familial Dysautonomia: Implications for Sudden Death During Sleep —*Jose-Alberto Palma, Miguel Perez, Lucy Norcliffe-Kaufmann, Horacio Kaufmann*

6:45 a.m. S18.002
Spinal Fluid Biomarkers for Multiple System Atrophy - A Pilot Study —*Wolfgang Singer, Ann Schmeichel, David Goldstein, James Schmelzer, Anita Zeller, Tonette Gehrking, Phillip Low*

7:00 a.m. S18.003
Differential Abnormalities of Sympathetic Noradrenergic Responses to Cooling Despite Identical Severities of Baroreflex-Sympathoneural Failure in Autonomic Synucleinopathies —*Reversa Mills, Courtney Holmes, Richard Imrich, Juan Guzman, Yehonatan Sharabi, David Goldstein*

7:15 a.m. S18.004
The Impact of 'Neurogenic' on Mortality Rates of Orthostatic Hypotension: 10 Year Follow-Up —*Christopher Gibbons, Roy Freeman*

7:30 a.m. S18.005
Hypotension-Induced Vasopressin Release As a Biomarker to Distinguish Multiple System Atrophy from Parkinson Disease and Dementia with Lewy Bodies —*Jose-Alberto Palma, Lucy Norcliffe-Kaufmann, Horacio Kaufmann*

7:45 a.m. S18.006
Can Blood Pressure Responses to the Valsalva Maneuver Predict Orthostatic Hypotension? —*Wolfgang Singer, Tonette Gehrking, Jade Gehrking, Phillip Low*

8:00 a.m. S18.007
Dysautonomia Due to Ganglionic Nicotinic Acetylcholine Receptor Autoimmunity —*Jeremy Cutsforth-Gregory, Elizabeth Coon, Andrew McKeon, Mariana Suarez, Phillip Low*

8:15 a.m. S18.008
A Test of Sudomotor Nerve Function Measuring Output and Distribution of Individual Sweat Glands —*Adam Loavenbruck, Kevin Welk, Nathan Sit, Patrick Camilleri, Gwen Crabb, William Kennedy*

S19: Movement Disorders: Parkinson's Disease and Atypical Parkinsonian Syndromes: Phenomenology

6:30 a.m. S19.001
MDS Clinical Diagnostic Criteria for Parkinson's Disease —*Ronald Postuma, Daniela Berg*

6:45 a.m. S19.002
Classification of Clinical Subtypes in Parkinson's Disease Based on Phenotypic Variability in the Motor, Cognitive, and Psychiatric Domains —*Meghan Campbell, Alexandra Weigand, Christina Lessov-Schlaggar, Joel Perlmutter*

7:00 a.m. S19.003
How Long Is the Wait to See a Specialist in Parkinson's Disease in the United States? —*Katherine Holmes, Karl Maki, Justin Martello, Stephen Reich*

7:15 a.m. S19.004
Simulated Driving in Low Visibility Predicts Real World Driving Outcomes in Parkinson's Disease —*Ergun Uc, Matthew Rizzo, Steven Anderson, Jeffrey Dawson*

7:30 a.m. S19.005
Greater Incidence of Depressive Symptoms in Atypical Parkinsonism: Importance of Early Screening —*Leonardo Almeida, Bilal Ahmed, Roger Walz, Sol De Jesus, Addie Patterson, Daniel Martinez-Ramirez, David Vaillancourt, Dawn Bowers, Herbert Ward, Michael Okun, Melissa Armstrong, Nikolaus McFarland*

7:45 a.m. S19.006
Diabetes and Small Vessel Cerebrovascular Disease Influence Motor and Cognitive Features in Early Parkinson's Disease —*Naveed Malek, Diane Swallow, Katherine Grosset, Lawton Michael, Sarah Marrinan, Nin Bajaj, Roger Barker, David Burn, John Hardy, Huw Morris, Nigel Williams, Nicholas Wood, Yoav Ben-Shlomo, Donald Grosset*

8:00 a.m. S19.007
GBA Mutations in REM Sleep Behavior Disorder and Parkinson's Disease —*Ziv Gan-Or, Nicolas Dupre, Ronald Postuma, Claire LeBlond, Anat Mirelman, Avi Orr-Urtreger, Nir Giladi, Isabelle Arnulf, Alex Desautels, Jean-Francois Gagnon, Birgit Frauscher, Susan Bressman, Karen Marder, Roy Alcalay, Christelle Monaca, Yves Dauvilliers, Birgit Hogl, Jacques Montplaisir, Patrick Dion, Guy Rouleau*

8:15 a.m. S19.008
Circadian Expression of Clock Genes in Parkinson's Disease - Implications for Disrupted Sleep and Daytime

Sleepiness —*Aleksandar Videnovic, Angelica Marconi, Phyllis Zee, Elizabeth Klerman, Fred Turek*

S20: General Neurology

6:30 a.m. S20.001
Clinical, Physiological and Pathological Characterization of the Peripheral Neuropathy in Copper Deficiency —*Ruple Laughlin, Sean Taylor, Christopher Klein, Neeraj Kumar, Brent Goodman, P. James B. Dyck*

6:45 a.m. S20.002
Rare Disease Clinical Research: Caregivers' Perspectives on Barriers and Solutions for Clinical Research Participation —*Travis Amengual, Heather Adams, Jonathan Mink, Erika Augustine*

7:00 a.m. S20.003
An Unusual Cause of Progressive Ataxia and Devastating Seizure Disorder —*Yi Shiau Ng, Charlotte Alston, Emma Blakely, Nichola Lax, Germaine Pierre, Efstathia Chronopoulou, Gill Riordan, Helen Mundy, Michael Champion, Paul Maddison, Patrick Chinnery, Robert Taylor, Doug Turnbull, Robert McFarland, Grainne Gorman*

7:15 a.m. S20.004
Diagnosing Hereditary Neuropathies in the Clinic with Next-Generation Sequencing Technology, the Norwegian Experience —*Geir Braathen, Helle Hoyer, Øyvind Busk, Øystein Hølla, Linda Strand, Camilla Skjelbred, Michael Russell*

7:30 a.m. S20.005
White Matter Integrity in High-Altitude Pilots —*Adam Willis, John Sladky, Stephen McGuire*

7:45 a.m. S20.006
Ex-Vivo Regulatory T Cells Isolated from Patients with Amyotrophic Lateral Sclerosis Are Dysfunctional —*David R. Beers, Weihua Zhao, Jason Thonhoff, Jinghong Wang, Xiujun Zhang, Abdullah Alsuliman, Elizabeth Shpall, Katy Rezvani, Stanley Appel*

8:00 a.m. S20.007
Upregulation of Mitochondrial Biogenesis in Neuronal Cells Via CREB-Mediated Transcription of TFAM —*Madhuchanda Kundo, Goutam Chandra, Suresh Rangasamy, Supurna Ghosh, Richard Watson, Kalipada Pahan*

8:15 a.m. S20.008
Diagnostic Exome Sequencing Is Successful in Providing Diagnoses Among Patients with Intellectual Disability and Developmental Delay: Strong Family History Correlates with an Increased Novel Genetic Etiology Detection Rate —*Heather Newman, Jade Tinker, Zoe Powis, Taylor Cain, Sha Tang*

6:30 a.m.–8:30 a.m.

S18 Autonomic Disorders

S19 Movement Disorders: Parkinson's Disease and Atypical Parkinsonian Syndromes: Phenomenology

S20 General Neurology

C95 Stroke Team Action Therapy (STAT): Current State of the Art

Director: *Antonio Culebras, MD, FAAN, FAHA, Syracuse, NY*

C96 Neurotoxicology

Director: *Alan R. Berger, MD, Jacksonville, FL*

C97 Severe TBI: From ICU to Rehabilitation

Director: *Holly E. Hinson, MD, Portland, OR*

C98 Cerebrovascular Disease I: Prevention

Director: *Larry B. Goldstein, MD, FAAN, FAHA, Lexington, KY*

C99 Morning Report: Memory Disorders

Director: *David A. Wolk, MD, Philadelphia, PA*

C100 Neuro Flash: Epilepsy

Director: *Joseph I. Sirven, MD, FAAN, Scottsdale, AZ*

C101 Controversies in Multiple Sclerosis Therapy

Director: *Mark Keegan, MD, Rochester, MN*

C102 Neuro-oncologic Emergencies

Director: *Nimish A. Mohile, MD, Rochester, NY*

C103 Idiopathic Intracranial Hypertension

Director: *Michael Wall, MD, FAAN, Iowa City, IA*

7:00 a.m.–7:45 a.m.

Yoga

Instructor: *Sarah Bird Nelson, JD, RYT 200, Minneapolis, MN*

8:00 a.m.–9:00 a.m.

Live Intraoperative Monitoring

Director: *Constantine Moschonas, MD, Scottsdale, AZ*

8:30 a.m.–7:00 p.m.

P3 Poster Session III 68



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8:30 a.m.–7:00 p.m.

Poster Session

P3 Poster Session III

Presenters Stand by Posters 5:30 p.m.–7:00 p.m.

Poster Discussion Session: MS and CNS Inflammatory Disease

Eight abstracts have been selected for presentation during a poster discussion session. Authors will present a 5-minute data blitz presentation.

In addition to the regular poster time, authors also have a specific time slot over lunch. Times below are standard across poster sessions.

Discussion: 11:45 a.m.–11:50 a.m.

P3.001 Myelin Oligodendrocyte Glycoprotein Antibodies Are Associated with Bilateral and Recurrent Optic Neuritis and Have a Distinct Radiological Profile to Multiple Sclerosis or Aquaporin-4 Antibody-associated Optic Neuritis—*Sudarshini Ramanathan, Kristina Prelog, Elizabeth Barnes, Esther Tantis, Stephen Reddel, Andrew Henderson, Ostojia Vucic, Mark Gorman, Leslie Benson, Gulay Alper, Catherine Riney, Michael Barnett, John Parratt, Todd Hardy, Richard Leventer, Vera Merheb, Margherita Nosadini, Victor Fung, Fabienne Briot, Russell Dale*

Discussion: 11:50 a.m.–11:55 a.m.

P3.002 Lifetime Sun Exposure and the Risk of Multiple Sclerosis in Blacks and Hispanics—*Annette Langer-Gould, Lie Chen, Edlin Gonzales, Christopher Schroeder, Anny Xiang, Lisa Barcellos, Robyn Lucas*

Discussion: 11:55 a.m.–12:00 p.m.

P3.003 Epidemiology of Aquaporin-4 Autoimmunity and Neuromyelitis Optica Spectrum: A Comparison of Two Ethnically Divergent Populations—*Eoin Flanagan, Philippe Cabre, Brian Weinshenker, Jennifer St. Sauver, Masoud Majed, Vanda Lennon, Claudia Lucchinetti, Andrew McKeon, Dean Wingerchuk, Jayawant Mandrekar, Debra Jacobson, Jessica Sagen, John Schmeling, James Fryer, Marcelo Matiello, Nilufur Kale, Angala Borders Robinson, Sean Pittock*

Discussion: 12:00 p.m.–12:05 p.m.

P3.004 Novel Findings in Anti-GABA_A Receptor Encephalitis—*Marianna Spatola, Mar Petit-Pedrol, Myrna Rosenfeld, Francesc Graus, Josep Dalmau*

Discussion: 12:05 p.m.–12:10 p.m.

P3.005 Multiple Sclerosis White Matter Demyelination and Remyelination Using T1-, T2- and T2*-Weighted Images: A Post Mortem Validation Study at 7.0 Tesla—*Michael Bradshaw, Assunta Dal-Bianco, Simon Hametner, Siddharama Pawate, Subramaniam Sriram, Seth Smith, John Gore, Brian Welch, Hans Lassmann, Francesca Bagnato*

Discussion: 12:10 p.m.–12:15 p.m.

P3.006 Vitamin D Supplementation Reduces Markers of Oxidative Stress Measured by Untargeted Metabolomics in Healthy Controls but Not in Multiple Sclerosis Patients—*Pavan Bhargava, Kathryn Fitzgerald, Sonya Steele, Sandra Cassard, Emmanuelle Waubant, Peter Calabresi, Ellen Mowry*

Discussion: 12:15 p.m.–12:20 p.m.

P3.007 The Role of Gut Immunity in Multiple Sclerosis Patients—*Vittorio Martinelli, Maria José Messina, Mariani Alberto, Ilaria Cosorich, Gloria Dalla Costa, Gloria Dalla Costa, Mariaemma Rodegher, Giancarlo Comi, Marika Falcone*

Discussion: 12:20 p.m.–12:25 p.m.

P3.008 Progressive Solitary Sclerosis: Insidious Motor Impairment Localized to an Isolated CNS Demyelinating Lesion—*Mark Keegan, Timothy Kaufmann, Brian Weinshenker, Orhun Kantarci, William Schmalstieg, M. Paz Soldan, Eoin Flanagan*

e-Poster Session: MS and CNS Inflammatory Disease

Ten e-posters in six neurologic topics have been selected for on-site, interactive display. e-Posters will be grouped in a separate area where attendees are invited to explore more deeply through touch screen displays.

P3.009 Contrasting In Situ and In Vitro Expression of MiR-155 and MiR-146a in Astrocytes in Context of Multiple Sclerosis (MS)—*Vijayaraghava Rao, Samuel Ludwin, Shih-Chieh Fuh, Marthe Minderman, Robin Sawaya, Craig Moore, Ming-Kai Ho, Barry Bedell, Jack Antel*

P3.010 Dimethyl Fumarate Is Well Tolerated in a Small Cohort of Pediatric-Onset Multiple Sclerosis Patients—*Ian Rossman, Manikum Moodley, Mary Rensel*

P3.011 Movement Measurements At Home for Multiple Sclerosis: Walking Speed and Cane Usage Measured by a

Novel Infrared Sensor—*Victoria M. Smith, Jonathan Varsanik, Kevin Patel, Wendy Gabel, Glenn Phillips, Zebadiah Kimmel, Eric Klawiter*

P3.012 Racial Variations in Mean Serum Vitamin A (Retinoic Acid) Levels in Multiple Sclerosis Patients with Normal/Corrected Vitamin D Levels—*Bijal Mehta, Kristen Berube*

P3.013 Automatic Measurement of Optic Nerve Atrophy in Multiple Sclerosis Patients with and Without Optic Neuritis in MRI—*Robert Harrigan, Bennett Landman, Louise Mawn, Siddharama Pawate, Seth Smith*

P3.014 MS Arising During Tocilizumab Therapy for Rheumatoid Arthritis—*Philippe Beauchemin, Robert Carruthers*

P3.015 Time Course of Multiple Sclerosis Lesions Visualized with MRI: Insight into Focal Pathology—*Pietro Maggi, Francesco Zellini, Alessandro Barilaro, Alessandro Passeri, Luca Massacesi*

P3.016 MRI Quantification of Spinal Cord Atrophy in Multiple Sclerosis: A Systematic Review and Meta-Analysis—*Courtney Casserly, Stephanie Sankar, Stefan Baral, Jiwon Oh*

P3.017 Autoimmune Tumefactive Rhombencephalitis Associated with Anti-TNF α (Adalimumab) Treatment—*Kedar Mahajan, Omar Shah*

P3.018 Assessment of High-Resolution, Clinically Applicable Quantitative Magnetization Transfer Imaging in the Cervical Spinal Cord of Multiple Sclerosis Patients at 3T—*Alex Smith, Richard Dortch, Bailey Lyttle, Siddharama Pawate, Seth Smith*

MS and CNS Inflammatory Disease: Clinical Trials

P3.019 Absence of HDL Decrease After Interferon Beta-1a Initiation Is Associated with Greater Brain Volume Loss and Lesion Burden in Multiple Sclerosis Patients over 4 Years—*Tomas Uher, Dana Horakova, Kelly Fellows, Manuela Vaneckova, Lukas Sobisek, Zdenek Seidl, Michaela Tyblova, Jan Krasensky, Eva Havrdova, Murali Ramanathan*

P3.020 Relationship Between VLA-4 Receptor Occupancy and Body Weight in Natalizumab Treated Patients—*John Foley, Tamara Hoyt, Angelene Christensen, Ryan Metzger*

P3.021 Early Vs Delayed Treatment with Teriflunomide 14 Mg Results in Reduced Risk of Disability Progression in Patients with MS—*Paul O'Connor, Karthinathan Thangavelu, Pascal Ruffi, Philippe Truffinet*

P3.022 Patients with Active RRMS and an Inadequate Response to Prior Therapy Demonstrate Durable Improvements in Relapse and Disability Following Treatment with Alemtuzumab: 5-Year Follow-Up of the CARE-MS II Study—*Alasdair Coles, Douglas Arnold, Jeffrey Cohen, Edward Fox, Gavin Giovannoni, Hans-Peter Hartung, Eva Havrdova, Krzysztof Selmaj, David Margolin, Karthinathan Thangavelu, D. Alastair Compston*

P3.023 Results from the 48-Week Blinded Extension of RADIANCE: A Randomized, Double-Blind, Placebo-Controlled Phase 2 Trial of Oral Ozanimod in Relapsing Multiple Sclerosis—*Krzysztof Selmaj, Jeffrey Cohen, Douglas Arnold, Giancarlo Comi, Amit Bar-Or, Sheila Gujrathi, Jeffrey Hartung, Allan Olson, Matthew Cravets, Paul Frohna*

P3.024 Patients Who Switched from SC IFNβ-1a to Alemtuzumab in the CARE-MS II Extension Study Show Durable Improvements in Clinical Outcomes —*Eva Havrdova, Douglas Arnold, Jeffrey Cohen, Alasdair Coles, Edward Fox, Hans-Peter Hartung, Krzysztof Selmaj, David Margolin, Linda Kasten, D Alastair Compston*

P3.025 Patients Who Discontinued SC IFNβ-1a and Switched to Alemtuzumab in the CARE-MS II Extension Study Show Durable Reduction in New Lesion Activity —*Daniel Pelletier, Jeffrey Cohen, Alasdair Coles, Edward Fox, Hans-Peter Hartung, Krzysztof Selmaj, David Margolin, Karthinathan Thangavelu, Douglas Arnold*

P3.026 Patients Who Discontinued SC IFNβ-1a and Switched to Alemtuzumab in the CARE-MS I Extension Study Show Durable Reduction in New Lesion Activity —*Alex Rovira, Jeffrey Cohen, Alasdair Coles, Edward Fox, Hans-Peter Hartung, Eva Havrdova, Krzysztof Selmaj, David Margolin, Karthinathan Thangavelu, Douglas Arnold*

P3.027 Final Outcomes of the Teriflunomide Phase 2 Extension Study: 13 Years of Efficacy and Safety Results —*Marcelo Kremenchutzky, Mark Freedman, Amit Bar-Or, Annie Purvis, Myriam Benamor, Philippe Truffinet, Paul O'Connor*

P3.028 Clinical Efficacy of Cladribine Tablets in Patients with Relapsing-Remitting Multiple Sclerosis (RRMS): Final Results from the 120-Week Phase IIIb Extension Trial to the CLARITY Study —*Gavin Giovannoni, Giancarlo Comi, Stuart Cook, Peter Rieckmann, Kottil Rammohan, Per Soelberg-Sorensen, Patrick Vermersch, Emily Martin, Fernando Dangond*

P3.029 Efficacy of Cladribine Tablets As Add-On to IFN-beta Therapy in Patients with Active Relapsing MS: Final Results from the Phase II ONWARD Study —*Xavier Montalban, Bruce Cohen, Thomas Leist, Harold Moses, Christine Hicking, Fernando Dangond*

P3.030 Baseline Characteristics of Patients in the PANGAEA Study —*Tjalf Ziemssen, Christian Cornelissen, Jennie Medin*

P3.031 PANGAEA 2.0: State of the Art Multiple Sclerosis Patient Management in Daily Clinical Practice. A 3-Year Observational Study of Patients Receiving Fingolimod —*Tjalf Ziemssen, Raimar Kern, Christian Cornelissen*

P3.032 Siponimod (BAF312) Safety, Tolerability and Pharmacodynamics in Healthy Subjects with Different Genetic Variants of the Cytochrome P4502C9 Enzyme —*Mike Ufer, Anne Gardin, Gianluca Rossato, Zhenzhong Su, Yi Jin, Eric Legangneux, Kasra Shakeri-Nejad*

P3.033 Longer-Term Follow-Up of the Efficacy of Delayed-Release Dimethyl Fumarate in Newly Diagnosed Patients with Relapsing-Remitting Multiple Sclerosis: Integrated Analysis of DEFINE, CONFIRM, and ENDORSE —*Ralf Gold,*

Gavin Giovannoni, J. Theodore Phillips, Robert Fox, Annie Zhang, Catherine Taylor, Jing Marantz

P3.034 A Randomized, Double-Blind, Parallel Group Study to Compare the Safety and Efficacy of Arbaclofen Extended Release Tablets to Placebo and Baclofen for the Treatment of Spasticity in Patients with Multiple Sclerosis —*Daniel Kantor, Daniel Wynn, Angela Dentiste, Mark Aikman, Praveen Tyle, Samer Kaba*

P3.035 Efficacy of Cladribine Tablets in ORACLE Study Patients Who Retrospectively Met 2010 McDonald Multiple Sclerosis (MS) Criteria at Baseline —*Mark Freedman, Thomas Leist, Giancarlo Comi, Bruce Cree, Patricia Coyle, Hans-Peter Hartung, Patrick Vermersch, Doris Damian, Fernando Dangond*

P3.036 Interferon β-1a SC Tiw Reduces Mild to Moderate and Moderate to Severe Relapses and Disease Activity over 1 Year in Patients with Relapsing MS: Post Hoc Analyses of PRISMS Data —*Aaron Boster, David Li, Eric Williamson, Juanzhi Fang, Fernando Dangond, Anthony Traboulsee*

P3.037 Treatment Adherence, Persistence, and Compliance at 96 Weeks in MS Patients Using RebiSmart® for Injection of Interferon β-1a —*Virginia Devonshire, Anthony Feinstein, Alan Gillett*

P3.038 Outcomes in Patients with Progressive MS: Analysis of Teriflunomide Long-Term Extension Data —*Flavia Nelson, Christine Lebrun-Frenay, William Camu, Alexey Boyko, Karthinathan Thangavelu, Pascal Ruffi, Steve Cavalier, Philippe Truffinet, Jinjun Liang, Fred Lublin*

P3.039 High Dose Biotin As Treatment for Progressive Multiple Sclerosis —*Gary Birnbaum, Jessica Stulc, Tori Snyder*

P3.040 Hormone Therapy Use and Physical Quality of Life in Postmenopausal Women with Multiple Sclerosis —*Riley Bove, Charles White, Kathryn Fitzgerald, Tanuja Chitnis, Lori Chibnik, Alberto Ascherio, Cassandra Munger*

P3.041 Correlation of Physical, Cognitive and MRI Measures with Multifocal Visual Evoked Potential Using Baseline Data from the Anti-LINGO-1 SYNERGY Trial in Multiple Sclerosis —*Diego Cadavid, Alexander Klistorner, Radek Ampapa, Robert Bonek, Jelena Drulovic, Smiljana Kostić, Maciej Maciejowski, Krzysztof Selmaj, Martin Vališ, Tomasz Zielinski, Adama Ibrahim, Yiwei Zhang, Lei Xu*

P3.042 Multiple Intrathecal Dosing of Neural Progenitors Administered to Progressive MS Patients with Disability Is Safe and Improves Disability Scores —*Saud Sadiq, Leslie Blackshear, Gloria Joo, Tamara Vyshkina, Violaine Harris*

P3.043 NDC-1308, a Small Molecule with Remyelinating Activity for Treatment of Secondary Progressive Multiple Sclerosis Patients —*Steven Nye, James Yarger*

P3.044 Who Participates in MS Clinical Trials? The NARCOMS Experience —*Stacey Cofield, Tuula Tyry, Amber Salter, Sandre McNeal, Robert Fox, Ruth-Ann Marrie, Gary Cutter*

P3.045 A Multicenter Randomized Controlled Trial in People with Multiple Sclerosis Comparing the Immediate and 6-Month Follow-Up Effects of Two Group Programs on Fatigue and Self-Efficacy —*Cinda Hugos, Yiyi Chen, Zunqiu Chen, Aaron Turner, Jodie Haselkorn, Toni Chiara, Sean McCoy, Christopher Bever, Dennis Bourdette*

P3.046 Baseline Immunological Profile in Secondary Progressive Multiple Sclerosis Patients of Phase III EXPAND Trial —*Yang Mao-Draayer, Qi Wu, Qin Wang, Catherine Dowling, Steven Lundy, Benjamin Segal, Wallström Wallström*

P3.047 Teriflunomide Significantly Slows Brain Volume Loss in MS Patients Irrespective of Disability Progression —*Till Sprenger, Ludwig Kappos, Ernst-Wilhelm Radue, Laura Gaetano, Nicole Mueller-Lenke, Jens Wuerfel, Karthinathan Thangavelu, Michael Panzara, Steve Cavalier, Jerry Wolinsky*

P3.048 High Dose Clinical Pharmacology Study of GNBAC1, a Humanized Monoclonal Antibody for Multiple Sclerosis —*Francois Curtin, Herve Porchet, Alois Lang*

P3.049 Disease-Modifying Treatment Has a Similar Effect in Pediatric Onset and Adult Onset RRMS Patients: Findings from an Integrated RRMS Adult Clinical Trial Database —*Teesta Soman, Carmen Castrillo, Kartik Raghupathi*

P3.050 The Use of Natalizumab in Pediatric-Onset Multiple Sclerosis —*Samar Akhmed, Jassem Al-Hashel, Raed Behbehani, Raed Alroughani*

P3.051 Clinical Efficacy of Laquinimod 0.6 Mg Once Daily in the Treatment of Worsening Relapsing-Remitting Multiple Sclerosis (Baseline EDSS >3) —*Timothy Vollmer, Giancarlo Comi, Ludwig Kappos, Xavier Montalban, Gary Cutter, Joshua Steinerman, Nissim Sasson, Tali Gorfine, Volker Knappertz*

P3.052 Teriflunomide Slows Brain Volume Loss: Subgroup Analysis of the SIENA TEMSO MRI Dataset —*Jens Wuerfel, Ludwig Kappos, Ernst-Wilhelm Radue, Laura Gaetano, Nicole Mueller-Lenke, Karthinathan Thangavelu, Michael Panzara, Steven Cavalier, Jerry Wolinsky, Till Sprenger*

P3.053 Durable Efficacy of Alemtuzumab Over 10 Years: Long-Term Follow-Up of Patients with RRMS from the CAMMS223 Study —*Alasdair Coles, Mario Habek, Ann Bass, Vesna Brinar, Anton Vladic, David Margolin, Minmin Lu, Edward Fox*

P3.054 Long-Term Responders from the CARE-MS I Study: No Evidence of Disease Activity for 4 Years Following 2 Courses of Alemtuzumab and No Further Treatment —*Gavin Giovannoni, Douglas Arnold, Jeffrey Cohen, Alasdair Coles, Edward Fox, Hans-Peter Hartung, Eva*

Havrdova, Krzysztof Selmaj, David Margolin, Karthinathan Thangavelu, Michael Panzara, Heinz Wiendl

P3.055 Long-Term Clinical Stability in a Subset of MS Patients with Minimal Therapeutic Intervention —*Leslie Blackshear, Lena Josephs, Saud Sadiq*

P3.056 Estimation of Brain Volume Loss with Multiple Imputation of Missing Values in the Placebo-Controlled FREEDOMS Trials of Fingolimod —*Gary Cutter, Xiangyi Meng, Brandon Brown*

P3.057 Ongoing Safety and Effectiveness: An Interim Analysis of Long-Term Fingolimod Treatment —*Jeffrey Cohen, Ashish Pradhan, Rebecca Gottschalk, Yu Chen, Ludwig Kappos*

P3.058 Slowing of Disability Progression Based on 6-Month Confirmed EDSS in Patients with Relapsing-Remitting Multiple Sclerosis (RRMS) Treated with Cladribine Tablets in the CLARITY Study: A Post-Hoc Subgroup Analysis —*Stuart Cook, Kottil Rammohan, Peter Rieckmann, Per Soelberg-Sorensen, Patrick Vermersch, Christine Hicking, Fernando Dangond, Gavin Giovannoni*

P3.059 No Evidence of Disease Activity for 4 Years Following 2 Courses of Alemtuzumab and No Further Treatment: Long-Term Responders from the CARE-MS II Study —*Heinz Wiendl, Douglas Arnold, Jeffrey Cohen, Alasdair Coles, Edward Fox, Hans-Peter Hartung, Eva Havrdova, Krzysztof Selmaj, David Margolin, Karthinathan Thangavelu, Michael Panzara, Gavin Giovannoni*

P3.060 Dimethylfumarate in Real-Life: Efficacy and Safety in a Monocentric Prospective Cohort of 156 Patients with MS —*Jennifer Aboab, Antoine Gueguen, Romain Deschamps, Caroline Bensa, Antoine Moulignier, Olivier Gout*

P3.061 Rate of Brain Volume Loss with Long-Term Delayed-Release Dimethyl Fumarate Treatment in Patients with Relapsing-Remitting Multiple Sclerosis: 6-Year Results from ENDORSE —*Ludwig Kappos, Tarek Youssry, Robert Fox, Ralf Gold, Douglas Arnold, James Potts, Jing Marantz*

P3.062 Effect of Teriflunomide (Aubagio®) on Gray Matter Pathology in Multiple Sclerosis —*Robert Zivadinov, Channa Kolb, Noopur Modi, Jillian Carl, Jesper Hagemeier, Niels Bergsland, Deepa Ramasamy, Jackie Durfee, Bianca Weinstock-Guttman*

P3.063 Lymphocyte Subtypes in Relapsing Remitting Multiple Sclerosis (RRMS) Patients Treated with Dimethylfumarate (DMF) —*Rik Ganguly, Ann Camac, Caitlin Dionne, Claudia Chaves*

P3.064 Regulatory B Cells Increased Following Treatment of Relapsing Remitting Multiple Sclerosis Patients with BG-12 —*Yang Mao-Draayer, Steven Lundy, Qi Wu, Qin Wang, Catherine Dowling, Sophina Taitano, Guangmei Mao*

P3.065 JC Virus Antibody Testing in the Penn MS Clinic - Examining the Utility and Stability of the Test —*Christine Bierema, Eric Williamson*

P3.066 Effects of Intrathecal MSC-Derived Neural Progenitors (MSC-NP) Treatment on Biomarker Levels in the CSF in Patients with Progressive Multiple Sclerosis —*John Tuddenham, Violaine Harris, Saud Sadiq*

P3.067 Stability of Anti-JCV Antibody Index in Multiple Sclerosis: A 6-Year Longitudinal Study —*Harald Hegen, Michael Auer, Gabriel Bsteh, Franziska Di Pauli, Florian Deisenhammer, Thomas Berger*

P3.068 GZ402668, a Next-Generation Anti-CD52 Antibody, Displays Decreased Proinflammatory Cytokine Release In Vitro —*William Siders, Ronnie Wei, Ben Greene, Alison McVie-Wylie, Meredith Bailey, Vijay Dhawan, Annie Best, William Brondyk, Evis Havar, Michael Turner, Bruce Roberts, Johanne Kaplan, Rebecca Sendak*

P3.069 Laquinimod Disability Progression Effects Are Maintained with Increasingly Rigorous Confirmation Time Intervals —*Giancarlo Comi, Timothy Vollmer, Ludwig Kappos, Xavier Montalban, Nissim Sasson, Tali Gorfine, Volker Knappertz*

P3.070 Late Onset Multiple Sclerosis Patients Tend to Have Faster Disease Progression —*Raed Alroughani, Saeed Akhtar, Samar Ahmed, Jaseem Al-Hashel*

P3.071 Effects of Fingolimod on Cognitive Status in Patients with Multiple Sclerosis: Prospective, Controlled Trial —*Serkan Ozakbas, Bilge Piri Cinar, Gorkem Kosehasanogullari, Pinar Yigit*

P3.072 4 Years PANGAEA: A 5-Year Non-Interventional Study of Safety, Effectiveness and Pharmacoeconomic Data for Fingolimod Patients in Daily Clinical Practice - Effectiveness Update —*Christian Cornelissen, Holger Albrecht, Judith Haas, Luisa Klotz, Michael Lang, Christoph Lassek, Stephan Schmidt, Bjorn Tackenberg, Tjalf Ziemssen*

P3.073 Correlation of Brain Volume and Physical Measures with Cognitive Function Using Baseline Data from the Anti-LINGO-1 SYNERGY Trial in Multiple Sclerosis —*Raymond Hupperts, Jelena Drulovic, Krzysztof Selmaj, Xavier Montalban, Smiljana Kostić, Martin Vališ, Evgeniy Evdoshenko, Yiwei Zhang, Lei Xu, Michelle Mellion, Diego Cadavid*

P3.074 Real-World Durability of Long-Term Relapse Rates Among Patients with Multiple Sclerosis Receiving Fingolimod Therapy: A Retrospective US Claims Database Analysis —*Edward Fox, Kristen Johnson, Feng Lin, James Signorovitch, Nanxin Li, Miranda Peeples, Ljubic Ristovska, Ariadne Souroutzidis, Walter Hong, Vivian Herrera*

P3.075 A One Year, Open Label, Dose Escalation Study to Evaluate the Long-Term Safety of Arbaclofen Extended Release Tablets (AERT) in Multiple Sclerosis Subjects with Spasticity —*Samuel Hunter, Thomas Leist, Angela Dentiste, Mark Aikman, Samer Kaba, Paveen Tyle*

P3.076 Early Clinical Development of GNBAC1 a Humanized Monoclonal Antibody Neutralizing MSRV-ENV, a Neurotoxic Protein, for the Treatment of Multiple Sclerosis —*Hartung Hans Peter, Herve Perron, Alois Lang, Herve Porchet, Francois Curtin*

P3.077 Natural and Inducible Regulatory T Cell Subsets in a Large Cohort of Relapsing Remitting Multiple Sclerosis Patients Treated with Interferon Beta and Followed for 24 Months —*Federico Serana, Marco Chiarini, Viviana Giustini, Diego Bertoli, Marion Vaglio Tessitore, Ahmed Elwahsh, Ruggero Capra, Andrea Visconti, Luisa Imberti*

P3.078 Effectiveness of Natalizumab in Extended Dosing Interval —*Jose Vicente Hervas, Joan Punet-Ortiz, Aina Teniente-Serra, M Jos Mansilla, Bibiana Quirant-Sanchez, Juan Navarro, Silvia Presas, Eva Martinez-Caceres, Cristina Ramo*

P3.079 Effect of Teriflunomide on Relapses Associated with Disability Worsening: Results from the TEMSO and TOWER Studies —*Paul O'Connor, Karthinathan Thangavelu, Philippe Truffinet, Giancarlo Comi*

P3.080 Long-Term Effect of Fingolimod on Disability: A Categorical Trend Analysis Over 8 Years —*Anthony Reder, Jeffrey Cohen, Daniela Piani Meier, Davorka Tomic, Shannon Ritter, Bruce Cree*

P3.081 LOMS Vs. Other Diseases: The Consequence of "To Be or Not To Be" —*Maria Curbelo, Alejandra Martinez, Judith Steinberg, Adriana Carra*

P3.082 Comparison of Costs and Health Resource Utilization in Patients Treated with Different Disease Modifying Therapies for Multiple Sclerosis —*Jacqueline Nicholas, Aaron Boster, Wei-Shi Yeh, Robert Garland, Monica Fay, Ravi Iyer, Andrew Lee*

P3.083 Prospective Study of Retinal Nerve Fibre Layer Thickness in Alemtuzumab Treated Multiple Sclerosis Patients —*Al-Lan Nguyen, Janet Lam, Rick White, Robert Carruthers, Anthony Traboulsee*

P3.084 Baseline Subgroup Characteristics of EXPAND: A Phase 3 Study of Siponimod (BAF312) for the Treatment of Secondary Progressive Multiple Sclerosis —*Ludwig Kappos, Amit Bar-Or, Bruce Cree, Robert Fox, Gavin Giovannoni, Ralf Gold, Patrick Vermersch, Priya Bhasin, Sophie Arnould, Tatiana Sidorenko, Erik Wallstroem*

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P3.346 Rho GTPase Activating Protein 26 (ARHGAP26)-IgG Autoimmunity: Frequency and Clinical Associations — Nora Alfugham, Vanda Lennon, Lars Komorowski, Christian Probst, Sean Pittcock

Neuroepidemiology: Movement Disorders, MS, and Stiff Person Syndrome

P3.347 Prodromal Diagnoses in the Electronic Medical Record (EMR) Differ in Parkinson's Disease (PD), Dementia with Lewy Bodies (DLB), Multiple System Atrophy (MSA), and Progressive Supranuclear Palsy (PSP) — Sara LaHue, Kathleen Albers, Samuel Goldman, Amethyst Leimpeper, Stephen Van Den Eeden, Caroline Tanner

P3.348 Blepharospasm in a Multiethnic Population — Erica Byrd, Kathleen Albers, Samuel Goldman, Jeffrey Klingman, Raymond Lo, Connie Marras, Amethyst Leimpeper, Robin Fross, Kathleen Comyns, Zhuqin Gu, Maya Katz, Laurie Ozellus, Susan Bressman, Rachel Saunders-Pullman, Cynthia Comella, Lorene Nelson, Stephen Van Den Eeden, Caroline Tanner

P3.349 Associations Between Anticholinergic Burden and Adverse Health Outcomes in Parkinson Disease — James Crispo, Allison Willis, Dylan Thibault, Yannick Fortin, Harlen Hays, Douglas McNair, Lise Bjerre, Dafna Kohen, Santiago Perez-Lloret, Donald Mattison, Daniel Krewski

P3.350 Survival and Risk of Mortality of Clinically-Diagnosed Synucleinopathies: A 15 Year Population-Based Study (1991 - 2005) — Rodolfo Savica, J. Ahlsgaard, Bradley Boeve, James Bower, Michelle Mielke

P3.351 Ambient Air Pollution Exposures and Risk of Parkinson's Disease — Rui Liu, Michael Young, Jiu-Chuan Chen, Joel Kaufman, Honglei Chen

P3.352 WITHDRAWN

P3.353 Risk of Infection-related Hospitalizations in People with Primary-progressive Relative to Relapsing-onset Multiple Sclerosis — José Wijnands, Tanja Hoegge, Feng Zhu, Elaine Kingwell, Yinshan Zhao, John Fisk, Okechukwu Ekuma, Charity Evans, Robert Carruthers, Ruth-Ann Marrie, Helen Tremlett

P3.354 A Population-Based Study Comparing Multiple Sclerosis Clinic Users and Non-Users in British Columbia, Canada — Kyla McKay, Helen Tremlett, Feng Zhu, Lorne Kastrukoff, Ruth-Ann Marrie, Elaine Kingwell

P3.355 Vitamin D and Immunogenicity of IFN β in Multiple Sclerosis Patients: A Case-Control Study — Signe Hassler, Derik Hermesen, Delphine Bachelet, Annette Hess, Kathleen Ingenhoven, Cyprien Mbogning, Pierre Doennes, Anna Fogdell-Hahn, Florian Deisenhammer, Julie Davidson, Fritz Boege, Hans-Peter Hartung, Bernd Kieseier, Philippe Broet, Clemens Warnke

P3.356 Epidemiology of Stiff Person Syndrome in the United States Veterans Health Administration Database — Jonathan Galli, John Greenlee, M. Paz Soldan, Stacey Clardy

Movement Disorders: Parkinson's Disease Surgical Interventions

P3.357 The Core Assessment Program for Surgical Interventional Therapies in Parkinson's Disease (CAPSIT-PD): Tolerability of Preoperative Neuropsychological Testing for Deep Brain Stimulation in Parkinson's Disease — Gian Pal, Virginia Persinger, Bryan Bernard, Bichun Ouyang, Christopher Goetz, Leonard Verhagen Metman

P3.358 Very Long Term Clinical and Radiological Outcomes of Fetal Tissue Transplant for Parkinson's Disease — Claire Henchcliffe, James Carter, Yeona Kang, John Babich, Lisa Ravdin, Stephen Gollomp, Antonio Strafella, Alfonso Fasano, Natalie Hellmers, Cynthia McRae

P3.359 Clinical Outcomes Of Deep Brain Stimulation Placement Using Intraoperative MRI for Parkinson Disease — Vibhash Sharma, Kushal Naik, Cathrin Buetefisch, Shirley Triche, Jon Willie, Nicholas Boulis, Stewart Factor, Robert Gross, Mahlon DeLong

P3.360 Transplantation of Neural Stem Cells into Patients with Parkinson's Disease — Ruslan Semechkin, Ibon Garitaonandia, Rodolfo Gonzalez, Maxim Poustovoitov, Tatiana Abramihina, Christiansen-Weber Trudy, Alexander Noskov, Glenn Sherman, Andrey Semechkin, Louise Laurent, John Elsworth, Evan Snyder, Eugene Redmond, Andrew Evans

P3.361 Effect of Disease Duration on Motor Outcomes After Bilateral Subthalamic Stimulation in Parkinson's Disease — Bhavana Patel, Kelly Lyons, Gary Gronseth, Jules Nazzaro, Rajesh Pahwa

P3.362 Predictors of Functional and Quality of Life Outcomes Following Deep Brain Stimulation Surgery in Parkinson's Patients — Hesham Abboud, Gencer Genc, Nicolas Thompson, Srivadee Oravivattanukul, Faisal Alsallom, Darlene Floden, Andre Machado, Michal Gostkowski, Ayman Eassa, Hazem Marouf, Osama Mansour, Hubert Fernandez

P3.363 WITHDRAWN

P3.364 Initial Deep Brain Stimulation Programming Optimization Using the Personal KinetiGraph(PKG) Movement Recording System — Danielle Spengler, Victor Velez-Aldahondo, Carlos Singer, Corneliu Luca

P3.365 Subthalamic Nucleus Deep Brain Stimulation in Early Stage Parkinson's Disease May Slow the Progression of Rest Tremor — Mallory Hacker, Lea Drye, Lauren Heusinkveld, Maxim Turchan, Amanda Currie, Peter Konrad, Thomas Davis, Joseph Neimat, Fenna Phibbs, Peter Hedera, James Tonascia, David Shade, Alice Sternberg, David Charles

P3.366 The Number of Microelectrode Passes During DBS Surgery: Can It Really Influence Surgical Outcome? — Xin Xin Yu, Hesham Abboud, Srivadee Oravivattanukul, Nicolas Thompson, Michal Gostkowski, Hubert Fernandez

General Neurology

P3.367 A Novel Fluorescent Nano-Neural Tracer: Cholera Toxin B Conjugated Carbon Dots — Nan Zhou, Laijin Lu

P3.368 Establishment of a New Human Muscle Microvascular Endothelial Cell Line — Yasuteru Sano, Hironori Sano, Masatoshi Omoto, Takashi Kanda

P3.369 Unusual Neurological Presentation in a Patient with Known Metastatic Prostate Cancer — Mohammed Elkider, Assad Mohammedzein, Gerard O'Connor

P3.370 GABAA Encephalitis in a Patient with HIV Presenting with Auditory Agnosia and Refractory Seizures — Brian Marcus, Lakshmi Warrior, James Dorman

P3.371 A Case of Neurosarcoidosis Masquerading As Subacute Inflammatory Demyelinating Polyneuropathy — Christine Rizk, Daniel Savitt, Shilpa Jain, Joseph Kass

P3.372 Brachioradial Pruritus: A Report of Three Cases and Review of the Literature — Aimee Szewka, Michael Gibbs, Jonathan Cheponis, Steven Lewis

P3.373 A Case of Pure Sensory Variant of Guillain Barré Syndrome — Helen Hwang, Anand Trivedi, Saad Adoni, Vibhav Bansal

P3.374 Neurological Manifestations and Electrophysiological Studies in Acute Toxicity of Laughing Gas — Vai Hong Fong, Amanda Vieira

P3.375 Pineal Cyst Apoplexy: A Report of a Case Presenting with Unusual Symptoms — Srikanth Reddy, Tamika Burrus, Karyl Mehlman

P3.376 A Case of Cerebral Amyloidoma Presenting As a Mass Lesion — Janhavi Modak, Bharti Manwani, Sanjay Mittal

P3.377 Isolated Tongue Hemi-Atrophy from Hypoglossal-Vertebral Entrapment Syndrome — Bhaskar Roy, Ekaterina Bakradze, Martin Ollenschlegler, Kevin Felice

P3.378 A Brace of Dysphonia and Dysphagia: Collet-Sicard Syndrome (CSS) in Cancer Patients — Xiumin Shermyn Neo, Kim En Lee

P3.379 Neurological Features of Bechet Syndrome: A Case Series — Kewei Yu, Nan Jiang, Guangbin Xia

P3.380 Neurological Complications of Bariatric Surgery: A Review of 15 Patients — Mohamed Falah, Eman Al-Ghawi, Rafeeq Adnan, Adnan Al-Sarawi, Talal Al-Harbi

General Neurology: Clinical Practice

P3.381 A Short Case Series of Super Refractory Status Epilepticus — Shankar Balakrishnan, Velmurugan Balasubramanian

P3.382 Wernicke Encephalopathy in Cancer Patients: A Literature Review — Fernanda Wajnsztajn, Lauren Cameron, Gurcharanjeet Kaur, Agnes Kowalska

P3.383 Antibiotic-Associated Encephalopathy: A Comprehensive Review of 391 Reported Cases — Shamik Bhattacharyya, Richard Darby, Pooja Raibagkar, Luis Gonzalez Castro, Aaron Berkowitz

P3.384 Alterations in Task Activation Patterns and Functional Connectivity in Patients with Crohn's Disease in Remission — Veena Nair, Poonam Beniwal-Patel, Ifeanyi Mbah, Vivek Prabhakaran, Sumona Saha

P3.385 Cefepime Induced Neurotoxicity: A Case Series and Review of the Literature — Cigdem Isitan, Andrew Ferree, Anna Hahler

P3.386 Neuropsychological Response to Immunotherapy in Patients with Suspected Rapidly Progressive Dementia Secondary to Autoimmune Encephalitis: Analysis of 17 Cases — Galeno Rojas, Ignacio Demei, Julieta Quiroga, Fatima Pantiu, Luciana Leon Cejas, Pablo Bonardo, Maria Pacha, Oscar Martinez, Claudia Uribe Roca, Juan Olari, Manuel Fernandez Pardal, Ricardo Reisin

P3.387 Health Disparities Among Patients Diagnosed with Diabetic Neuropathy in the HCUP Nationwide Inpatient Sample — Tamara Opila, Nicholas Battaglia, Nizar Souayah

P3.388 High Prevalence of Osteoporosis and Osteopenia in Adult Neuromuscular Patients: A Prospective Pilot Study in Central Pennsylvania — Sankar Bandyopadhyay

P3.389 Vertebroplasty in the Treatment of Acute Fracture (VITTA) Trial — Naim Khoury, Andre Lima Batista, Francis Cloutier, Alain Weill, Daniel Roy, Jean Raymond

P3.390 A Longitudinal Characterization of Cerebral Microbleeds in a Marginalized Population with High Rates of Mental Illness, Substance Abuse and Viral Infection — Jan Mosion, Alexander Rauscher, Taylor Willi, Donna Lang, Talia Vertinsky, Fidel Vila-Rodriguez, Christian Kames, William Panenka, Mike Jarrett, William Honer, Alasdair Barr

P3.391 The Quix Test: A 30 Second Test Essential for the Diagnosis of the Dizzy Patient—*Jeffrey Reese, Colin Zuchowski, Garrett Barr, Fitzgerald Evan, Charles Maitland*

P3.392 Assessment of Diagnostic Value and Risks of Brain Biopsy in Neurologic Disease—*Bruno Guedes, Andre Silva, Davi Solla, Luiz Castro, Herval Soares-Neto, Adalberto Studart Neto, Gisela Tinone, Marcia Goncalves, Ida Fortini, Ricardo Nitrini*

P3.393 The Patient Experience of Lumbar Puncture at a Teaching Hospital: A Qualitative Descriptive Study—*Samuel Lapalme-Remis, Colin Chalk, Mary Ellen Macdonald, David Grimes, Stephen Van Gaal, Kathleen Day, Meredith Mackay*

P3.394 Impact of a Lumbar Puncture Clinic: Quality Review—*Paula Barreras, Ami Jani, David Benavides, Romanus Faigle, Mona Bahouth*

P3.395 Adequacy of Gait Examination in a Resident Neurology Clinic—*Ram Narayan, David Mendez, Steven Vernino, Pravin Khemani*

P3.396 Analysis of the “no Show” Rate in an Ambulatory Neurology Clinic and Modeling to Predict Future Visit Failures—*Padmaja Sudhakar, Stephen Ryan, David Akers, Li Xu*

P3.397 Successful Increase in Physical Therapy Referrals Following Implementation of a Fall Screening Program in a High-Volume Neurology Practice—*William Buxton, Robin Clarke, Andrew Hackbarth*

P3.398 Collaborative, Co-Located Neurology-Primary Care: Maximizing Value Utilizing Curbside, Electronic, and Traditional Consultations—*Nathan Young, Muhamad Elrashidi*

P3.399 Hospital and Demographic Characteristics Associated with Availability of Inpatient Neurological Services—*Ali Razmara, Steven Cen, Tara Dutta, William Mack, Amy Towfighi, Nerses Sanossian*

P3.400 Asynchronous Teleneurology: A Systematic Review of Electronic Provider-to-Provider Communications—*Joshua Buck, Kirstin Manges, Peter Kaboli*

Medical Student Essay Award Recipients

P3.401 Cognitive Impairment and Driving Safety Errors in Idiopathic REM Sleep Behavior Disorder—*Stuart McCarter*

P3.402 Acute Disseminated Encephalomyelitis in 228 Patients: A Retrospective, Multi-center U.S. Study—*Diederik Koelman*

P3.403 Fear and Perseverance: Polio's Progression from Epidemics Towards Eradication—*Jennifer Romine*

P3.404 See-saw Signalling in the Brain: Could Proton-Sensing Receptors Be a Target in Neuroprotection—*Benjamin Jacobs*

Mon - April 18

Awards Luncheon 2016

Tuesday, April 19 • 11:30 a.m.–1:00 p.m.



Celebrate the 2016 AAN and American Brain Foundation awards:

- Recognize top accomplishments
- Join AAN leaders
- Snap photos on the red carpet

Bob Woodruff, former ABC “World News Tonight” co-anchor and current ABC News reporter, has been named the 2016 Public Leadership in Neurology Award recipient for his commitment to helping people with traumatic brain injury—a condition he himself suffered while reporting on US and Iraqi security forces in 2006. Woodruff’s wife, Lee, will be accepting the award on her husband’s behalf. Lee is co-author of Woodruff’s 2008 best-selling memoir, *In an Instant*. The award honors an individual or group outside of the medical profession dedicated to advancing public understanding and awareness of neurologic disease, being effective advocates for neuroscience research, and making significant contributions to improve patient care.

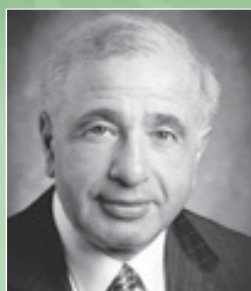
AAN
2016
Annual Meeting

Controversies in Neurology Plenary Session

Monday, April 18, 2016 9:00 a.m. to 11:30 a.m.

The program features experts discussing the most current and controversial issues in neuroscience. It is set up as a debate format in which two speakers argue one side of a single topic, followed by a rebuttal. Each round concludes with a 10-minute question and answer period.

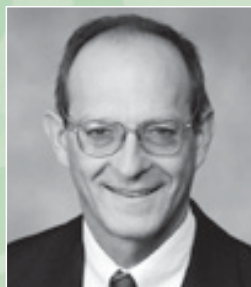
Moderators



Joseph Jankovic, MD, FAAN
 Member, AAN Science Committee



Aleksandar Videnovic, MD, MSc, FAAN
 Member, AAN Science Committee
 Member, Clinical Research Subcommittee



Cognitive Enhancing Activities: Do They Prevent Dementia?

Pro: David S. Knopman, MD, FAAN
 Mayo Clinic
 Rochester, MN



Con: Kaycee Sink, MD, MAS
 Wake Forest Baptist Medical Center
 Winston Salem, NC

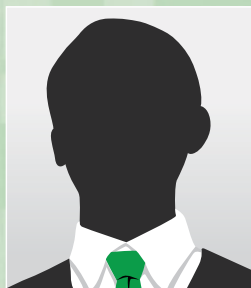


Is Vascular Etiology a Common Cause of Parkinsonism?

Pro: Aron S. Buchman, MD
 Rush Alzheimer's Disease Center
 Chicago, IL



Con: Alberto J. Espay, MD, FAAN
 University of Cincinnati
 Cincinnati, OH



Is Early Aggressive Treatment a More Beneficial Approach Than Escalation of Treatment for Most Patients with MS?

Pro: Timothy L. Vollmer, MD, FAAN
 University of Colorado
 Aurora, CO



Con: Brian G. Weinshenker, MD, FAAN
 Mayo Clinic
 Rochester, MN

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Mon - April 18



AAN
2016
Annual Meeting

1:00 p.m.–3:00 p.m.

Scientific Platform Sessions

S21: Aging and Dementia: Genetics

1:00 p.m. Presentation of the Potamkin Prize for Research in Pick's, Alzheimer's, and Related Diseases

Recipients:

Rosa Rademakers, PhD

Jacksonville, FL

Bryan Traynor, MD, PhD,

MMSc, MRCPI

Bethesda, MD

1:30 p.m. S21.003

Identification of Chromosomal Loci Influencing Cognitive Resilience to Neuropathology —Hyun-Sik Yang, Charles White, Lei Yu, Lori Chibnik, Julie Schneider, David Bennett, Philip De Jager

1:45 p.m. S21.004

Genetic Overlap Between Immune-Mediated Diseases and Alzheimer's Disease —Jennifer Yokoyama, Yunpeng Wang, Andrew Schork, Wesley Thompson, Celeste Karch, Carlos Cruchaga, Linda McEvoy, Aree Witteklar, Chi-Hua Chen, Dominic Holland, James Brewer, Tom Karlsen, David Wilson, Pratik Mukherjee, Christopher Hess, Zachary Miller, Luke Bonham, Jeffrey Shen, Gil Rabinovici, Howard Rosen, Bruce Miller, Bradley Hyman, Gerard Schellenberg, Ole Andreassen, Anders Dale, Rahul Desikan

2:00 p.m. S21.005

FERMT2 Is Associated with Brain Amyloidosis in Cognitively Normal and Mild Cognitive Impairment Subjects —Naira Goukasian, Triet Do, Jonathan Grotts, Dan Silverman, David Elashoff, Liana Apostolova

2:15 p.m. S21.006

Clinical Evidence for Disease Anticipation in Families Segregating a C9orf72 Repeat Expansion —Sara Van Mossevelde, Julie Van Der Zee, Ilse Gijssels, Kristel Slegers, Tim Van Langenhove, Anne Sieben, Jan De Bleeker, Adrian Ivanoiu, Olivier Deryck, Patrick Santens, Veerle Baumer, Marleen Van Den Broeck, Maria Mattheijssens, Karin Peeters, Peter De Jonghe, Peter De Deyn, Patrick Cras, Rik Vandenbergh, Jean-Jacques Martin, Marc Cruts, Sebastiaan Engelborghs, Christine Van Broeckhoven

2:30 p.m. S21.007

Clinical Features of TBK1 Carriers and Comparison with C9orf72, GRN and Nonmutation Carriers in a Belgian Patient Cohort —Sara Van Mossevelde, Julie Van Der Zee, Ilse Gijssels, Sebastiaan Engelborghs, Anne Sieben, Tim Van Langenhove, Jan De Bleeker, Jonathan Baets, Mathieu Vandenbulcke, Koen Van Laere, Sarah Ceysens, Marleen Van Den Broeck, Karin Peeters, Maria Mattheijssens, Patrick Cras, Rik Vandenbergh, Peter De Jonghe, Jean-Jacques Martin, Peter De Deyn, Marc Cruts, Christine Van Broeckhoven

2:45 p.m. S21.008

C9ORF72 Is a Stronger Determinant Than APOE of Cognitive Impairment in ALS —Adriano Chio, Maura Brunetti, Marco Barberis, Barbara Iazzolino, Anna Montuschi, Antonio Ilardi, Stefania Cammarosano, Umberto Manera, Cristina Moglia, Antonio Canosa, Andrea Calvo

S22: Epilepsy/Clinical Neurophysiology: Cognition, Emotion, Women, and Injury

1:00 p.m. Presentation of the Dreifuss-Perry Epilepsy Award

Recipient:

Alexander Rotenberg, MD, PhD
Boston, MA

1:15 p.m. S22.002

Methylphenidate's Effects on Cognition in Patients with Epilepsy: A Randomized, Double-Blind, Placebo-Controlled, Crossover, Single-Dose Study —Adams Jesse, Valerie Alipio-Jacson, Katherine Inoyama, Victoria Bartlett, Saira Sandhu, Jemima Oso, John Barry, David Loring, Kimford Meador

1:30 p.m. S22.003

Neuroimaging Evidence for Abnormal Emotion Processing in Conversion Disorder —Jerzy Szaflarski, Jane Allendorfer, Kathleen Hermendo, Jennifer DeWolfe, Lawrence Ver Hoef, Sandipan Pati, Ashley Thomas

1:45 p.m. S22.004

Functional Brain Connectivity and Memory Impairment in Temporal Lobe Epilepsy —A-reum Jung, Chang-hyun Park, Yun seo Choi, Jeong Hyun Yoo, Hyang Woon Lee

2:00 p.m. S22.005

Self-management (HOBSCOTCH) Improves Cognition and Quality of Life in Epilepsy: A Randomized Controlled Trial —Tracie Callier, Robert Ferguson, Robert Roth, Karen Secore, Faith Alexandre, Wenyan Zhao, Tor Tosteson, Patricia Henegan, Kimberly Birney, Barbara Jobst

2:15 p.m. S22.006

A Prospective Study of Pregnancy in Women with Epilepsy Seeking Conception (The WEPD Study) —Jacqueline French, Cynthia Harden, Page Pennell, Emilia Bagliella, Evie Andreopoulos, Connie Lau, Stephanie Cornely, Sarah Barnard, Anne Davis

2:30 p.m. S22.007

Differential Effects of Hormonal Versus Non-Hormonal Contraception on Seizures: Prospective Pilot Findings of the Epilepsy Birth Control Registry —Andrew Herzog, Hannah Mandile

2:45 p.m. S22.008

Risk Factors for Injury in a Community-Treated Cohort of Patients with Epilepsy in Tasmania, Australia —Michael Tan, Neil Pearce, Vijaya Sundararajan, Mark Cook, Wendy D'Souza

1:00 p.m.–3:00 p.m.

Section Topic Controversies

S23 Section Topic Controversies: The Role of Rest vs. Active Intervention Following Concussion

Directors: Brian Hainline, MD, and Vernon Williams, MD

1:00 p.m.–1:30 p.m.

Concussion: Setting the Stage with New Data from the NCAA-DoD Grand Alliance Concussion Study —Brian Hainline, MD

1:30 p.m.–2:30 p.m.

Active Intervention in Concussion: Results from TEAM (Targeting Evaluation & Active Management Approach to Treating Concussion) —Anthony Kontos, PhD

2:30 p.m.–3:00 p.m.

Next Steps —Vernon Williams, MD

- 💰 A registration fee is required
- 🎧 The program is one of the AAN Leadership University sessions
- 📺 The course is part of a Subspecialty in Focus track
- 🗣️ The program is one of the I Talk sessions



The program is part of the Experiential Learning Area sessions

Meeting Schedule

9:00 a.m.–11:30 a.m.

**Controversies in Neurology
Plenary Session** 78

11:45 a.m.–12:45 p.m.

1 Neurological Exam Tips and Tricks

Directors: *Thomas R. Swift, MD, FAAN, Augusta, GA*
Kapil D. Sethi, MD, FRCP, FAAN, Augusta, GA
Christopher H. Hawkes, MD, BSc, FRCP, Romford, England

1:00 p.m.–2:00 p.m.

1 There's an AAN App for that! Engaging with the AAN using eMedia

Director: *Bert B. Vargas, MD, Dallas, TX*

Health & Wellness Vital Signs of Well Being™

Director: *Dina Kruzansky Markind, CPCC, Danbury, CT*

1:00 p.m.–3:00 p.m.

S21 Aging and Dementia: Genetics

S22 Epilepsy/Clinical Neurophysiology: Cognition, Emotion, Women, and Injury

S23 Section Topic Controversies: The Role of Rest vs. Active Intervention Following Concussion

Real World of Neurology Ask the Expert: Advance Care Planning

C104 Clinical Approach to Muscle Disease I

Director: *Andrew Mammen, MD, PhD, Baltimore, MD*

C105 Therapy in Neurology I

Director: *David W. Dodick, MD, Phoenix, AZ*

C106 Common Spine Disorders I: Evaluation

Director: *J. D. Bartleson, MD, FAAN, Rochester, MN*

C107 Cerebrovascular Disease II: Hemorrhagic Stroke

Director: *Philip B. Gorelick, MD, MPH, FAAN, Grand Rapids, MI*

C108 Nonmotor Manifestations of Parkinson's Disease I

Director: *Charles H. Adler, MD, PhD, FAAN, Scottsdale, AZ*

C109 Pediatric MS: Diagnosis and Treatment

Director: *John W. Rose, MD, FAAN, Salt Lake City, UT*

C110 Core Concepts in Pain Management I: Refractory Neuropathic Pain—Practical Pharmacologics, Advances in Neuromodulation, and a Balanced look at Cannabinoids

Director: *James C. Watson, MD, Rochester, MN*

C111 Sleep for the Practicing Neurologist I: Can't Fall Asleep—Insomnia, RLS and Related Disorders

Director: *Michael J. Howell, MD, FAAN, Minneapolis, MN*

C112 Bedside Evidence-based Medicine: How to Find and Deconstruct Articles in Order to Take Care of Patients I

Director: *Gary S. Gronseth, MD, FAAN, Kansas City, KS*

C113 Humanism in Medicine, Humanizing Medicine, and the Role of Education

Director: *Daniel L. Menkes, MD, FAAN, Royal Oak, MI*

C114 Contemporary Ethical Issues

Director: *James A. Russell, DO, FAAN, Burlington, MA*

1:00 p.m.–5:00 p.m.

C115 Improving Your Leadership Skills:

A Practical Approach (registration required)

Directors: *Terrence L. Cascino, MD, FAAN, Rochester, MN*
Ralph L. Sacco, MD, MS, FAHA, FAAN, Miami, FL



New HeadTalks Feature Dynamic Presentations

Friday, April 15–Thursday, April 21: 7:00 a.m.–5:30 p.m.
Location: West Level 1

Want to know what motivates a master clinician? A cutting-edge researcher? An outstanding patient advocate? Visit HeadTalks—modeled after the popular TED Talks—in the Learning Lab, an exciting new Experiential Learning Area at the 2016 AAN Annual Meeting.

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- ▶ How to Get Everything Out of the Conference
- ▶ Neuroanatomy is Dead: Long Live Neuroanatomy
- ▶ Academic General Neurologist: Oxymoron?
- ▶ Why Educators Get Promoted But Teachers Don't
- ▶ The AAN and Your Learning
- ▶ Practice Issues
- ▶ The Future of Neurology
- ▶ Optimism for Neurology
- ▶ Medical Care for VIPs
- ▶ Neuroanatomy the Fun Way
- ▶ Creating Community Partnerships for Wellbeing
- ▶ How the ELF Helps Build Our Career: AAN and Beyond
- ▶ Global Research, Engagement, and Advocacy Training for Neurologists (GREAT)
- ▶ Neuromuscular Disease Registries for Prevalence, Clinical Outcomes, and Implementation of American Academy of Neurology Quality Measures
- ▶ Neurohospitalist 2.0: Next Steps in the Evolution
- ▶ Bioethics in Neurology or Communicating Bad News
- ▶ Sponsorship or Mentorship? Thoughts in Diversity in Neurology
- ▶ The Future of Global Neurology

Learn more at AAN.com/view/LearningLab.

Mon - April 18

1:00 p.m.–5:30 p.m.

Integrated Neuroscience Session

16

SIF Future Directions and Challenges in Stroke Team Action Therapy (STAT)

This program is offered in partnership with the Stroke and Vascular Neurology Section.

Coordinators: Jeffrey L. Saver, MD, FAAN, and Joseph P. Broderick, MD, FAAN

Program Description: The INS program will present current uncertainties and future directions in acute stroke treatment. The introduction of mobile units with CT scan capability has the potential to reduce the delay in administration of i.v. thrombolysis by 45 minutes. New devices for mechanical thrombectomy are advancing this form of therapy and the program will present the diversity of new devices and their optimal therapeutic utilization. Advances in neuroimaging with rapid display of arterial thrombus location and extent of the penumbra region are extending the range of thrombolysis and improving the outcome of thrombectomy while pushing further out the frontiers of action. The recent development of comprehensive stroke centers with telestroke technology, mobile units, new neuroimaging capabilities, and increasingly sophisticated thrombectomy devices are reducing the time-delay for therapeutic action while paradoxically creating geographical disparities in access to care. A call to action is needed to reduce disparities.

Upon Completion: Participants should be able to identify clinically relevant differences in phenotype or risk factors between males and females with neurological diseases.

Part I

1:00 p.m.–3:00 p.m.

1:00 p.m.–1:10 p.m. Introduction

Jeffrey L. Saver, MD, FAAN, and Joseph P. Broderick, MD, FAAN

1:10 p.m.–1:45 p.m. Invited Speaker

The STAT Ambulance in Motion: Should My Center Get One?

James C. Grotta, MD, FAAN, Houston, TX

1:45 p.m.–1:50 p.m. 16.001 Data Blitz

Gaze Deviation and Acute Stroke Care Strategies —Zaid Mahdi, Anup Kumar Trikanad Ashwini Kumar, Pratik Bhattacharya, Ramesh Madhavan

1:50 p.m.–1:55 p.m. 16.002 Data Blitz

Comparison of Large Vessel Occlusion Prediction Scores —Toby Groppen, Amelia Boehme, Sheryl Martin-Schild, Karen Albright, Brian Perrin, Alyana Samai, Sammy Pishanidar, Nazli Janjua, Steven Levine, Ethan Brandler, Dov Rosenbaum

1:55 p.m.–2:05 p.m. Audience Q&A

2:05 p.m.–2:40 p.m. Invited Speaker

New Developments in Acute Stroke Neuroimaging: Future Directions

Gregory W. Albers, MD, Stanford, CA

2:40 p.m.–2:45 p.m. 16.003 Data Blitz

Variability in Approach to Treatment of Acute Central Retinal Artery Occlusion in US Teaching Hospitals —Matthew Schrag, Teddy Youn, Morgan Patrylo, Joseph Schindler, Patrick Lavin, Howard Kirshner, David Greer

2:45 p.m.–2:50 p.m. 16.004 Data Blitz

Intracranial Hemorrhage on Warfarin: Time to Reversal Is of the Essence —Chandan Mehta, Mathew Jones, Mauricio Ruiz Cuero, Jody Wellwood, Mohammed Rehman, Panayiotis Mitsias, Panayiotis Varelas

2:50 p.m.–3:00 p.m. Audience Q&A

Guided Poster Rounds

3:00 p.m.–3:30 p.m.

16.001 Gaze Deviation and Acute Stroke Care Strategies —Zaid Mahdi, Anup Kumar Trikanad Ashwini Kumar, Pratik Bhattacharya, Ramesh Madhavan

16.002 Comparison of Large Vessel Occlusion Prediction Scores —Toby Groppen, Amelia Boehme, Sheryl Martin-Schild, Karen Albright, Brian Perrin, Alyana Samai, Sammy Pishanidar, Nazli Janjua, Steven Levine, Ethan Brandler, Dov Rosenbaum

16.003 Variability in Approach to Treatment of Acute Central Retinal Artery Occlusion in US Teaching Hospitals —Matthew Schrag, Teddy Youn, Morgan Patrylo, Joseph Schindler, Patrick Lavin, Howard Kirshner, David Greer

16.004 Intracranial Hemorrhage on Warfarin: Time to Reversal Is of the Essence —Chandan Mehta, Mathew Jones, Mauricio Ruiz Cuero, Jody Wellwood, Mohammed Rehman, Panayiotis Mitsias, Panayiotis Varelas

16.005 Time is Brain: Standardized Neuro-Interventional Thrombectomy Protocols Lead to Faster Recanalization Times —Donald Frei, Lisa Caputo, Kathryn McCarthy, Kristin Salottolo, David Bar-Or

16.006 Effect of Annual Hospital Procedure Volume on Outcomes After Mechanical Thrombectomy in Acute Ischemic Stroke Patients: An Analysis of 13,502 Procedures —Achint Patel, Harshil Shah, Abhishek Lunagariya, Sanjeeva Onteddu, Sonal Mehta

16.007 Arterial Recanalization in the Golden Hour of IV TPA Administration for Ischemic Stroke —Rodica Bernatowicz, Megan Donohue, Muhammad Hussain, Seby John, Dolora Wisco, Ken Uchino

16.008 ARTSS-2: Final Results of a Pilot, Phase IIb, Randomized, Multi-Center Trial of Argatroban in Combination with Recombinant Tissue Plasminogen Activator for Acute Stroke —Andrew Barreto, Gary Ford, Loren Shen, Chunyan Cai, Claudia Pedroza, Jon Tyson, Mohammad Rahbar, James Grotta

16.009 Early CT Changes in Patients Admitted for Thrombectomy: Intra- and Interrater Agreement and Systematic Review of the Literature —Naim Khoury, Robert Fahed, Francois Guilbert, Alexandre Poppe, Nicole Daneault, Behzad Farazin, Andre Durocher, Sylvain Lanthier, Hayet Boudjani, Daniel Roy, Alain Weill, Jean-Christophe Gentric, Andre Lima Batista, Laurent Letourneau-Guillon, Francois Bergeron, Marc-Antoine Henry, Tim E. Darsaut, Jean Raymond

16.010 Onset to Reperfusion Times Strongly Determine Clinical Outcome Across a Wide Range of ASPECTS Scores in Endovascular Ischemic Stroke Therapy —Joon-Tae Kim, Mayank Goyal, Vitor Pereira-Mendes, Alain Bonafe, Jan Gralla, Reza Jahan, Elad Levy, David Liebeskind, Jeffrey Saver

16.011 Overcoming Barriers to Reduce Door to Needle Times in Acute Ischemic Stroke Patients: Field to CT —Spozhmy Panezai, Florence Chukwunke, Audrey Arango, Jaskiran Brar, Joshua Daniel, Daniel Korya, Siddhart Mehta, Mohammad Moussavi, Jawad Kirmani

16.012 Symptomatic Cerebral Ischemia Associated with Intensive Blood Pressure Lowering Following Acute Intracerebral Hemorrhage —Natalie Organe, Megan Donohue, Lauren Gotterer, Ken Uchino

16.013 The DRAGON Score Predicts Functional Outcomes in Acute Ischemic Stroke Patients Receiving Both Intravenous Tissue Plasminogen Activator (IVtPA) and Endovascular Therapy —Noorie Pednekar, Jin Li, Richard Zeman, Rachel Lehrer, Parvinder Kaur, Amrita Anreja, Emiliya Melkumova, Akira Todo, John Wainwright, Rivkah Epstein, Ramandeep Sahni, Stephen Marks, Michael Stiefel

Part II

3:30 p.m.–5:30 p.m.

3:30 p.m.–4:05 p.m. Invited Speaker

Mechanical Thrombectomy Devices: How Many Are There and Where Are We Going? Johanna Fifi, MD, New York, NY

4:05 p.m.–4:10 p.m. 16.005 Data Blitz

Time is Brain: Standardized Neuro-Interventional Thrombectomy Protocols Lead to Faster Recanalization Times —Donald Frei, Lisa Caputo, Kathryn McCarthy, Kristin Salottolo, David Bar-Or

4:10 p.m.–4:15 p.m. 16.006 Data Blitz

Effect of Annual Hospital Procedure Volume on Outcomes After Mechanical Thrombectomy in Acute Ischemic Stroke Patients: An Analysis of 13,502 Procedures —Achint Patel, Harshil Shah, Abhishek Lunagariya, Sanjeeva Onteddu, Sonal Mehta

4:15 p.m.–4:25 p.m. Audience Q&A

4:25 p.m.–5:00 p.m. Invited Speaker

Minimizing Geographical Disparities in Acute Stroke Treatment Dawn O. Kleindorfer, MD, Cincinnati, OH

5:00 p.m.–5:05 p.m. 16.007 Data Blitz

Arterial Recanalization in the Golden Hour of IV TPA Administration for Ischemic Stroke —Rodica Bernatowicz, Megan Donohue, Muhammad Hussain, Seby John, Dolora Wisco, Ken Uchino

5:05 p.m.–5:10 p.m. 16.008 Data Blitz

ARTSS-2: Final Results of a Pilot, Phase IIb, Randomized, Multi-Center Trial of Argatroban in Combination with Recombinant Tissue Plasminogen Activator for Acute Stroke —Andrew Barreto, Gary Ford, Loren Shen, Chunyan Cai, Claudia Pedroza, Jon Tyson, Mohammad Rahbar, James Grotta

5:10 p.m.–5:20 p.m. Audience Q&A

5:20 p.m.–5:30 p.m. Conclusion

Meeting Schedule

1:00 p.m.–5:30 p.m.

I6  **Future Directions and Challenges in Stroke Team Action Therapy (STAT)**

I7 **The Human Connectome: Implications for Clinical Neurology** 84

I8 **Emerging Technologies for Neurological Research and Care: #Emerging-Tech #Neurologist @AAN** 85

C116  **Clinical Uses of Botulinum Toxin for Dystonia Skills Workshop** (registration required)

Director: *Diego Torres-Russotto, MD, Omaha, NE*

2:00 p.m.–3:00 p.m.

 **Mindfulness Meditation for Healthcare Practitioners**

Director: *Sarah Mulukutla, MD, MPH, Stamford, CT*

3:00 p.m.–4:00 p.m.

 **"Physical Exercise and Cognitive Training in Neurology"—Exercise in Stroke**

Director: *AM Barrett, MD, West Orange, NJ*

3:30 p.m.–4:30 p.m.

 **The Future of Payment**

Director: *Lyell K. Jones, MD, FAAN, Rochester, MN*

3:30 p.m.–5:30 p.m.

S24: **Clinical Outcomes and Treatment Strategies in Multiple Sclerosis** 86

S25: **Movement Disorders: Huntington's Disease** 86

S26: **Headache** 86

C117 **Clinical Approach to Muscle Disease II**

Director: *Andrew Mammen, MD, PhD, Baltimore, MD*

C118 **Therapy in Neurology II**

Director: *David W. Dodick, MD, Phoenix, AZ*

C119 **Common Spine Disorders II: Treatment**

Director: *J. D. Bartleson, MD, FAAN, Rochester, MN*

C120 **Cerebrovascular Disease III: Acute Ischemic Stroke**

Director: *Philip B. Gorelick, MD, MPH, FAAN, Grand Rapids, MI*

C121 **Emotional Communication: Chalk Talk**

Director: *Kenneth M. Heilman, MD, FAAN, Gainesville, FL*

C122 **Nonmotor Manifestations of Parkinson's Disease II**

Director: *Charles H. Adler, MD, PhD, FAAN, Scottsdale, AZ*

C123 **Status Epilepticus**

Director: *Frank W. Drislane, MD, FAAN, Newton, MA*

C124 **Core Concepts in Pain Management II: Safe Opioid Prescribing ? Practical Considerations, Unintended Consequences, and Legal Issues**

Director: *James C. Watson, MD, Rochester, MN*

C125 **Sleep for the Practicing Neurologist II: Sleep Duration, CNS Hypersomnias, and Treating Physician Fatigue**

Director: *Michael J. Howell, MD, FAAN, Minneapolis, MN*

C126 **Bedside Evidence-based Medicine: How to Find and Deconstruct Articles in Order to Take Care of Patients II** (registration required)

Director: *Gary S. Gronseth, MD, FAAN, Kansas City, KS*

4:00 p.m.–5:00 p.m.

 **Introduction to Stress Mastery—Going Beyond Stress Management**

Director: *Ravinder Singh, MD, Beverly Hills, CA*

4:30 p.m.–6:30 p.m.

Exhibit Hall Opening Reception

-  A registration fee is required
-  The program is one of the AAN Leadership University sessions
-  The course is part of a Subspecialty in Focus track
-  The program is one of the I Talk sessions
-  The program is part of the Learning Lab
-  The program is part of the Excellence in Discovery
-  The program is part of the Health & Wellness
-  The program is part of the Nurturing Your Career
-  The program is part of the Real World of Neurology

Mon - April 18

1:00 p.m.–5:30 p.m.

Integrated Neuroscience Session

17 The Human Connectome: Implications for Clinical Neurology

Coordinators: H. Branch Coslett, MD, FAAN, and Bradley L. Schlaggar, MD, PhD

Program Description: The program will start with an overview of the methods for assessing white matter pathways and a current picture of the normal architecture of white matter tracts. There will be talks describing the utility of investigations of white matter structures in disorders of sensory-motor processing, language, and attention. Finally, speakers will lead informal discussions of the posters during the second half of the poster session.

Part I

1:00 p.m.–2:45 p.m.

1:00 p.m.–1:05 p.m. Introduction

H. Branch Coslett, MD, FAAN, and Bradley L. Schlaggar, MD, PhD

1:05 p.m.–1:35 p.m. Invited Speaker

Connectomics: Principles, Methods, and Application to Disease
William Seeley, MD, San Francisco, CA

1:35 p.m.–1:40 p.m. 17.001 Data Blitz

Time-Dependence of Graph Theory Metrics in Functional Connectivity Analysis — Sharon Chiang, Alberto Cassese, Michele Guindani, Marina Vannucci, Hsiang Yeh, Zulfi Haneef, John Stern

1:40 p.m.–1:45 p.m. 17.002 Data Blitz

White Matter Seed Regions Produce More Complex Structural Networks and Greater Differences Between Healthy Elderly Subjects and Subjects with Alzheimer's Disease — Ronald Killiany, Lauren Zajac, BangBon Koo

1:45 p.m.–1:55 p.m. Audience Q&A

1:55 p.m.–2:25 p.m. Invited Speaker

TBD
Maria Gorno Tempini, MD, PhD, San Francisco, CA

2:25 p.m.–2:30 p.m. 17.003 Data Blitz

Focal Temporal Pole Atrophy and Network Degeneration in Semantic Variant Primary Progressive Aphasia — Jessica Collins, Victor Montal, Maria Gorno Tempini, Bradford Dickerson

2:30 p.m.–2:35 p.m. 17.004 Data Blitz

Structural Connectivity of Broca's Region — Anastasia Bohsali, Joseph Gullett, Thomas Mareci, Bruce Crosson, David FitzGerald, Keith White, Stephen Nadeau

2:35 p.m.–2:45 p.m. Audience Q&A

Guided Poster Rounds

2:45 p.m.–3:15 p.m.

17.001 Time-Dependence of Graph Theory Metrics in Functional Connectivity Analysis — Sharon Chiang, Alberto Cassese, Michele Guindani, Marina Vannucci, Hsiang Yeh, Zulfi Haneef, John Stern

17.002 White Matter Seed Regions Produce More Complex Structural Networks and Greater Differences Between Healthy Elderly Subjects and Subjects with Alzheimer's Disease — Ronald Killiany, Lauren Zajac, BangBon Koo

17.003 Focal Temporal Pole Atrophy and Network Degeneration in Semantic Variant Primary Progressive Aphasia — Jessica Collins, Victor Montal, Maria Gorno Tempini, Bradford Dickerson

17.004 Structural Connectivity of Broca's Region — Anastasia Bohsali, Joseph Gullett, Thomas Mareci, Bruce Crosson, David FitzGerald, Keith White, Stephen Nadeau

17.005 Differential Longitudinal Decline of White Matter Integrity in Frontotemporal Lobar Degeneration and Alzheimer's Disease — Gabriel Marx, Fanny Elahi, Jon Eloffson, Yann Cobigo, Duygu Tosun, Norbert Schuff, Bruce Miller, Howard Rosen

17.006 Structural Disconnection Is Responsible for Increased Resting State Functional Connectivity in Multiple Sclerosis — Kevin Patel, Sean Tobyn, Boratyn Daria, John Bireley, Victoria Smith, Eric Klawiter

17.007 Functional Brain Connectivity and Memory Impairment in Temporal Lobe Epilepsy — A-reum Jung, Chang-hyun Park, Yun seo Choi, Jeong Hyun Yoo, Hyang Woon Lee

17.008 White Matter Connectome in Patients with Genetic Dystonia — Federica Agosta, Silvia Basaia, Alexandra Tomic, Elisabetta Sarasso, Nikola Kresojevic, Sebastiano Galantucci, Marina Svetel, Vladimir Kostic, Massimo Filippi

17.009 Military Personnel with Traumatic Stress Show Changes in Large-Scale Brain Networks After Use of a Closed-Loop Neurotechnology — Charles Tegeler, Catherine Tegeler, Jared Cook, Sung Lee, Hossam Shaltout, Paul Laurienti

17.010 Functional Reorganization in Multiple Sclerosis at 7T: Altered Connectivity and Relationships to Cognitive Impairment — Benjamin Conrad, Bailey Lyttle, Siddharama Pawate, Seth Smith

17.011 Targeted Capture and Massively Parallel Sequencing to Identify Atypical Leukoencephalopathy in 48 Chinese Patients — Xiaole Wang, Fei Yin, Liwen Wu, Lifan Yang, Fang He, Jing Peng

17.012 Structural Organization of the Brain Connectome in Patients with Psychogenic Dystonia — Silvia Basaia, Federica Agosta, Aleksandra Tomic, Elisabetta Sarasso, Marina Svetel, Sebastiano Galantucci, Vladimir Kostic, Massimo Filippi

17.013 Data-Driven Regions of Interest for Longitudinal Change in Frontotemporal Lobar Degeneration at 3T — Faye McKenna, Gabriel Marx, Aleksandr Pankov, Richard Binney, Attygale Suneth, Xuanzi He, Shubir Dutt, Jon Eloffson, John Kornak, Bruce Miller, Howard Rosen

Part II

3:15 p.m.–5:30 p.m.

3:15 p.m.–3:45 p.m. Invited Speaker

Visuo-spatial Function and Neglect
Maurizio Corbetta, MD, St. Louis, MO

3:45 p.m.–3:50 p.m. 17.005 Data Blitz

Differential Longitudinal Decline of White Matter Integrity in Frontotemporal Lobar Degeneration and Alzheimer's Disease — Gabriel Marx, Fanny Elahi, Jon Eloffson, Yann Cobigo, Duygu Tosun, Norbert Schuff, Bruce Miller, Howard Rosen

3:50 p.m.–3:55 p.m. 17.006 Data Blitz

Structural Disconnection Is Responsible for Increased Resting State Functional Connectivity in Multiple Sclerosis — Kevin Patel, Sean Tobyn, Boratyn Daria, John Bireley, Victoria Smith, Eric Klawiter

3:55 p.m.–4:05 p.m. Audience Q&A

4:05 p.m.–4:35 p.m. Invited Speaker

Executive Function
Murray Grossman, MD, FAAN, Philadelphia, PA

4:35 p.m.–5:05 p.m. Invited Speaker

Development
Nico Dosenbach, MD, PhD, St. Louis, MO

5:05 p.m.–5:10 p.m. 17.007 Data Blitz

Functional Brain Connectivity and Memory Impairment in Temporal Lobe Epilepsy — A-reum Jung, Chang-hyun Park, Yun seo Choi, Jeong Hyun Yoo, Hyang Woon Lee

5:10 p.m.–5:15 p.m. 17.008 Data Blitz

White Matter Connectome in Patients with Genetic Dystonia — Federica Agosta, Silvia Basaia, Alexandra Tomic, Elisabetta Sarasso, Nikola Kresojevic, Sebastiano Galantucci, Marina Svetel, Vladimir Kostic, Massimo Filippi

5:15 p.m.–5:20 p.m. Audience Q&A

5:20 p.m.–5:30 p.m. Conclusion

18 Emerging Technologies for Neurological Research and Care: #Emerging-Tech #Neurologist @AAN

Coordinators: Lee H. Schwamm, MD, and Farrah J. Mateen, MD, PhD

Program Description: Emerging technologies confront the neurologist on a regular basis and can transform the way neurology is practiced and research is conducted. Such technological innovations include but are not limited to online databases, crowdsourcing of data, social media, virtual house calls, wearable devices, and implementation of mobile-phone based technologies. Through presentations and demonstrations, faculty will facilitate discussion with audience on successful implementation of new technologies into daily practice as well as research designs, including clinical trials, multi-country cohort studies in a variety of settings worldwide. Other examples include effective implementation of technologies into neurological inpatient and outpatient practices for training and clinical coordination for everyday practice improvements.

Upon Completion: Participants should be familiar with the range and type of use of various emerging technologies in neurological practice and research. Participants will also have improved awareness of pitfalls and challenges in incorporation of technologies into their work based on the experience of others who have worked with new devices, platforms, and media.

Part I

1:00 p.m.–2:50 p.m.

1:00 p.m.–1:10 p.m. Introduction

Lee H. Schwamm, MD, and Farrah J. Mateen, MD, PhD

1:10 p.m.–1:40 p.m. Invited Speaker

The Gods must be Crazy: Improving Access to Neurodiagnostics for Patients in Remote Areas or Low Income Countries Through mHealth Technology
Farrah J. Mateen, MD, PhD, Boston, MA

1:40 p.m.–1:45 p.m. 18.001 Data Blitz

Rare Disease Clinical Research: Caregivers' Perspectives on Barriers and Solutions for Clinical Research Participation —Travis Amengual, Heather Adams, Jonathan Mink, Erika Augustine

1:45 p.m.–1:50 p.m. 18.002 Data Blitz

Validation of the Smartphone Brain Scanner for the Detection of Epileptiform Discharges Among Epilepsy Outpatients in Bhutan —Erica McKenzie, Andrew Lim, Edward Leung, Andrew Cole, Rodrigo Zepeda Garcia, Alice Lam, Ronald Thibert, Esther Bui, Damber Nirola, Sonam Deki, Lhab Tshering, Liesly Lee, Sarah Clark, Joseph Cohen, Jo Mantia, Kate Brizzi, Sarah Wahlster, Tali Sorets, Mikkel Aagaard, Arkadiusz Stopczynski, Lars Hansen, Sydney Cash, Farrah Mateen

1:50 p.m.–2:00 p.m. Audience Q&A

2:00 p.m.–2:30 p.m. Invited Speaker

Tracking MS in the Digital Era
Riley Bove, MD, San Francisco, CA

2:30 p.m.–2:35 p.m. 18.003 Data Blitz

Tremor Severity Estimation Using Lfware Instrumented Eating Utensil —Svjetlana Miocinovic, Ali Shoeb, Sarah Wang, Nicole Swann, Anupam Pathak, Jill Ostrem

2:35 p.m.–2:40 p.m. 18.004 Data Blitz

Accuracy of Depth-Sensing Recordings in Classifying Expanded Disability Status Scale Subscores of Motor Dysfunction in Patients with Multiple Sclerosis —Marcus DSouza, Jessica Burggraaff, Saskia Steinheimer, Peter Kotschieder, Cecily Morrison, Jonas Dorn, Samuel Rota Buló, Prejaas Tewarie, Kristina Miciunaite, Abigail Sellen, Antonio Criminisi, Frank Dahlke, Christian Kamm, Bernard Uitdehaag, Ludwig Kappos

2:40 p.m.–2:50 p.m. Audience Q&A

Guided Poster Rounds

2:50 p.m.–3:20 p.m.

18.001 Rare Disease Clinical Research: Caregivers' Perspectives on Barriers and Solutions for Clinical Research Participation —Travis Amengual, Heather Adams, Jonathan Mink, Erika Augustine

18.002 Validation of the Smartphone Brain Scanner for the Detection of Epileptiform Discharges Among Epilepsy Outpatients in Bhutan —Erica McKenzie, Andrew Lim, Edward Leung, Andrew Cole, Rodrigo Zepeda Garcia, Alice Lam, Ronald Thibert, Esther Bui, Damber Nirola, Sonam Deki, Lhab Tshering, Liesly Lee, Sarah Clark, Joseph Cohen, Jo Mantia, Kate Brizzi, Sarah Wahlster, Tali Sorets, Mikkel Aagaard, Arkadiusz Stopczynski, Lars Hansen, Sydney Cash, Farrah Mateen

18.003 Tremor Severity Estimation Using Lfware Instrumented Eating Utensil —Svjetlana Miocinovic, Ali Shoeb, Sarah Wang, Nicole Swann, Anupam Pathak, Jill Ostrem

18.004 Accuracy of Depth-Sensing Recordings in Classifying Expanded Disability Status Scale Subscores of Motor Dysfunction in Patients with Multiple Sclerosis —Marcus DSouza, Jessica Burggraaff, Saskia Steinheimer, Peter Kotschieder, Cecily Morrison, Jonas Dorn, Samuel Rota Buló, Prejaas Tewarie, Kristina Miciunaite, Abigail Sellen, Antonio Criminisi, Frank Dahlke, Christian Kamm, Bernard Uitdehaag, Ludwig Kappos

18.005 Toward Improving Migraine Management in Primary Care: The HAPPY Project —Jennifer Bickel, Mark Connelly

18.006 Alzheimers Care Via Telemedicine for Oregon (ACT-ON), Phase I: Establishing the Reliability of Telemedicine-Based Measures —Allison Lindauer, Adriana Seelye, Bayard Lyons, Nora Mattek, Mattie Gregor, Katherine Mincks, Hiroko Dodge, Jeffrey Kaye, Deniz Erten-Lyons

18.007 Durability of Symptom Reductions Associated with Use of HIRREM by Military Personnel with Traumatic Stress —Charles Tegeler, Catherine Tegeler, Jared Cook, Lindsay Howard, Sung Lee, Hossam Shaltout

18.008 Stroke Unit Evaluation of Sleep Apnea: Validity of Screening Tools and Use of a Portable Sleep Study —Hugo Javier Aparicio, Tudor Sturzoiu, Helena Lau, Judith Clark, Julie Grimes, Hesham Masoud, Thanh Nguyen, Sanford Auerbach, Yelena Pyatkevich

18.009 Long-Term Outcome of Adults with Medically Intractable Mesial Temporal Lobe Seizures Treated with Responsive Neurostimulation —Paul Van Ness, Tara Crowder Skarpaas, Martha Morrell

18.010 Quantitative Gait Parameters from MCI to Moderate Dementia: Results from the GOOD Initiative —Allali Gilles, Joe Verghese, Olivier Beauchet

18.011 Smartphone Apps Provide a Simple, Accurate Bedside Screening Tool for Orthostatic Tremor —Danish Bhatti, Rebecca Thompson, Amy Hellman, Cindy Penke, John Bertoni, Diego Torres-Russotto

18.012 Wireless Sensors to Measure Walking in Patients with Facioscapulohumeral Muscular Dystrophy (FSHD) —Jessie Huisinga, Adam Brutsch, Melissa Currence, Laura Herbelin, Omar Jawdat, Mamatha Pasnoor, Mazen Dimachkie, Richard Barohn, Jeffrey Statland

18.013 Overcoming Challenges in the Collection of Patient-Reported Outcomes in an Ambulatory Academic Neurology Clinic —Lidia Maria Moura, Eli Schwamm, Valdey Moura, Lee Schwamm

Part II

3:20 p.m.–5:30 p.m.

3:20 p.m.–3:50 p.m. Invited Speaker

Terminator Genesys: Translating Advances in Military Health and Technology to Civilian Neurological Care
Geoffrey S. F. Ling, MD, FAAN, Bethesda, MD

3:50 p.m.–4:10 p.m. Invited Speaker

To Boldly Go Where No Man Has Gone Before: From Telestroke to Teleneurology
Lee H. Schwamm, MD, Boston, MA

4:10 p.m.–4:15 p.m. 18.005 Data Blitz

Toward Improving Migraine Management in Primary Care: The HAPPY Project —Jennifer Bickel, Mark Connelly

4:15 p.m.–4:20 p.m. 18.006 Data Blitz

Alzheimers Care Via Telemedicine for Oregon (ACT-ON), Phase I: Establishing the Reliability of Telemedicine-Based Measures —Allison Lindauer, Adriana Seelye, Bayard Lyons, Nora Mattek, Mattie Gregor, Katherine Mincks, Hiroko Dodge, Jeffrey Kaye, Deniz Erten-Lyons

4:20 p.m.–4:30 p.m. Audience Q&A

4:30 p.m.–4:50 p.m. Invited Speaker

Acoustic Features and Predictive Value in Marital Outcome/Human Relationships
Panayiotis Georgiou, Los Angeles, CA

4:50 p.m.–4:55 p.m. 18.007 Data Blitz

Durability of Symptom Reductions Associated with Use of HIRREM by Military Personnel with Traumatic Stress —Charles Tegeler, Catherine Tegeler, Jared Cook, Lindsay Howard, Sung Lee, Hossam Shaltout

4:55 p.m.–5:00 p.m. 18.008 Data Blitz

Stroke Unit Evaluation of Sleep Apnea: Validity of Screening Tools and Use of a Portable Sleep Study —Hugo Javier Aparicio, Tudor Sturzoiu, Helena Lau, Judith Clark, Julie Grimes, Hesham Masoud, Thanh Nguyen, Sanford Auerbach, Yelena Pyatkevich

5:00 p.m.–5:10 p.m. Audience Q&A

5:10 p.m.–5:30 p.m. Conclusion

3:30 p.m.–5:30 p.m.

Scientific Platform Sessions

S24: Clinical Outcomes and Treatment Strategies in Multiple Sclerosis

3:30 p.m. S24.001

Predicting the End of Symptomatic Relapses and Disease Modifying Treatment Use Decisions in Progressive Multiple Sclerosis —*Martina Novotna, Brittani Conway, Burcu Zeydan, M. Paz Soldan, Nuhad Abou Zeid, Nilufer Kale, Melih Tutuncu, Orhun Kantarci*

3:45 p.m. S24.002

Can We Stop Immunomodulatory Treatment in Secondary Progressive MS? —*Julien Bonenfant, Veronique Deburghgraeve, Emmanuelle Le Page, Gilles Edan, Anne Kerbrat, Bajeux Emma*

4:00 p.m. S24.003

Switch Strategies in RRMS: A Real-Life Multi Center Study —*Francesco Sacc, Alessio Signori, Giorgia Teresa Maniscalco, Roberta Lanzillo, Salvatore Lo Ferro, Pietro Annovazzi, Luca Prosperini, Eleonora Cocco, Simona Bonavita, Valentina Torri Clerici, Alice Laroni, Anna Maria Repice, Ignazio Roberto Zarbo, Cerqua Raffaella, Alessia Di Sapia, Simona Pontecorvo, Marinella Clerico, Luigi Lavorgna, Caterina Barrillà, Cinzia Cordioli, Fabio Gallo, Maria Pia Sormani*

4:15 p.m. S24.004

Comparison of Fingolimod and Dimethyl Fumarate in the Treatment of Multiple Sclerosis: Two Year Experience —*Brandi Vollmer, Kavita Nair, Stefan Sillau, John Corboy, Timothy Vollmer, Enrique Alvarez*

4:30 p.m. S24.005

Interferon-Beta Exposure During First Trimester in Women with Multiple Sclerosis - A Prospective Cohort Study from the German Multiple Sclerosis and Pregnancy Registry —*Sandra Thiel, Sylvia Menck, Birte Elias-Hamp, Ralf Gold, Kerstin Hellwig*

4:45 p.m. S24.006

Pregnancy and Fetal Outcomes After In Utero Exposure to Natalizumab in Patients with Multiple Sclerosis: A Prospective, Nation-Wide, Controlled Study —*Marta Giannini, Emilio Portaccio, Bahia Hakiki, Pasto' Luisa, Lorenzo Razzolini, Righini Isabella, Carla Tortorella, Maria Trojano, Eleonora Cocco, Maurizio Melis, Marroso Maria Giovanna, Valeria*

Di Tommaso, Deborah Farina, Alessandra Lugaesi, Pietro Annovazzi, Angelo Ghezzi, Claudio Gasperini, Alfonso Iudice, Roberta Fantozzi, Paolo Bellantonio, Silvia Messina, Francesco Patti, Chiavazza Carlotta, Paola Cavalla, Alessandra Protti, Rocco Totaro, Carlo Pozzilli, Laura De Giglio, Antonio Uccelli, Arianna Sartori, Antonio Bosco, Roberta Lanzillo, Vincenzo Brescia Morra, Maria Pia Amato

5:00 p.m. S24.007

Age Related Multiple Sclerosis Severity Score: Disability Ranked by Age —*Ali Manouchehrinia, Westerlind Helga, Elaine Kingwell, Feng Zhu, Robert Carruthers, Ryan Ramanujam, Ban Maria, Anna Glaser, Stephen Sawcer, Helen Tremlett, Jan Hillert*

5:15 p.m. S24.008

Pregnancy Outcomes in Patients with RRMS Who Received Alemtuzumab in the Clinical Development Program —*Jiwon Oh, Anat Achiron, Christina Chambers, Edward Fox, Pamela McCombe, Susana Otero, David Margolin, Linda Kasten, D Alastair Compston*

S25: Movement Disorders: Huntington's Disease

3:30 p.m. Presentation of the Movement Disorders Research Award

Sponsored by the American Academy of Neurology and the Parkinson's Disease Foundation through an endowment.

Recipient:

Susan B. Bressman, MD, FAAN
New York, NY

4:00 p.m. S25.003

Intermediate CAG Repeats in Huntington's Disease. A Longitudinal Analysis of the European Huntington's Disease Network REGISTRY Cohort —*Esther Cubo, Maria Antonia Ramos-Arroyo, Saul Martinez-Horta, Asunción Martinez-Descals, Cecilia Gil-Polo*

4:15 p.m. S25.004

PRE-CELL: Clinical and Novel Biomarker Measures of Disease Progression in a Lead-In-Observational Study for a Planned Phase 1 Trial of Genetically-Modified Mesenchymal Stem Cells Over-Expressing BDNF in Patients with Huntington's Disease —*Vicki Wheelock, Teresa Tempkin, Alexandra Duffy, Amanda*

Martin, Lisa Mooney, Ashok Dayananthan, Lorin Scher, Sarah Farias, David Swadell, Charles DeCarli, James Brunberg, Chin-Shang Li, Yu Liu, Mark Yarborough, Julie Stout, miriam Moscovitch-Lopatin, Steven Hersch, Kyle Fink, GERALYN ANNETT, Jan Nolte

4:30 p.m. S25.005

Enroll-HD: A Global Clinical Research Platform for Huntington's Disease —*Tiago Mestre, Cheryl Fitzer-Attas, Joseph Giuliano, Bernhard Landwehrmeyer, Cristina Sampaio*

4:45 p.m. S25.006

Rating Swallowing Function in Patients with Huntington Disease Enrolled in the First-HD Study —*Daniel Claassen, Samuel Frank, David Stamler, Victor Sung, Sarah Janicki, David Oakes, Christina Vaughan, Claudia Testa*

5:00 p.m. S25.007

Mesenchymal Stem Cells Engineered to Overexpress Brain-Derived Neurotrophic Factor As a Proposed Therapeutic for Huntington's Disease —*Vicki Wheelock, Kari Pollock, Heather Dahlenberg, Hayley Nelson, Kyle Fink, Whitney Cary, Kyle Hendrix, GERALYN ANNETT, Audrey Torrest, Peter Deng, Josh Gutierrez, Catherine Nacy, Karen Pepper, Stefanos Kalomoiris, Johnathon Anderson, Jeannine McGee, William Gruenloh, Brian Fury, Gerhard Bauer, Alexandra Duffy, Teresa Tempkin, Jan Nolte*

5:15 p.m. S25.008

First-In-Human Stem Cell Trials in Huntington's Disease: A Bioethics Survey —*Alexandra Duffy, Teresa Tempkin, Amanda Martin, Meaghan O'Keefe, Marsha Michie, Mark Yarborough, Vicki Wheelock*

S26: Headache

3:30 p.m. Presentation of the Harold Wolff-John Graham: An Award for Headache/Facial Pain Research

Sponsored by the American Academy of Neurology and endowed by Endo Pharmaceuticals.

Recipient:

Catherine Chong, PhD
Phoenix, AZ

3:45 p.m. S26.002

Prevention of Episodic Migraine with AMG 334, a Human Anti-Calcitonin

Gene-Related Peptide Receptor Monoclonal Antibody: Phase 2 Study Results and 52-Week Analysis of Open-Label Extension —*Robert Lenz, David Dodick, Peter Goadsby, Stephen Silberstein, Uwe Reuter, Messoud Ashina, Joel Saper, Roger Cady, Feng Zhang, Marie-Louise Trotman, Julie Dietrich, Hong Sun*

4:00 p.m. S26.003

Emotional Abuse History and Migraine Among Young Adults: Results from The Add Health Dataset —*Gretchen Tietjen, Monita Karmakar, Aliaksander Amialchuk*

4:15 p.m. S26.004

Factors Predicting the Response to the First Epidural Blood Patch in Spontaneous Intracranial Hypotension —*Jr-Wei Wu, Shu-Shya Hseu, Jong-Ling Fuh, Jiing-Feng Ling, Yen-Feng Wang, Wei-Ta Chen, Shuu-Jiun Wang*

4:30 p.m. S26.005

Modifications of Gray Matter Volume in Migraine Patients Over Four Years: A Tensor-Based Morphometry Study —*Roberta Messina, Maria Rocca, Bruno Colombo, Elisabetta Pagani, Andrea Falini, Giancarlo Comi, Massimo Filippi*

4:45 p.m. S26.006

Inflammation and Abnormal Trigeminal Sensory Processing in Obese Mice —*Ana Recober-Montilla, Heather Rossi*

5:00 p.m. S26.007

Peripheral and Central Nervous System Distribution of a CGRP Neutralizing Antibody [129I]-LY2951742 in Male Rats —*Michael Johnson, Bernice Ellis, Deanna Maren, S. Michelle Morin, Victor Wroblewski, Kirk Johnson*

5:15 p.m. S26.008

Delivery Outcomes After Acute Migraine Treatment in Pregnancy —*Matthew Robbins, Tracy Grossman, Shravya Govindappagari, Ashlesha Dayal*

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Industry Therapeutic Updates

Saturday, April 16, 2016, Tuesday, April 19, 2016, and Wednesday, April 20, 2016

Starting at 7:00 p.m.

Registration is free and open to registered Annual Meeting attendees.

Representatives from the following companies invite you to an informational session on therapeutic updates. This program provides you the opportunity to learn about current therapies and projects in the industry pipeline.

Saturday, April 16, 2016

ACADIA Pharmaceuticals Inc.

Beyond Motor Symptoms: Parkinson's Disease Psychosis, Expert Perspectives in Neurology and Psychiatry

Location: Fairmont Waterfront
Waterfront Ballroom ABC

UCB, Inc.

Clinical Debate: Is Shorter Time to Control in Chronic Neurological Disorders a Need or a Want?

Location: Westin Bayshore
Bayshore Grand Ballroom

Tuesday, April 19, 2016

AbbVie Inc.

Emerging Concepts in Advanced Parkinson's Disease
Location: Hyatt Regency Vancouver
Ballroom DEF

Biogen

Location: Pan Pacific Hotel
Crystal Ballroom

Genentech

Evolving Perspectives on Disease Activity: What Is Lying Beneath the Surface?
Location: Hyatt Regency Vancouver
Regency Ballroom C

Eisai Canada

Location: Westin Bayshore
Stanley Park Ballroom

IMPAX Pharmaceuticals

Location: Hyatt Regency Vancouver
Regency Ballroom AB

Sunovion Pharmaceuticals Inc.

Industry Therapeutic Update: A Live Panel Event
Location: Vancouver Marriott Downtown
Pinnacle Ballroom

Wednesday, April 20, 2016

Sanofi Genzyme

Preserving Brain and Function in Multiple Sclerosis
Location: Westin Bayshore
Bayshore Grand Ballroom

Novartis Pharma AG

A switch in time: taking charge of MS disease activity
Location: Fairmont Waterfront
Waterfront Ballroom ABC

RSVP is recommended for these events.

Please visit AAN.com/view/ITU for more information.

No CME will be given by any accredited organization for the Industry Therapeutic Updates, and the AAN cannot affirm claims pertaining to FDA off-label medication, research use of pre-FDA drugs, or other research information that might be discussed. Industry Therapeutic Updates are industry events.

6:30 a.m.–8:30 a.m.

2016 AAN Run/Walk for Brain Research

6:30 a.m.–8:30 a.m.

- C127  Sleep Across the Lifecycle: What Neurologists Need to Know
- C128 Management of Migraine and Psychiatric Comorbidities
- C129 Neurologic Intensive Care I
- C130 Neuro-ophthalmology I
- C131 Practical Legal Issues for Neurologists
- C132 Balance and Gait Disorders
- C133 Mild Cognitive Impairment: Implications for Clinicians
- C134 Emerging Therapies in Epilepsy
- C135 Neuro Flash: Child Neurology
- C136 Controversies in Stroke Therapy
- S27 Movement Disorders. Essential Tremor and Tardive Dyskinesia 90
- S28 Clinical Trials and Experimental Therapies in Neuromuscular Diseases 90
- S29 Pediatric Multiple Sclerosis 90

7:00 a.m.–7:45 a.m.

 Yoga

8:30 a.m.–7:00 p.m.

- P4 Poster Session IV
Presenters Stand by Posters 5:30 p.m.–7:00 p.m. . . 92

9:00 a.m.–11:30 a.m.

Frontiers in Neuroscience Plenary Session . 101

11:00 a.m.–4:00 p.m.

Exhibit Hall

Visit the exhibit hall for a look at the latest products and services available in the neurologic industry. You may also learn about programs you can support to help those suffering from neurologic disorders. Lunch will be served. The exhibits will be open at this time.

11:30 a.m.–1:00 p.m.

Awards Luncheon 162

1:00 p.m.–2:00 p.m.

 New Approaches to Biosensing and Biomarkers for the Management of Neurological Disease

 Oasis in the Overwhelm

1:00 p.m.–3:00 p.m.

- C137 Introduction to Primary Headache Disorders I
- C138 Neurologic Intensive Care II

- C139 Neuro-ophthalmology II
- C140 Clinical Neurology for Advanced Practice Providers I
- C141 *Continuum*® Test Your Knowledge: A Multiple-choice Question Review I (registration required)
- C142 Improving Accuracy of Dementia Diagnosis: Case Studies with Both Imaging and Neuropathology
- C143 Small Fiber Neuropathies: Sensory, Autonomic and Both I
- C144 Multiple Sclerosis Therapy: Symptom Management
- C145 Circadian Rhythm Disorders
- C146 Neuroimaging for the General Neurologist: Brain I
- C147  Clinical Usefulness of Botulinum Toxin for Spasticity Skills Workshop (registration required)
- C148 Precision Neurology: The Promise and Perils of Whole Exome Sequencing for Neurological Disorders
- C149 Sports Neurology: Non-concussion Overview I
- C150 Recent History: Shapers of Modern Neurology I
- S30 Movement Disorders: Ataxias and Other Hyperkinetic Movement Disorders
Presentation of the Jon Stolk Award in Movement Disorders for Young Investigators 102
- S31 Stroke Risk, Outcomes, and Complications
Presentation of the Founders Award 102
- S32 Neuroepidemiology
Presentation of the Bruce S. Schoenberg International Award in Neuroepidemiology 102
- S33 Section Topic Controversies: Autoimmune/Paraneoplastic Neurological Disorders: Update on Imaging and Antibody Testing 102

 Ask the Expert: PQRS

1:00 p.m.–5:00 p.m.

- C233  The Most Important Tool in Your Black Bag: Gallup StrengthsFinder™ Assessment I (registration required)

1:00 p.m.–5:30 p.m.

- C151  EMG Skills Workshop: Basic (registration required)
- I9  Sleep, Clocks, and Alzheimer's Disease . . . 104
- I10 Remyelination and Repair in Multiple Sclerosis . . 106

2:15 p.m.–3:00 p.m.

 Mindfulness Meditation for Healthcare Practitioners

3:00 p.m.–4:00 p.m.

 Dietary Interventions in MS & Medical Marijuana in MS

3:30 p.m.–4:30 p.m.

-  Ask Me Anything with Dr. Robert Gross, Editor-in-Chief of Neurology

- A registration fee is required
- The program is one of the AAN Leadership University sessions
- The course is part of a Subspecialty in Focus track
- The program is one of the I Talk sessions



The program is part of the Experiential Learning Area sessions

3:30 p.m.–5:30 p.m.

- C152** Introduction to Primary Headache Disorders II
- C153** Neurologic Intensive Care III
- C154** Neuro-ophthalmology III
- C155** *Continuum*® Test Your Knowledge: A Multiple-choice Question Review II (registration required)
- C156** EEG in Children: Developmental Maturation, Variants, Epilepsy Syndromes, and Identification of Surgical Candidates
- C157** Small Fiber Neuropathies: Sensory, Autonomic, and Both II
- C158** The Dystonias: Diagnosis, Treatment, and Update on Causes
- C159** Current Management of Incidental and Asymptomatic Cerebrovascular Lesions
- C160** How to Win Patient Satisfaction: Understanding the Net Promoter Score
- C161** Neuroimaging for the General Neurologist: Brain II
- C162** Precision Neurology: Precision Directed Genetic Therapeutics
- C163** Clinical Neurology for Advanced Practice Providers II

C164 Recent History: Shapers of Modern Neurology II

C165 Sports Neurology: Non-concussion Overview II
Invited Science: Movement Disorders

S34 Neuro-oncology

*Presentation of the Neuro-oncology Investigator Award
Presentation of the Neuro-oncology Scientific Award . . . 107*

S35 Behavioral and Cognitive Neurology

*Presentation of the Norman Geschwind Prize
in Behavioral Neurology
Presentation of the S. Weir Mitchell Award 107*

4:00 p.m.–5:00 p.m.



What in the World is Positive Psychology and How Can It Help Me?

5:45 p.m.–7:15 p.m.

Emerging Science Session

7:00 p.m.–10:00 p.m.

Industry Therapeutic Updates 87

Industry-sponsored, non-CME programs will be offered and are open to attendees at no charge. This program provides you the opportunity to learn about current therapies and projects in the industry pipeline. Please visit AAN.com/view/ITU for more information.

Tue-April 19

My Tuesday

Time _____ to _____

Program # _____ Program Name _____

Time _____ to _____

Program # _____ Program Name _____

9:00 a.m.–11:30 a.m. Frontiers in Neuroscience Plenary Session

Lunch

Time _____ to _____

Program # _____ Program Name _____

Time _____ to _____

Program # _____ Program Name _____

Time _____ to _____

Program # _____ Program Name _____

6:30 a.m.–8:30 a.m.

Scientific Platform Sessions

S27: Movement Disorders. Essential Tremor and Tardive Dyskinesia

6:30 a.m. S27.001

Open-Label Extension of KINET: A Phase 2 Study of Valbenazine (NBI-98854) for Tardive Dyskinesia — Mohammed Bari, Raj Shiwach, Roland Jimenez, Scott Siegert, Christopher O'Brien

6:45 a.m. S27.002

Botulinum Toxin Treatment of Essential Tremor - A Customized Approach — Rezvan Rostami, Christopher Chow, Diana Richardson, Bahman Jabbari, Duarte Machado

7:00 a.m. S27.003

Pathogenic PARK2 Variants in Early-Onset Essential Tremor Families — Lorraine Clark, Nora Hernandez, Ruth Ottman, Elan Louis

7:15 a.m. S27.004

A Multi-Center, Randomized, Controlled Trial of Unilateral Focused Ultrasound Thalamotomy for Essential Tremor — William Ondo, Jeff Elias

7:30 a.m. S27.005

Closing the Loop in Deep Brain Stimulation: A Responsive Treatment for Essential Tremor — Enrico Opi, Jonathan Shute, Rene Molina, Kelly Foote, Michael Okun, Aysegül Gunduz

7:45 a.m. S27.006

Exploring Essential Tremor: Results from a Large Online Survey — Phaedra Dowell, Rajesh Pahwa, Kelly Lyons

8:00 a.m. S27.007

A Phase 2 Study of Valbenazine (NBI-98854) for Treatment of Tardive Dyskinesia: KINET 2 — Stewart Factor, Robert Hauser, Daniel Mandri, Julio Castro-Gayol, Roland Jimenez, Scott Siegert, Christopher O'Brien

8:15 a.m. S27.008

Deutetrabenazine Effect on Total Motor Score in Patients with Huntington Disease (First-HD) — Samuel Frank, David Stamler, Victor Sung, Daniel Claassen, Sarah Janicki, Clement Loy, Erin Furr-Stimming, David Oakes, Claudia Testa

S28: Clinical Trials and Experimental Therapies in Neuromuscular Diseases

6:30 a.m. S28.001

Eteplirsen, a Phosphorodiamidate Morpholino Oligomer (PMO) for

Duchenne Muscular Dystrophy (DMD): Clinical Update and Longitudinal Comparison to External Controls on Six-Minute Walk Test (6MWT) — J. Mendell, Nathalie Goemans, Louise Rodino-Klapac, Zarife Sahenk, Linda Lowes, Lindsay Alfano, K Berry, E Peterson, S Lewis, Kim Shontz, J Shao, P Duda, C Donoghue, F Schnell, J Dworzak, Bruce Wentworth, E. Kaye, E Mercuri, DMD Italian Network

6:45 a.m. S28.002

Results of North Star Ambulatory Assessments (NSAA) in the Phase 3 Ataluren Confirmatory Trial in Patients with Nonsense Mutation Duchenne Muscular Dystrophy (ACT DMD) — Katharine Bushby, Jan Kirschner, Xiaohui Luo, Gary Elfring, Hans Kroger, Peter Riebling, Tuyen Ong, Robert Spiegel, Stuart Peltz, Francesco Muntoni

7:00 a.m. S28.003

Thymectomy in Non-thymomatous Myasthenia Gravis: Results from MGTX, a Randomized, Controlled Trial — Gary Cutter, Henry Kaminski, Gil Wolfe, Immaculada Aban, On behalf of the MGTX Trial Research Group

7:15 a.m. S28.004

Intravenous Trehalose Improves Dysphagia and Muscle Function in Oculopharyngeal Muscular Dystrophy (OPMD): Preliminary Results of 24 Weeks Open Label Phase 2 Trial — Zohar Argov, Irit Gliko-Kabir, Bernard Brais, Yoseph Caraco, Dalia Megiddo

7:30 a.m. S28.005

Genome Therapy of Myotonic Dystrophy Type 1 IPS Cells for Development of Autologous Stem Cell Therapy — Guangbin Xia, Yuanzheng Gao, Xiuming Guo, Katherine Santostefano, Karen McFarland, Naohiro Terada, Tetsuo Ashizawa

7:45 a.m. S28.006

Effect of Deflazacort and Prednisone Versus Placebo on Muscle Strength in Boys with Duchenne Muscular Dystrophy Who Have Lost Ambulation: Results from the Deflazacort Clinical Trial Program — Timothy Cunniff, Stephen Wanaski, Jordan Dubow, James Meyer

8:00 a.m. S28.007

Antiinflammatory and Neuroprotective Role of Fingolimod in Experimental Autoimmune Neuritis in Lewis Rats — Bjoern Ambrosius, Kalliopi Pitarokouli, Lisa Schrewe, Ralf Gold

8:15 a.m. S28.008

Electrical Impedance Myography and Quantitative Ultrasound Detect Steroid

Related Improvements in Duchenne Muscular Dystrophy — Seward Rutkove, Craig Zaidman, Jim Wu, Amy Pasternak, Lavanya Madabusi, Heather Szlag, Tim Harrington, Adam Pacheco, Sung Yim, Kush Kapur, Basil Darras

S29: Pediatric Multiple Sclerosis

6:30 a.m. S29.001

First Genome-Wide Analysis in Pediatric Multiple Sclerosis (MS) Confirms a Role for Adult MS Risk Variants and Reveals New Candidates — Lisa Barcellos, Xiaorong Shao, Brooke Rhead, Milena Gianfrancesco, Jennifer Graves, Amy Waldman, Timothy Lotze, Teri Schreiner, Anita Belman, Benjamin Greenberg, Bianca Weinstock-Guttman, Gregory Aaen, Jan-Mendelt Tillema, Janace Hart, Jayne Ness, Yolanda Harris, Jennifer Rubin, Meghan Candee, Lauren Krupp, Mark Gorman, Leslie Benson, Moses Rodriguez, Tanuja Chitnis, Soe Mar, Adeline Vanderver, Ilana Kahn, John Rose, Shelly Roalstad, Charlie Casper, Ling Shen, Hong Quach, Catherine Metayer, Cathy Schaefer, Emmanuelle Waubant

6:45 a.m. S29.002

Pediatric Radiologically Isolated Syndrome: Clinical and Radiological Outcomes — Naila Makhani, Christine Lebrun Frenay, Aksel Siva, Clarisse Carra-Dalliere, Jerome De Seze, Francoise Durand Dubief, Orhun Kantarci, Megan Langille, Jean Pelletier, Juan Ignacio Rojas, Teri Schreiner, Mar Tintore, Ugur Uygungoglu, Darin Okuda, Daniel Pelletier

7:00 a.m. S29.003

Effect of Obesity and Puberty on Risk and Age at Onset of Pediatric MS — Tanuja Chitnis, Jennifer Graves, Bianca Weinstock-Guttman, Anita Belman, Cody Olsen, Madhusmita Misra, Gregory Aaen, Leslie Benson, Meghan Candee, Mark Gorman, Benjamin Greenberg, Timothy Lotze, Jayne Ness, Moses Rodriguez, John Rose, Jennifer Rubin, Teri Schreiner, Jan-Mendelt Tillema, Charlie Casper, Emmanuelle Waubant

7:15 a.m. S29.004

Demographic and Clinical Characteristics of 490 Children and Adolescents with Multiple Sclerosis (MS): US Network of Pediatric MS Centers' Experience — Anita Belman, Lauren Krupp, Cody Olsen, John Rose, Gregory Aaen, Leslie Benson, Tanuja Chitnis, Mark Gorman, Jennifer Graves,

Yolanda Harris, Timothy Lotze, Jayne Ness, Shelly Roalstad, Moses Rodriguez, Jan-Mendelt Tillema, Emmanuelle Waubant, Bianca Weinstock-Guttman, Charlie Casper

7:30 a.m. S29.005

Maternal Illness in Pregnancy and Perinatal Exposure to Pesticides Are Associated with Risk for Pediatric Onset MS — Jennifer Graves, Tanuja Chitnis, Bianca Weinstock-Guttman, Jennifer Rubin, Aaron Zelikovitch, Bardia Nourbakhsh, Timothy Simmons, Charlie Casper, Emmanuelle Waubant

7:45 a.m. S29.006

Dietary Factors and Risk of Pediatric Multiple Sclerosis — Julia Pakpoor, Brandon Seminatore, Jennifer Graves, Teri Schreiner, Amy Waldman, Timothy Lotze, Anita Belman, Benjamin Greenberg, Bianca Weinstock-Guttman, Gregory Aaen, Jan-Mendelt Tillema, Janace Hart, Jayne Ness, Yvonne Harris, Jennifer Rubin, Meghan Candee, Lauren Krupp, Mark Gorman, Leslie Benson, Moses Rodriguez, Tanuja Chitnis, Soe Mar, Ilana Kahn, John Rose, Shelly Roalstad, Michael Waltz, Charlie Casper, Emmanuelle Waubant

8:00 a.m. S29.007

The Causal Effect of Serum Vitamin D Levels on Pediatric Multiple Sclerosis: A Mendelian Randomization Study — Brooke Rhead, Milena Gianfrancesco, Xiaorong Shao, Jennifer Graves, Amy Waldman, Timothy Lotze, Teri Schreiner, Anita Belman, Benjamin Greenberg, Bianca Weinstock-Guttman, Gregory Aaen, Jan-Mendelt Tillema, Janace Hart, Jayne Ness, Yolanda Harris, Jennifer Rubin, Meghan Candee, Lauren Krupp, Mark Gorman, Leslie Benson, Moses Rodriguez, Tanuja Chitnis, Soe Mar, Ilana Kahn, John Rose, Shelly Roalstad, Charlie Casper, Ling Shen, Hong Quach, Catherine Metayer, Cathy Schaefer, Lisa Barcellos, Emmanuelle Waubant

8:15 a.m. S29.008

Associations Between Immune Markers and Gut Microbiota in Pediatric Multiple Sclerosis and Controls — Helen Tremlett, Douglas Fadrosch, Ali Farqui, Janace Hart, Shelly Roalstad, Jennifer Graves, Collin Spencer, Susan Lynch, Scott Zamvil, Emmanuelle Waubant

Meeting Schedule

6:30 a.m.–8:30 a.m.

S27 Movement Disorders: Essential Tremor and Tardive Dyskinesia

S28 Clinical Trials and Experimental Therapies in Neuromuscular Diseases

S29 Pediatric Multiple Sclerosis

C127 SIF Sleep Across the Lifecycle: What Neurologists Need to Know
Director: Michael J. Howell, MD, FAAN, Minneapolis, MN

C128 Management of Migraine and Psychiatric Comorbidities
Director: Mia T. Minen, MD, New York, NY

C129 Neurologic Intensive Care I
Director: Alejandro A. Rabinstein, MD, FAAN, Rochester, MN

C130 Neuro-ophthalmology I
Director: Nancy J. Newman, MD, FAAN, Atlanta, GA

C131 Practical Legal Issues for Neurologists
Director: Daniel G. Larriviere, MD, JD, FAAN, New Orleans, LA

C132 Balance and Gait Disorders
Director: Bastiaan Roelof Bloem, MD, PhD, Nijmegen, The Netherlands

C133 Mild Cognitive Impairment: Implications for Clinicians
Director: David J. Gill, MD, Rochester, NY

C134 Emerging Therapies in Epilepsy
Director: Carl W. Bazil, MD, PhD, FAAN, New York, NY

C135 Neuro Flash: Child Neurology
Director: Erika Fullwood Augustine, MD, FAAN, Rochester, NY

C136 Controversies in Stroke Therapy
Director: Steven R. Messe, MD, FAAN, FAHA, Philadelphia, PA

7:00 a.m.–7:45 a.m.

Health & Wellness Yoga
Instructor: Sarah Bird Nelson, JD, RYT 200, Minneapolis, MN

8:30 a.m.–7:00 p.m.

P4 Poster Session IV 92

9:00 a.m.–11:30 a.m.

Frontiers in Neuroscience Plenary Session. . . 101

11:00 a.m.–4:00 p.m.

Exhibit Hall

1:00 p.m.–2:00 p.m.

I New Approaches to Biosensing and Biomarkers for the Management of Neurological Disease
Director: John David Hixson, MD, San Francisco, CA

Health & Wellness Oasis in the Overwhelm
Director: Dina Kruzansky Markind, CPCC, Danbury, CT

Navigating Your Career: All Aboard

Get Essential Career Advice at Navigating Your Career: All Aboard!

Friday, April 15–Thursday, April 21: 7:00 a.m.–5:30 p.m.
Location: West Level 1

Get the information you need on how to choose the best career option, how to succeed in your current career, or how to make a career transition—this exciting new Experiential Learning Area at the 2016 AAN Annual Meeting has something for everyone, including medical students, residents, fellows, junior faculty, senior faculty, and advanced practice providers.

Topics include:

- ▶ Writing and Reviewing for *Neurology*® Resident and Fellow Section
- ▶ Conflict Resolution: Finding Common Ground
- ▶ Giving and Getting Great Feedback
- ▶ The Neurohospitalist Model
- ▶ Choosing Neurohospitalist Career
- ▶ Interviewing Skills
- ▶ Interviewing Skills: Negotiation
- ▶ Career Stories: Nuts and Bolts of Academic Leadership—Strategies I have Learned in my Career
- ▶ Career Stories
- ▶ Private Practice to Employed Model
- ▶ Being a Great Chief Resident
- ▶ Research in Residency: How to Choose the Right Project
- ▶ Resident Wellness & Burnout: What we Know and What we Don't
- ▶ Measuring Success: Quality Improvement 101

Learn more at AAN.com/view/NavigatingYourCareer.

Tue-April 19

8:30 a.m.–7:00 p.m.

Poster Session

P4 Poster Session IV

Presenters Stand by Posters 5:30 p.m.–7:00 p.m.

Poster Discussion Session: Aging and Dementia

Eight abstracts have been selected for presentation during a poster discussion session. Authors will present a 5-minute data blitz presentation.

In addition to the regular poster time, authors also have a specific time slot over lunch. Times below are standard across poster sessions.

Discussion: 11:45 a.m.–11:50 a.m.

P4.001 C9orf72 BAC Transgenic Mice Display Typical Pathologic Features of ALS/FTD —Robert Baloh, Jacqueline O'Rourke, Shaughn Bell, Laurent Bogdonik, AKMG Muhammad, Tania Gendron, Kevin Kim, Andrew Austin, Janet Cady, Elaine Liu, Jonah Zarrow, Sharda Grant, Ritchie Ho, Sharon Carmona, Megan Simpkinson, Kathryn Wu, Lillian Daugherty, Dennis Dickson, Matthew Harms, Leonard Petrucelli, Cathleen Lutz

Discussion: 11:50 a.m.–11:55 a.m.

P4.002 Cerebral Perfusion and the Risk of Dementia in the General Population —Frank Wolters, Hazel Zonneveld, Peter Koudstaal, Albert Hofman, Meike Vernooij, Mohammad Ikram

Discussion: 11:55 a.m.–12:00 p.m.

P4.003 Long-term Cognitive Decline After Intracerebral Hemorrhage —Alessandro Biffi, Christopher Anderson, Alison Ayres, Edip Guroi, Steven Greenberg, Jonathan Rosand, Anand Viswanathan

Discussion: 12:00 p.m.–12:05 p.m.

P4.004 Quality in Addition to Quantity of Education Impacts Performance on Cognitive Screening —Chinwe Nwadiogbu, Whitney Fitts, Jason Karlawish, Nabila Dahodwala

Discussion: 12:05 p.m.–12:10 p.m.

P4.005 The Prevalence of Parkinsonism in the Oldest Old: A 90+ Study —Dana McDermott, Maria Corrada, Shawna Perry, Nicolás Phielipp, Claudia Kwas

Discussion: 12:10 p.m.–12:15 p.m.

P4.006 Alzheimer's Care Via Telemedicine for Oregon (ACT-ON), Phase I: Establishing the Reliability of Telemedicine-Based Measures —Allison Lindauer, Adriana Seelye, Bayard Lyons, Nora Mattek, Mattie Gregor, Katherine Mincks, Hiroko Dodge, Jeffrey Kaye, Deniz Erten-Lyons

Discussion: 12:15 p.m.–12:20 p.m.

P4.007 Post-Hoc Analysis of Early AD Subjects Meeting Phase 3 Entry Criteria in PRIME, a Phase 1b Study of the Anti-Amyloid Beta Antibody Aducanumab (BIIB037) —Vissia Vigiotta, Xiaopeng Miao, Tianle Chen, John O'Gorman, Leslie Williams, Yan Ling, Jeff Sevigny

Discussion: 12:20 p.m.–12:25 p.m.

P4.008 Exosome-based Biomarkers of Brain Insulin Resistance Predict Atrophy in Alzheimer's Disease —Dimitrios Kapogiannis, Maja Mustapic, Roger Mullins, Edward Goetzl

e-Poster Session: Aging, Dementia, Cognitive, and Behavioral Neurology

Ten e-posters in six neurologic topics have been selected for on-site, interactive display. e-Posters will be grouped in a separate area where attendees are invited to explore more deeply through touch screen displays.

P4.009 In Vivo Correlates of Pathological Diagnosis in Primary Progressive Aphasia —Edoardo Spinelli, Maria Luisa Mandelli, Miguel Santos, Giulia Vinceti, Christa Watson, Federica Agosta, Massimo Filippi, Bruce Miller, William Seeley, Maria Gorno Tempini

P4.010 Imaging Tau Pathology In Vivo in AD and FTLD Spectrum Tauopathies with [18F] AV1451 PET —Bradford Dickerson, Sara Makaretz, Christina Caso, Michael Stepanovic, Megan Quimby, Chenjie Xia, Scott McGinnis, Matthew Frosch, Keith Johnson

P4.011 Differential Gene Expression in Microglial Polarized States and in Alzheimer's Disease: Novel Insights Provided by Weighted Correlation

Network Analysis (WGCNA) —Srikant Rangaraju, Eric Dammer, Nicholas Seyfried, Allan Levey

P4.012 Multimodal Imaging to Distinguish In Vivo Early Onset Alzheimer's Disease from Behavioral Variant of Frontotemporal Dementia —Elisa Canu, Federica Agosta, Gorana Mandic-Stojmenovic, Tanya Stojkovic, Elka Stefanova, Francesca Imperiale, Massimiliano Copetti, Vladimir Kostic, Massimo Filippi

P4.013 Default Mode Network Integrity and Brain Atrophy Rates in Patients with Alzheimer's Disease and Mild Cognitive Impairment: The Role of Catechol-o-Methyltransferase Val158Met Variant —AmirHussein Abdolalazadeh, Nooshin Abbasi, Bahram Mohajer

P4.014 Structural and Functional MRI Signatures of ALS Patients with C9ORF72 Hexanucleotide Repeat Expansion —Pilar Maria Ferraro, Federica Agosta, Nilo Riva, Teuta Domi, Massimiliano Copetti, Christian Lunetta, Maurizio Ferrari, Giancarlo Comi, Paola Carrera, Andrea Falini, Angelo Quattrini, Massimo Filippi

P4.015 Hepatic Encephalopathy As a Model for Studying the Neural Connectivity of Alertness and Higher Cortical Function —Niral Patel, Nisha Bhatia, Wen-Ching Liu, Sri Raghav Sista, Michael Zagardo, Michael Xu, Sonu Dhillon, Hrachya Nersesyan

P4.016 Novel Associations and Genetic Mimics in a Leukodystrophy Series Characterised by Focused Exome Sequencing —David Lynch, Wei Jia Zhang, Rahul Phadke, Rahul Lakshmanan, Indran Davagnanam, Elaine Murphy, Jeremy Chataway, Nick Fox, Henry Houlden

P4.017 F-MRI Correlates of Single-Word Reading in Arabic Bilinguals —Haythum Tayeb, Jamaan Al-Ghamdi, Doreen AlShaer, Khalid Al-Safi, Yousuf Al-Sawwaf

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Frontiers in Neuroscience Plenary Session

Tuesday, April 19, 2016 9:00 a.m. to 11:30 a.m.

Focuses on translational research related to clinical issues of importance. Six physician scientists outline their recent research findings, along with the clinical implications.

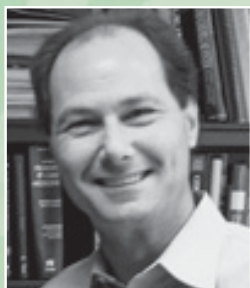
Moderator



Paul M. George, MD, PhD, MSE
 Member, AAN Science Committee



Christof Koch, PhD
 Allen Institute for Brain Science
 Seattle, WA
Analyzing Single Neurons from the Human Cerebral Cortex



Jeremy D. Schmahmann, MD, FAAN
 Massachusetts General Hospital
 Boston MA
The Cerebellar Cognitive Affective Syndrome: Implications for Neurology and Psychiatry



Robert Zatorre, PhD
 Montreal Neurological Institute
 Montreal, QC, Canada
From Perception to Pleasure: Music and Its Neural Substrates



Thomas A. Rando, MD, PhD
 Stanford University
 Stanford, CA
Harnessing Stem Cell Potential for Tissue Repair: Reversing the Aging Process?



David A. Hafler, MD, FAAN
 Yale University School of Medicine
 New Haven, CT
Unraveling the Cause of Multiple Sclerosis



John Collinge, MD, FRCP
 University of London
 Institute of Neurology
 London, United Kingdom
Development of Rational Therapeutics for Prion Infection and Its Relevance to Alzheimer's Disease

Tue-April 19

1:00 p.m.–3:00 p.m.

Scientific Platform Sessions

S30: Movement Disorders: Ataxias and Other Hyperkinetic Movement Disorders

1:00 p.m. Presentation of the Jon Stolk Award in Movement Disorders for Young Investigators

Sponsored by the American Academy of Neurology and endowed by Kyowa Pharmaceutical, Inc., Lineberry Research, Quintiles, and Dr. Dennis Gillings.

Recipient:

Ken Nakamura, MD, PhD
San Francisco, CA

1:15 p.m. S30.002
Identification of Antibodies Against Inositol 1,4,5-Triphosphate Receptor 1 (IR3R1) in Cerebellar Ataxia and Primary Progressive Multiple Sclerosis —Harry Alexopoulos, Penelope Fouka, Ioanna Chatzi, Skarlatos Dedos, Martina Samiotaki, George Panayotou, Panagiotis Politis, Athanasios Tzioufas, Marinos Dalakas

1:30 p.m. S30.003
Deep Brain Stimulation Placement Using Intraoperative MRI for Dystonia: One Year Clinical Outcomes —Vibhash Sharma, Kushal Naik, Shirley Triche, Cathrin Bueteftsch, Jon Willie, Nicholas Boulis, Stewart Factor, Robert Gross, Mahlon DeLong

1:45 p.m. S30.004
Lack of Aprataxin Impairs Mitochondrial Functions Via Downregulation of the APE1/NRF1/NRF2 Pathway —Beatriz Garcia-Diaz, Emanuele Barca, Andrea Balreira, Luis Lopez, Saba Tadesse, Sindu Krishna, Ali Naini, Caterina Mariotti, Barbara Castellotti, Catarina Quinzii Hirano

2:00 p.m. S30.005
The Core Clinical Features of MTATP6-Related Mitochondrial Disease —Mika Martikainen, Yi Shiao Ng, Grainne Gorman, Andrew Schaefer, Rita Horvath, Patrick Chinnery, Emma Blakely, Charlotte Alston, Robert Taylor, Robert McFarland, Douglas Turnbull

2:15 p.m. S30.006
Clinical and Neuroradiological Features of Spinocerebellar Ataxia 38 (SCA38) —Barbara Borroni, Eleonora Di Gregorio, Laura Orsi, Giovanna Vaula, Chiara Costanzi, Stefano Gazzina, Filippo Tempia, Nico Mitro, Donatella Caruso, Lorenzo Pinessi, Alessandro Padovani, Alfredo Brusco, Loredana Boccone

2:30 p.m. S30.007
Targeting ATXN2 Using Antisense Oligonucleotides As a Treatment for Spinocerebellar Ataxia Type 2 (SCA2) —Daniel Scoles, Matthew Schneider, Pratap Meera, Karla Figueroa, Gene Hung, Frank Rigo, Frank Bennett, Thomas Otis, Stefan Pulst

2:45 p.m. S30.008
Clinical and Genetic Heterogeneity of Paroxysmal Dyskinesias —Kailash Bhatia, Roberto Erro, Alice Gardiner, Fatima Zaheera Jaffer, Maria Stamelou, Matthew Walker, Dimitri Kullmann, Paul Jarman, Manju Kurian, Henry Houlden

S31: Stroke Risk, Outcomes, and Complications

1:00 p.m. Presentation of the Founders Award
Sponsored by the American Academy of Neurology and endowed by the former American Academy of Neurology Alliance.

Recipient:

Michelle P. Lin, MD, MPH
Los Angeles, CA

1:15 p.m. S31.002
Predictors of Dysphagia Screening After Acute Ischemic Stroke —Raed Joundi, Rosemary Martino, Gustavo Saposnik, Jiming Fang, Vasily Giannakeas, Moira Kapral

1:30 p.m. S31.003
Multiple Myeloma Stage I, II and Renal Insufficiency Are Associated with Increased Stroke Risk —Kautubh Limaye, Rahul Ravilla, Appalaidu Sasapu, Xenofon Papanikolaou, Sarah Waheed, Archana Hinduja

1:45 p.m. S31.004
The Stroke Nurse Project: A Community-Based Approach to Improving the Post-Acute Care of Stroke Patients —Thomas Staudacher, Pia Bader, Jürgen Kunz, Dietmar Bengel, Hans Joachim von Büdingen

2:00 p.m. S31.005
Does Smoking Status Influence the Effect of Clopidogrel on Secondary Stroke Prevention? —Bruce Ovbiagele, Jing Wang, Johnston S. Claiborne, Anxin Wang, Yongjun Wang, Xingquan Zhao, Yilong Wang

2:15 p.m. S31.006
Impact of Early Intervention with OnabotulinumtoxinA Treatment in Adult Patients with Post-Stroke Lower Limb Spasticity —Atul Patel, Anthony Ward, Carolyn Geis, Chengcheng Liu, Wolfgang Jost, Rozalina Dimitrova

2:30 p.m. S31.007
Atorvastatin Treatment Is Associated with Increased BDNF Level and Improved Functional Recovery After Atherothrombotic Stroke —Jingmiao Zhang, Xiali Mu, Zongliang Gao, Yonglu Huang

2:45 p.m. S31.008
Perihematomal Edema Expansion Rate Predicts Functional Outcome in Deep Intracerebral Hemorrhage —Zachary Grunwald, Sebastian Urdy, Lauren Beslow, Anastasia Vashkevich, Alison Ayres, Steven Greenberg, Joshua Goldstein, Thomas Battey, Marc Simard, Jonathan Rosand, W. Kimberly, Kevin Sheth

S32: Neuroepidemiology

1:00 p.m. Presentation of the Bruce S. Schoenberg International Award in Neuroepidemiology
Sponsored by the American Academy of Neurology and endowed by GlaxoSmithKline, Inc.

Recipient:

Rufus O. Akinyemi, MBBS, PhD, MWACP, FMCP
Ibadan, Nigeria

1:30 p.m. S32.003
Quantification of Risks of Seizure in Autism —Jennifer Jaskiewicz, Apryl Susi, Elizabeth Hisle-Gorman, David Dennison, Gregory Gorman, Cade Nylund, Christine Erdie-Lalena

1:45 p.m. S32.004
Polychlorinated Biphenyls (PCBs) and Parkinson's Disease (PD): Effect Modification by Membrane Transporter Variants —Samuel Goldman, Freya Kamel, Chen Meng, Monica Korell, Kathleen Comyns, David Umbach, Jane Hoppin, G. Ross, Connie Marras, Meike Kasten, Anabel Chade, Aaron Blair, Caroline Tanner

2:00 p.m. S32.005
A Prospective Comorbidity-Matched Study of Parkinson's Disease and the Risk of Mortality Among Women —Pamela Rist, Anke Winter, Julie Buring, Tobias Kurth

2:15 p.m. S32.006
Adherence to Ideal Cardiovascular Health Guidelines Prevents Vascular Brain Injury, Dementia and Cognitive Decline —Matthew Pase, Alexa Beiser, Danielle Enserro, Vanessa Xanthakis, Hugo Javier Aparicio, Claudia Satizabal, Jayandra Himali, Carlos Kase, Vasan Ramachandran, Charles DeCarli, Sudha Seshadri

2:30 p.m. S32.007
Temporal Trends in Stroke Incidence in the Young in the Framingham Study —Hugo Javier Aparicio, Alexa Beiser, Jayandra Himali, Claudia Satizabal, Matthew Pase, Jose Romero, Carlos Kase, Sudha Seshadri

2:45 p.m. S32.008
Daylight Saving Time Transitions, Incidence and In-Hospital Mortality of Ischemic Stroke —Jussi O. Sipilä, Jori Ruuskanen, Päivi Rautava, Ville Kytö

1:00 p.m.–3:00 p.m.

Section Topic Controversies

S33 Section Topic Controversies: Autoimmune/Paraneoplastic Neurological Disorders: Update on Imaging and Antibody Testing

Director: Sean J. Pittock, MD

1:00 p.m.–1:15 p.m. Introduction
Sean J. Pittock, MD

1:15 p.m.–2:00 p.m.
Neural Autoantibody Evaluations: Looking Toward the Future
Andrew McKeon, MD

2:00 p.m.–2:45 p.m.
Update on Body and Nervous System Imaging in Autoimmune Neurological Disorders
Jenny Linnoila, MD, PhD

2:45 p.m.–3:00 p.m.
Questions and Answers

Meeting Schedule

1:00 p.m.–3:00 p.m.

S30 Movement Disorders: Ataxias and Other Hyperkinetic Movement Disorders

S31 Stroke Risk, Outcomes, and Complications

S32 Neuroepidemiology

S33 Section Topic Controversies: Autoimmune/Paraneoplastic Neurological Disorders: Update on Imaging and Antibody Testing

 **Ask the Expert: PQRS**

C137 Introduction to Primary Headache Disorders I

Director: *Todd D. Rozen, MD, FAAN, Jacksonville, FL*

C138 Neurologic Intensive Care II

Director: *Alejandro A. Rabinstein, MD, FAAN, Rochester, MN*

C139 Neuro-ophthalmology II

Director: *Nancy J. Newman, MD, FAAN, Atlanta, GA*

C140 Clinical Neurology for Advanced Practice Providers I

Director: *Cynthia L. Comella, MD, FAAN, Chicago, IL*

C141 *Continuum*® Test Your Knowledge: A Multiple-choice Question Review I

(registration required)

Director: *Aaron E. Miller, MD, FAAN, New York, NY*

C142 Improving Accuracy of Dementia Diagnosis: Case Studies with Both Imaging and Neuropathology

Director: *Edward Y. Zamrini, MD, Sun City, AZ*

C143 Small Fiber Neuropathies: Sensory, Autonomic and Both I

Director: *Christopher H. Gibbons, MD, FAAN, Boston, MA*

C144 Multiple Sclerosis Therapy: Symptom Management

Director: *Jonathan L. Carter, MD, Scottsdale, AZ*

C145 Circadian Rhythm Disorders

Director: *Phyllis C. Zee, MD, PhD, Chicago, IL*

C146 Neuroimaging for the General Neurologist: Brain I

Director: *Laszlo Mechtler, MD, FAAN, Amherst, NY*

C147  Clinical Usefulness of Botulinum Toxin for Spasticity Skills Workshop

(registration required)

Director: *Allison Brashear, MD, MBA, FAAN, Winston Salem, NC*

C148 Precision Neurology: The Promise and Perils of Whole Exome Sequencing for Neurological Disorders

Director: *Amy R. Brooks-Kayal, MD, Aurora, CO*

C149 Sports Neurology: Non-concussion Overview I

Director: *Brian W. Hainline, MD, FAAN, Indianapolis, IN*

C150 Recent History: Shapers of Modern Neurology I

Director: *Stephen G. Reich, MD, FAAN, Baltimore, MD*

Invited Science: Movement Disorders



International Parkinson and Movement Disorder Society

Tuesday, April 19, 3:30 p.m. to 5:30 p.m.

Top abstracts previously presented at the International Parkinson and Movement Disorder Society will be presented by their authors in 20-minute platform sessions. Select abstracts from their “best of” lineups emphasize basic, clinical, and translational sciences as they evolve toward a more complete understanding of Movement Disorders with the overall goal of developing more effective prevention and treatment.

3:30 p.m. to 3:50 p.m.

Microglial Dysfunction Plays a Critical Role in Huntington’s Disease Pathogenesis

Blair Leavitt, MD, Vancouver, BC, Canada

3:50 p.m. to 4:10 p.m.

PREDICT-PD: Identifying Risk of Parkinson’s Disease in the Community

Alastair John Noyce, MBBS, London, United Kingdom

4:10 p.m. to 4:30 p.m.

Glucocerebrosidase Activity in Parkinson’s Disease With and Without GBA Mutations

Roy Alcalay, MD, New York, NY

4:30 p.m. to 4:50 p.m.

Tau-PET Imaging in Progressive Supranuclear Palsy Using [18F] AV-1451

Daniel Schonhaut, San Francisco, CA

4:50 p.m. to 5:10 p.m.

Inhaled Levodopa (CVT-301) Provides Rapid Improvement of OFF States in Parkinson’s Disease

Peter A. LeWitt, MD, West Bloomfield, MI

5:10 p.m. to 5:30 p.m.

Stable Levodopa Plasma Levels With ND0612 (Levodopa/Carbidopa for Subcutaneous Infusion) in Parkinson’s Disease (PD) Patients With Motor Fluctuations

Sheila Oren, MD, MBA, Rehovot, Israel

Tue-April 19

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1:00 p.m.–5:30 p.m.

Integrated Neuroscience Session

19

SIF Sleep, Clocks, and Alzheimer's Disease

This program is offered in partnership with the Sleep Section.

Coordinators: Aleksandar Videnovic, MD, MSc, FAAN, and Yo-Ei Ju, MD

Program Description: Sleep is important for optimal cognitive performance. Understanding the mechanisms through which sleep homeostasis provides these cognitive benefits allows for novel approaches to enhance cognitive performance. This program will present new scientific discoveries related to the interface of sleep, circadian biology, and cognitive decline. An overview of the spectrum of disturbed sleep and alertness in Alzheimer's disease (AD) will set the stage for more specific discussions on sleep in cognitive disorders. These presentations will address 1) the bidirectional relationship between impaired sleep/circadian function and dementia/AD, 2) the impact of sleep-disordered breathing on cognitive function, and 3) the physiology of a newly described cerebral glymphatic system, a functional waste clearance pathway for the CNS, and its impact for cognitive functions. These presentations will be complemented by data blitz-presentations and poster discussions with topics covering sleep, alertness, and dementia.

Upon Completion: Participants should be able to: discuss sleep and circadian dysregulation in dementia, understand the bi-directional relationship between sleep-wake regulation and Alzheimer's disease, discuss the impact of sleep disordered breathing on cognitive outcomes, and understand the physiology of the glymphatic system and its relevance for optimal cognitive function.

Part I

1:00 p.m.–3:00 p.m.

- 1:00 p.m.–1:10 p.m. Introduction**
Aleksandar Videnovic, MD, MSc, FAAN, and Yo-Ei Ju, MD
- 1:10 p.m.–1:45 p.m. Invited Speaker**
Sleep: Role in Risk for Dementia and Changes Across the Spectrum of Cognitive Decline and Alzheimer's Disease
David M. Holtzman, MD, FAAN, St. Louis, MO
- 1:45 p.m.–1:50 p.m. 19.001 Data Blitz**
Association Between Sleep Problems and Brain Volume in the Elderly—Angeliki Tsapanou, Yian Gu, Jennifer Manly, Nicole Schupf, Nikolaos Scarmeas, Sandra Barral, Adam Brickman, Yaakov Stern
- 1:50 p.m.–1:55 p.m. 19.002 Data Blitz**
Use of Benzodiazepines and Risk of Dementia: A Retrospective Case-Control Study—Tsz-tai Chan, William Chun-yin Leung, Wesley Kin-yiu Wong, Wing-ming Chu, Ka-chun Leung, Yuey-zhun Ng, Gary Yuen-ming Kai, Victor Li, Yat-fung Shea, Chang Richard Shek-kwan, Shu-leong Ho
- 1:55 p.m.–2:05 p.m. Audience Q&A**
- 2:05 p.m.–2:40 p.m. Invited Speaker**
Circadian Timing, Clocks, and Alzheimer's Disease
Sonia Ancoli-Israel, PhD, La Jolla, CA
- 2:40 p.m.–2:45 p.m. 19.003 Data Blitz**
Impact of Armodafinil Therapy on Neuropsychiatric Features in Dementia with Lewy Bodies—Karen Kuntz, Sara Mason, Maria Lapid, Jeremiah Aakre, Emily Lundt, Bradley Boeve
- 2:45 p.m.–2:50 p.m. 19.004 Data Blitz**
Sleep Deficiency Is Associated with Lack of Exercise and Higher BMI Among Community-Dwelling Older Adults—Kelly Sullivan
- 2:50 p.m.–3:00 p.m. Audience Q&A**

Guided Poster Rounds

3:00 p.m.–3:30 p.m.

- 19.001** Association Between Sleep Problems and Brain Volume in the Elderly—Angeliki Tsapanou, Yian Gu, Jennifer Manly, Nicole Schupf, Nikolaos Scarmeas, Sandra Barral, Adam Brickman, Yaakov Stern
- 19.002** Use of Benzodiazepines and Risk of Dementia: A Retrospective Case-Control Study—Tsz-tai Chan, William Chun-yin Leung, Wesley Kin-yiu Wong, Wing-ming Chu, Ka-chun Leung, Yuey-zhun Ng, Gary Yuen-ming Kai, Victor Li, Yat-fung Shea, Chang Richard Shek-kwan, Shu-leong Ho
- 19.003** Impact of Armodafinil Therapy on Neuropsychiatric Features in Dementia with Lewy Bodies—Karen Kuntz, Sara Mason, Maria Lapid, Jeremiah Aakre, Emily Lundt, Bradley Boeve
- 19.004** Sleep Deficiency Is Associated with Lack of Exercise and Higher BMI Among Community-Dwelling Older Adults—Kelly Sullivan
- 19.005** A Unique Pattern on Memory Testing in Dementia Screening Predicts Obstructive Sleep Apnea—Amber Gerber, Donn Dexter
- 19.006** Severity of Sleep Disordered Breathing in Amnesic MCI and in the MCI Preceding Dementia with Lewy Bodies—Linda Hershey, Barbara Carlson, Kellie Jones, Michael Wenger, John Carlson
- 19.007** Hemispheric Differences in EEG Spectral Power in Patients with Obstructive Sleep Apnea—Derek Su, Pradeep Sahota, Mahesh Thakkar
- 19.008** Cerebral Perfusion and the Risk of Dementia in the General Population—Frank Wolters, Hazel Zonneveld, Peter Koudstaal, Albert Hofman, Meike Vernooij, Mohammad Ikram

- 19.009** The Effect of Age in the Association Between Frailty and Poor Sleep Quality in Community-Dwellers (The Atahualpa Project)—Pablo Castillo, Kristen Cagino, Robertino Mera, Johnathan Nieves, Marleni Milla-Martinez, Mauricio Zambrano, Kathryn Fanning, Mark Sedler, Oscar Del Brutto
- 19.010** Sleep Duration is Associated with Depression in the Northern Manhattan Study—Suzanne Lippman, Hannah Gardener, Tatjana Rundek, Azizi Seixas, Maria Santiago, Mitchell Elkind, Ralph Sacco, Clinton Wright, Alberto Ramos

- 19.011** Is the EEG Important in the Study of Patients with Cognitive Symptoms?—Agustina Tamargo, Analía Calle, Alejandro Thomson, Maria Gonzalez Toledo, Diego Nadile, José Molina, Santiago O'Neill, Elena Fontela, Alfredo Thomson
- 19.012** Sleep EEG Changes in Preclinical Alzheimer Disease: A Pilot Study—Sonja Schütz, Andrew Varga, Korey Kam, Emma Ducca, Margaret Wohlleber, Clifton Lewis, Girardin Jean-Louis, Indu Ayappa, David Rapoport, Ricardo Osorio, Helen Scharfman

Part II

3:30 p.m.–5:30 p.m.

- 3:30 p.m.–4:05 p.m. Invited Speaker**
Imaging Glymphatics in the Sleeping Brain: Implications for Alzheimer's Disease
Miranda M. Lim, MD, PhD, Portland, OR
- 4:05 p.m.–4:10 p.m. 19.005 Data Blitz**
Hemispheric Differences in EEG Spectral Power in Patients with Obstructive Sleep Apnea—Derek Su, Columbia, MO
- 4:10 p.m.–4:15 p.m. 19.006 Data Blitz**
Cerebral Perfusion and the Risk of Dementia in the General Population—Frank J. Wolters, Rotterdam, Netherlands
- 4:15 p.m.–4:25 p.m. Audience Q&A**
- 4:25 p.m.–5:00 p.m. Invited Speaker**
Sleep Disturbances, Sleep Disordered Breathing, and Cognitive Health
Michael K. Scullin, PhD, Waco, TX
- 5:00 p.m.–5:05 p.m. 19.007 Data Blitz**
A Unique Pattern on Memory Testing in Dementia Screening Predicts Obstructive Sleep Apnea—Amber Gerber, Eau Claire, WI
- 5:05 p.m.–5:10 p.m. 19.008 Data Blitz**
Severity of Sleep Disordered Breathing in Amnesic MCI and in the MCI Preceding Dementia with Lewy Bodies—Linda Hershey, Oklahoma City, OK
- 5:10 p.m.–5:20 p.m. Audience Q&A**
- 5:20 p.m.–5:30 p.m. Conclusion**

Meeting Schedule

1:00 p.m.–5:00 p.m.

C233   **The Most Important Tool in Your Black Bag: Gallup StrengthsFinder™ Assessment I**

(registration required)

Directors: Julie Anderson, Stillwater, MN, Keri Bischoff, Stillwater, MN

1:00 p.m.–5:30 p.m.

I9 Sleep, Clocks, and Alzheimer's Disease

I10 Remyelination and Repair in Multiple Sclerosis 106

C151  **EMG Skills Workshop: Basic** (registration required)

Director: Ezgi Tiryaki, MD, Minneapolis, MN

2:15 p.m.–3:00 p.m.

 **Mindfulness Meditation for Healthcare Practitioners**

Director: Sarah Mulukutla, MD, MPH, Stamford, CT

3:00 p.m.–4:00 p.m.

 **Dietary Interventions in MS & Medical Marijuana in MS**

Director: Vijayshree Yadav, MD, Portland, OR

3:30 p.m.–4:30 p.m.

 **Ask Me Anything with Dr. Robert Gross, Editor-in-Chief of Neurology**

Director: Robert A. Gross, MD, PhD, FAAN, Rochester, NY

3:30 p.m.–5:30 p.m.

C152 Introduction to Primary Headache Disorders II

Director: Todd D. Rozen, MD, FAAN, Jacksonville, FL

C153 Neurologic Intensive Care III

Director: Alejandro A. Rabinstein, MD, FAAN, Rochester, MN

C154 Neuro-ophthalmology III

Director: Nancy J. Newman, MD, FAAN, Atlanta, GA

C155 Continuum® Test Your Knowledge: A Multiple-choice Question Review II
(registration required)

Director: Aaron E. Miller, MD, FAAN, New York, NY

C156 EEG in Children: Developmental Maturation, Variants, Epilepsy Syndromes, and Identification of Surgical Candidates

Director: Tobias Loddenkemper, MD, Boston, MA

C157 Small Fiber Neuropathies: Sensory, Autonomic, and Both II

Director: Christopher H. Gibbons, MD, FAAN, Boston, MA

C158 The Dystonias: Diagnosis, Treatment, and Update on Causes

Director: Daniel Tarsy, MD, FAAN, Boston, MA

C159 Current Management of Incidental and Asymptomatic Cerebrovascular Lesions

Director: Seemant Chaturvedi, MD, FAAN, FAHA, Miami, FL

C160 How to Win Patient Satisfaction: Understanding the Net Promoter Score

Director: Richard J. Caselli, MD, FAAN, Scottsdale, AZ

C161 Neuroimaging for the General Neurologist: Brain II

Director: Laszlo Mechtler, MD, FAAN, Amherst, NY

C162 Precision Neurology: Precision Directed Genetic Therapeutics

Director: Peter K. Todd, MD, PhD, Ann Arbor, MI

C163 Clinical Neurology for Advanced Practice Providers II

Director: Cynthia L. Comella, MD, FAAN, Chicago, IL

C164 Recent History: Shapers of Modern Neurology II

Director: Stephen G. Reich, MD, FAAN, Baltimore, MD

C165 Sports Neurology: Non-concussion Overview II

Director: Brian W. Hainline, MD, FAAN, Indianapolis, IN

Invited Science: Movement Disorders 103

-  A registration fee is required
-  The program is one of the AAN Leadership University sessions
-  The course is part of a Subspecialty in Focus track
-  The program is one of the I Talk sessions
-  The program is part of the
-  Experimental Learning Area
-  sessions
- 
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Tue-April 19

1:00 p.m.–5:30 p.m.

Integrated Neuroscience Session

110 Remyelination and Repair in Multiple Sclerosis

Coordinators: Myla Goldman, MD, and Eric Klawiter, MD

Program Description: This program will provide audience members with an understanding of where the MS field is currently working in the areas of remyelination and repair. The broad expertise of speakers will discuss this issue from the bench to the bedside where are we in studying this critical issue and what are the next steps towards therapeutics in remyelination and repair.

Faculty will discuss the biology of demyelination and remyelination, how remyelination can be evaluated using advanced imaging (MRI and PET) techniques, and how compounds with remyelinating potential can be screened and selected for further study. The current status of remyelinating therapies in clinical trials will be reviewed. Interactive case discussions will be included.

Upon Completion: Participants should become familiar with the process of remyelination and repair in the central nervous system. Participants should become familiar with emerging remyelinating therapeutics for multiple sclerosis. They should be equipped to improve their management of patients with multiple sclerosis.

Part I

1:00 p.m.–3:00 p.m.

1:00 p.m.–1:10 p.m. Introduction

Myla Goldman, MD, and Eric Klawiter, MD

1:10 p.m.–1:45 p.m. Invited Speaker

The Biology of Demyelination and Remyelination in MS
Jack P. Antel, MD, FAAN, Montreal, QC, Canada

1:45 p.m.–1:50 p.m. 110.001 Data Blitz

IL-33 Expression in MS: Role in Remyelination and Repair —*Subramaniam Sriram, Chandramohan Natarajan, Song-Yi Yao, Charles Spurlock, John Tossberg, Thomas Aune*

1:50 p.m.–1:55 p.m. 110.002 Data Blitz

LINGO-1 Negatively Regulates Oligodendrocyte Differentiation by Blocking the β -integrin Signaling Pathway —*Sha Mi, Guanrong Huang, Xinhua Lee, Zhaohui Shao*

1:55 p.m.–2:05 p.m. Audience Q&A

2:05 p.m.–2:40 p.m. Invited Speaker

Remyelination and Repair in MS: Molecular Mechanisms, Epigenetics, and Therapeutic Development
TBD

2:40 p.m.–2:45 p.m. 110.003 Data Blitz

The Development of a Novel Zebrafish Model of Demyelination Allowing Therapeutic Development to Promote Remyelination in Multiple Sclerosis —*Alexander McGown, Tensore Ramesh, Basil Sharrack*

2:45 p.m.–2:50 p.m. 110.004 Data Blitz

Oligodendroglial Pathway in Multiple Sclerosis: Relation to Low Glycolytic Metabolic Rate of Oligodendrocytes —*Qiao Ling Cui, Malena Rone, Damla Khan, Melissa Bedard, Guillermina Almazan, Samuel Ludwin, Timothy Kennedy, Jack Antel*

2:50 p.m.–3:00 p.m. Audience Q&A

Guided Poster Rounds

3:00 p.m.–3:30 p.m.

110.001 IL-33 Expression in MS: Role in Remyelination and Repair —*Subramaniam Sriram, Chandramohan Natarajan, Song-Yi Yao, Charles Spurlock, John Tossberg, Thomas Aune*

110.002 LINGO-1 Negatively Regulates Oligodendrocyte Differentiation by Blocking the β -integrin Signaling Pathway —*Sha Mi, Guanrong Huang, Xinhua Lee, Zhaohui Shao*

110.003 The Development of a Novel Zebrafish Model of Demyelination Allowing Therapeutic Development to Promote Remyelination in Multiple Sclerosis —*Alexander McGown, Tensore Ramesh, Basil Sharrack*

110.004 Oligodendroglial Pathway in Multiple Sclerosis: Relation to Low Glycolytic Metabolic Rate of Oligodendrocytes —*Qiao Ling Cui, Malena Rone, Damla Khan, Melissa Bedard, Guillermina Almazan, Samuel Ludwin, Timothy Kennedy, Jack Antel*

110.005 Multiple Sclerosis White Matter Demyelination and Remyelination Using T1-, T2- and T2*-Weighted Images: A Post Mortem Validation Study at 7.0 Tesla —*Michael Bradshaw, Assunta Dal-Bianco, Simon Hametner, Siddharama Pawate, Subramaniam Sriram, Seth Smith, John Gore, Brian Welch, Hans Lassmann, Francesca Bagnato*

110.006 Differential Relationship Between Cortical Thinning and Myelin Water Fraction in RRMS and SPMS —*Michael Dayan, Sandra Hurtado Rua, Elizabeth Monohan, Sneha Pandya, Jai Perumal, Nancy Nealon, Timothy Vartanian, Thanh Nguyen, Ashish Raj, Susan Gauthier*

110.007 NDC-1308, a Small Molecule with Remyelinating Activity for Treatment of Secondary Progressive Multiple Sclerosis Patients —*Steven Nye, James Yarger*

110.008 Multiple Intrathecal Dosing of Neural Progenitors Administered to Progressive MS Patients with Disability Is Safe and Improves Disability Scores —*Saud Sadiq, Leslie Blackshear, Gloria Joo, Tamara Vyshkina, Violaine Harris*

110.009 Evidence That the Anti-LINGO-1 Monoclonal Antibody BILB033 Protects Against Multifocal Visual Evoked Potential Amplitude Loss in the Fellow Eye of Subjects with Unilateral Acute Optic Neuritis —*Diego Cadavid, Alexander Klistorner, Yi Chai, Letizia Leocani, Orhan Aktas, Helmut Butzkueven, Tjalf Ziemssen, Focke Ziemssen, Jette Frederiksen, Lei Xu*

110.010 Neurite Orientation Dispersion and Density Imaging (NODDI) at the Onset of Clinically Isolated Syndrome (CIS): New Insights in the Early Microstructural Brain Tissue Changes —*Sara Collorone, Niamh Cawley, Ferran Prados, Sebastien Ourselin, Carmen Tur Gomez, Francesco Grussu, CAM Gandini Wheeler-Kingshott, David Miller, Alan Thompson, Ahmed Toosy, Olga Ciccarelli*

110.011 The Sphingosine 1-phosphate (S1P) Receptor Modulator, Siponimod Decreases Oligodendrocyte Cell Death and Axon Demyelination in a Mouse Model of Multiple Sclerosis —*Seema Tiwari-Woodruff, Hana Yamate-Morgan, Maria Sekyi, Kelli Lauderdale, Jonathan Hasselmann, Anna Schubart*

110.012 Exploring Mechanisms of Multiple Sclerosis Lesion Evolution Using Advanced MRI —*Vanessa Wiggermann, Inga Ibs, Stephanie Schoerner, Enedino Hernandez-Torres, Galina Vorobeychik, Luanne Metz, David Li, Anthony Traboulsee, Alexander Rauscher*

110.013 Practical Experience with Animal Models for Translational Research in MS and NMO —*Melina Jones, Kateryna Schwartz, Michael Levy*

Part II

3:30 p.m.–5:30 p.m.

3:30 p.m.–4:05 p.m. Invited Speaker

Use of Imaging to Evaluate Remyelination and Repair in MS
Daniel S. Reich, MD, PhD, Bethesda, MD

4:05 p.m.–4:10 p.m. 110.005 Data Blitz

Multiple Sclerosis White Matter Demyelination and Remyelination Using T1-, T2- and T2*-Weighted Images: A Post Mortem Validation Study at 7.0 Tesla —*Michael Bradshaw, Assunta Dal-Bianco, Simon Hametner, Siddharama Pawate, Subramaniam Sriram, Seth Smith, John Gore, Brian Welch, Hans Lassmann, Francesca Bagnato*

4:10 p.m.–4:15 p.m. 110.006 Data Blitz

Differential Relationship Between Cortical Thinning and Myelin Water Fraction in RRMS and SPMS —*Michael Dayan, Sandra Hurtado Rua, Elizabeth Monohan, Sneha Pandya, Jai Perumal, Nancy Nealon, Timothy Vartanian, Thanh Nguyen, Ashish Raj, Susan Gauthier*

4:15 p.m.–4:25 p.m. Audience Q&A

4:25 p.m.–5:00 p.m. Invited Speaker

Remyelination and Repair in MS: Therapeutic Compound Screening and Clinical Trials
Ari Green, MD, San Francisco, CA

5:00 p.m.–5:05 p.m. 110.007 Data Blitz

NDC-1308, a Small Molecule with Remyelinating Activity for Treatment of Secondary Progressive Multiple Sclerosis Patients —*Steven Nye, James Yarger*

5:05 p.m.–5:10 p.m. 110.008 Data Blitz

Multiple Intrathecal Dosing of Neural Progenitors Administered to Progressive MS Patients with Disability Is Safe and Improves Disability Scores —*Saud Sadiq, Leslie Blackshear, Gloria Joo, Tamara Vyshkina, Violaine Harris*

5:10 p.m.–5:20 p.m. Audience Q&A

5:20 p.m.–5:30 p.m. Conclusion

- A registration fee is required
- The program is one of the AAN Leadership University sessions
- The course is part of a Subspecialty in Focus track
- The program is one of the I Talk sessions



The program is part of the Experiential Learning Area sessions

3:30 p.m.–5:30 p.m.

Scientific Platform Sessions

S34: Neuro-oncology

3:30 p.m. Presentation of the Neuro-oncology Investigator Award

Sponsored by the American Academy of Neurology and the AAN Neuro-oncology Section and supported by friends of Dr. Jerome Posner.

Recipient:

Eudocia Lee, MD, MPH
Boston, MA

3:45 p.m. Presentation of the Neuro-oncology Scientific Award

Sponsored by the American Academy of Neurology and the AAN Neuro-oncology Section and supported by friends of Dr. WK Alfred Yung.

Recipient:

Jeremy Rich, MD
Cleveland, OH

4:00 p.m. S34.003

The K27M Mutation in Histone H3 Is Present in Supratentorial Midline Diffuse Gliomas in Young Adult Patients —David Munoz, Scott Ryall, Sunit Das, Cynthia Hawkins

4:15 p.m. S34.004

Bevacizumab Impact on Hearing Loss Due to Neurofibromatosis Type 2 Associated Vestibular Schwannomas and Associated Biomarkers —Jaishri Blakeley, Xiobu Ye, Gabriel Duda, Christopher Halpin, Amanda Bergner, Alona Muzikansky, Vanessa Merker, Elizabeth Gerstner, Laura Fayad, Shivani Ahlawat, Michael Jacobs, Rakesh Jain, Eva Dombi, Brigitte Widemann, Scott Plotkin

4:30 p.m. S34.005

Effect of Everolimus on Subependymal Giant Cell Astrocytoma in Patients Being Treated for Renal Angiomyolipoma: Final Results from EXIST-2 —Michael Frost, John Bissler, Klemens Budde, Elena Belousova, Noah Berkowitz, Julie Nolat, J. Kingswood, E Bebin

4:45 p.m. S34.006

The Association of the MTHFR Gene Polymorphisms C677T and

A1298C with Methotrexate-Related Toxicity in Patients with Primary CNS Lymphoma —Sylvia Eisele, Corey Gill, Michelle Pisapia, SoaAe Jones, Tracy Batchelor, Scott Plotkin

5:00 p.m. S34.007

High Frequency of Inaccurate Prognostic Understanding Among Patients with Malignant Glioma —Eli Diamond, Holly Prigerson, Katherine Panageas, Denise Correa, Maria Kryza-Lacombe, Elizabeth Neil, Anne Reiner, Justin Butthorn, William Breitbart, Lisa DeAngelis, Allison Applebaum

5:15 p.m. S34.008

Acute Care Utilization in Glioblastoma (GBM): A Descriptive Analysis of Causes, Burden and Outcomes —Andrea Wasilewski, Jennifer Serventi, Lily Kamalyan, Thomas Wychowski, Nimish Mohile

S35: Behavioral and Cognitive Neurology

3:30 p.m. Presentation of the Norman Geschwind Prize in Behavioral Neurology

Sponsored by the American Academy of Neurology and the AAN Behavioral Neurology Section and endowed through Dr. Geschwind's family, friends, and colleagues; Pfizer Inc; and the Society for Behavioral and Cognitive Neurology.

Recipient:

Madhav R. Thambisetty, MBBS, DPhil
Baltimore, MD

3:45 p.m. Presentation of the S. Weir Mitchell Award

Sponsored by the American Academy of Neurology and endowed by the former American Academy of Neurology Alliance.

Recipient:

Aaron D. Boes, MD, PhD
Boston, MA

4:00 p.m. S35.003

Amyloid- β , Neuropsychiatric Symptoms and the Risk of Incident Mild

Cognitive Impairment: A Prospective Cohort Study —Jennifer Neureiter, Janina Krell-Roesch, Anna Pink, Gorazd Stokin, Rosebud Roberts, Michelle Mielke, Teresa Christianson, Kathleen Spanghel, Val Lowe, Clifford Jack, David Knopman, Bradley Boeve, Ronald Petersen, Yonas Geda

4:15 p.m. S35.004

A Human Brain Network Linking Arousal to Awareness —David Fischer, Aaron Boes, Athena Demertzi, Henry Evrard, Stephen Laureys, Brian Edlow, Clifford Saper, Alvaro Pascual-Leone, Michael Fox, Joel Geerling

4:30 p.m. S35.005

Longitudinal Decline in Speech Fluency in Lewy Body Spectrum Disorder —Sharon Ash, Collin York, Teagan Bisbing, Nam Min, Olga Kofman, Murray Grossman

4:45 p.m. S35.006

Olfactory Dysfunction and Neuroimaging Biomarkers Among Cognitively Normal Individuals —Maria Vassilaki, Michelle Mielke, Teresa Christianson, Yonas Geda, Walter Kremers, Rabe Alhurani, Mary Machulda, David Knopman, Ronald Petersen, Val Lowe, Clifford Jack, Rosebud Roberts

5:00 p.m. S35.007

Mentally Stimulating Activities in Late-Life and the Risk of Incident Mild Cognitive Impairment: A Prospective Cohort Study —Janina Krell-Roesch, Rosebud Roberts, Anna Pink, Gorazd Stokin, Michelle Mielke, Prashanthi Vemuri, Teresa Christianson, Kathleen Spanghel, David Knopman, Ronald Petersen, Yonas Geda

5:15 p.m. S35.008

Assessing the Therapeutic Potential of Epothilone D and an ApoE Mimetic Peptide in a Murine Model of Chronic Traumatic Encephalopathy —Alexandra Rosenberg, Hana Dawson, Daniel Laskowitz

Meeting Schedule

S34 Neuro-oncology

S35 Behavioral and Cognitive Neurology

4:00 p.m.–5:00 p.m.



What in the World is Positive Psychology and How Can It Help Me?

Directors:

Jennifer R. Molano, MD, FAAN, Cincinnati, OH
Heidi M. Schwarz, MD, FAAN, Rochester, NY

Frequently Asked Question

How can I guarantee that I have a seat in a particular session?

The sessions that do not require pre-registration are first-come, first-serve seating. Please arrive early to any session(s) that you must attend. Full session(s) may be overflowed to a second room.

6:30 a.m.–8:30 a.m.

- C166  Acute Neurological Emergencies
- C167  Current State of Alzheimer's Disease Imaging Biomarkers and the Road Ahead
- C168 Clinical E-Pearls
- C169 Clinical Epilepsy I
- C170 Principles of Genomic Medicine: Clinical Exome Sequencing in Neurologic Disease
- C171 Management of Behavioral Disturbances in Dementias
- C172 Neuro Flash: Neuro-ophthalmology
- C173 Therapy of Movement Disorders: A Case-based Approach
- C174 Clinical EMG I
- C175 The Interface Between Infection and Cerebrovascular Disease
- C176 Therapy of Headache
- S36 Update in Muscle Disorders 110
- S37 Risk Factors for Multiple Sclerosis. 110
- S38 General Neurology: Therapeutics 110

8:00 a.m.–9:00 a.m.

-  Telemovement Demonstration

8:30 a.m.–7:00 p.m.

- P5 Poster Session V
Presenters Stand by Posters 5:30 p.m.–7:00 p.m.. 112

9:00 a.m.–11:00 a.m.

Clinical Trials Plenary Session 123

11:00 a.m.–4:00 p.m.

Exhibit Hall
Visit the exhibit hall for a look at the latest products and services available in the neurologic industry. You may also learn about programs you can support to help those suffering from neurologic disorders. Lunch will be served. The exhibits will be open at this time.

1:00 p.m.–2:00 p.m.

-  Personalized Neurogenomic Medicine
-  Integrating Management of Activity and Exercise in Routine Clinical Practice

1:00 p.m.–3:00 p.m.

- C177 Therapy in Neurology III
- C178 Clinical Epilepsy II
- C179 Sports Concussion and Other Mild Concussive Injuries I
- C180 Genomic Neurology Workshop: Developing Practical Knowledge of Tools and Concepts Through Case Studies I *(registration required)*
- C181 Multiple Sclerosis Therapy: Disease-modifying Treatment I

- C182 Neuro-otology I
- C183 Clinical EMG II
- C184 Navigating Primary Brain Tumors for the Neurologist I
- C185 Autism Spectrum Disorders - What We Know and Where We Are Going
- C186 Neurologic Case Studies in Pregnancy I
- C187 Rehabilitation in Neurology
- C188  Clinical Uses of Botulinum Toxin for Headache Skills Workshop *(registration required)*
- S39 Aging and Dementia: Pathology and Imaging . . . 124
- S40 Movement Disorders: Parkinson's Disease Clinical Trials and Therapeutics 124
- S41 Advanced Neuroimaging in Multiple Sclerosis. . . 124
-  Ask the Expert: Telemedicine

1:00 p.m.–5:00 p.m.

- C234   The Most Important Tool in Your Black Bag: Gallup StrengthsFinder™ Assessment II *(registration required)*

1:00 p.m.–5:30 p.m.

- C189  Neuromuscular Bedside Rounds Skills Workshop *(registration required)*
- I11  Neurocritical Care and Neuroscience Crossroads: From Bench To Bedside 126
- I12  Amyloid and Beyond: From Bench to Bedside 128

3:00 p.m.–4:00 p.m.

-  Guts & Glory: The importance of Diet & Exercise in Managing Persons with Multiple Sclerosis

3:30 p.m.–4:30 p.m.

-  Mastering EMG Wave Form Recognition Skills in One Hour!

3:30 p.m.–5:30 p.m.

- C190 Therapy in Neurology IV
- C191 Clinical Epilepsy III
- C192 Sports Concussion and Other Mild Concussive Injuries II
- C193  Genomic Neurology Workshop: Developing Practical Knowledge of Tools and Concepts Through Case Studies II *(registration required)*
- C194 Multiple Sclerosis Therapy: Disease-modifying Treatment II
- C195 The Neurology of Social Behavior
- C196 Neuro-otology II

- ⓘ A registration fee is required
- ⚙ The program is one of the AAN Leadership University sessions
- Ⓜ The course is part of a Subspecialty in Focus track
- 📺 The program is one of the I Talk sessions



The program is part of the Experiential Learning Area sessions

- C197** Approach to the Shaky Patient
C198 Clinical EMG III
C199 Navigating Primary Brain Tumors for the Neurologist II
C200 Neurologic Case Studies in Pregnancy II
C201 Neurocysticercosis and Globalization
 Invited Science: Multiple Sclerosis 127
S42 Stroke Mechanism and Modifiers 129
S43 Motor Neuron Disease, Outcome, and Assessment to Therapy in Neuromuscular Disorders
*Presentation of the Sheila Essey Award:
 An Award for ALS Research 129*

7:00 p.m.–10:00 p.m.

Industry Therapeutic Updates 87

Industry-sponsored, non-CME programs will be offered and are open to attendees at no charge. This program provides you the opportunity to learn about current therapies and projects in the industry pipeline.

Please visit AAN.com/view/ITU for more information.

My Wednesday

Time _____ to _____

Program # _____ Program Name _____

Time _____ to _____

Program # _____ Program Name _____

Time _____ to _____

Program # _____ Program Name _____

9:00 a.m.–11:00 a.m. Clinical Trials Plenary Session

Lunch

Time _____ to _____

Program # _____ Program Name _____

Time _____ to _____

Program # _____ Program Name _____

Time _____ to _____

Program # _____ Program Name _____

Wed-April 20

6:30 a.m.–8:30 a.m.

Scientific Platform Sessions

S36: Update in Muscle Disorders

6:30 a.m. S36.001

Anti-cN1A Autoantibody Seropositivity Is Associated with Increased Mortality Risk in Inclusion Body Myositis —James Lilleker, Anke Rietveld (joint first author), Umesh Badrising, Olivier Benveniste, Karina Gheorghe, Michael Hanna, Megan Herbert, David Hilton-Jones, Janine Lamb, Bryan Lecky, Ingrid Lundberg, Pedro Machado, Kubéraka Mariampillai, James Miller, Matt Parton, Maikel Peeters, Stephen Pye, Mark Roberts, Sabrina Sacconi, Christiaan Saris, Robert Cooper, Ger Pruijn, Hector Chino, Baziel van Engelen

6:45 a.m. S36.002

Limb Girdle Muscular Dystrophy Due to Calpainopathy Also Exists in a Dominantly Inherited Form —John Vissing, Rita Barresi, Nanna Witting, Marijke van Ghelue, Laurence Bindoff, Straub Volker, Hanns Lochmuller, Christoph Wahl, Christoffer Jonsrud, Morten Duno

7:00 a.m. S36.003

Disease-Specific Splicing Changes Are Seen in Children with Congenital Myotonic Dystrophy —Donald McCorquodale, Katie Mayne, Diane Dunn, Brith Otterud, Nicholas Johnson, Robert Weiss

7:15 a.m. S36.004

A Novel Glycogenin-1 Gene Mutation in a Family with Late-onset Proximal Myopathy —Corrado Angelini, Marina Fanin, Vincenzo Nigro, Annalaura Torella, Marco Savarese

7:30 a.m. S36.005

Silencing of Myotonic Dystrophy Protein Kinase (DMPK) Does Not Affect Cardiac or Muscle Function in Mice —Samuel Carrelli, Ellie Carrelli, David Auerbach, Sanjay Pandey, Frank Bennett, Robert Dirksen, Charles Thornton

7:45 a.m. S36.006

Electrical Impedance Myography Is Reliable and Correlates to Measures of Facioscapulohumeral Muscular Dystrophy Disease Severity —Jeffrey Statland, Chad Heatwole, Katy Eichinger, Nuran Dilek, William Martens, Alrabi Tawil

8:00 a.m. S36.007

Exercise Training Normalizes Mitochondrial Function in Myopathies

Due to Heteroplasmic Mitochondrial DNA (mtDNA) Mutations —Ronald Haller

8:15 a.m. S36.008

Revisiting the Clinical, Histochemical and Molecular Spectrum of Adult-Onset AdPEO Associated with the C10Orf2 (PEO1) Mutation —Grainne Gorman, Kate Craig, Carl Fratter, Yi Shiao Ng, Andrew Purvis, Robert Field, Emma Blakely, Joanna Poulton, Robert McFarland, Doug Turnbull, Robert Taylor

S37: Risk Factors for Multiple Sclerosis

6:30 a.m. S37.001

Dietary Intake of Sodium and Other Minerals and the Risk of Multiple Sclerosis —Marianna Cortese, Tanuja Chitnis, Alberto Ascherio, Cassandra Munger

6:45 a.m. S37.002

Increased Sodium Intake Is Not Associated with MS Activity or Progression in BENEFIT —Kathryn Fitzgerald, Cassandra Munger, Mark Freedman, Hans Hartung, Xavier Montalban, Gilles Edan, Frederik Barkhof, Ernst-Wilhelm Radue, Ludwig Kappos, Gustavo Suarez, Alberto Ascherio

7:00 a.m. S37.003

Smoking Cessation Decelerates Brain Volume Loss in Patients with Multiple Sclerosis —Navid Seraji-Bozorgzad, Fen Bao, Sara Razmjou, Christina Caon, Alexandros Tselis, Carla Santiago Martinez, Imad Zak, Evanthis Bernitsas, Omar Khan

7:15 a.m. S37.004

Physical Comorbidities Are Associated with an Increased Risk of Psychiatric Comorbidity in Multiple Sclerosis —Ruth-Ann Marrie, Scott Patten, Jamie Greenfield, Helen Tremlett, Christina Wolfson, Sharon Warren, Larry Svenson, Nathalie Jette, John Fisk

7:30 a.m. S37.005

Multiple Sclerosis Lesions Show Perturbations in Cerebral Microbiota —William Branton, Jian Lu, Michael Surette, Robert Holt, John Lind, Jon Laman, Christopher Power

7:45 a.m. S37.006

Novel Multiple Sclerosis Genetic Risk Factors Are Involved in Epigenetic

Regulation —Dorothea Buck, Till Andlauer, Antonios Bayas, Klaus Berger, Achim Berthele, Elisabeth Binder, Theresa Dankowski, Andre Franke, Ralf Gold, Stefan Herms, Georg Homuth, Karl-Heinz Joeckel, Tim Kacprowski, Bernd Kieseier, Tania Kuempfel, Matthias Laudes, Wolfgang Lieb, Volker Limmroth, Ralf Linker, Susanne Moebus, Martina Mueller-Nurasyid, Antonella Mulas, Markus Nothen, Friedemann Paul, Martin Stangel, Jan-Patrick Stellmann, Konstantin Strauch, Bjorn Tackenberg, Florian Then Bergh, Hayrettin Tumani, Frank Weber, Peter Weber, Heinz Wiendl, Brigitte Wildemann, Uwe Zettl, Andreas Ziegler, Ulf Ziemann, Frauke Zipp, Francesco Cucca, Bertram Müller-Myhsok, Bernhard Hemmer

8:00 a.m. S37.007

Grey Matter Lesion Signature of Multiple Sclerosis —Jun-ichi Satoh, Yoshihiro Kino

8:15 a.m. S37.008

Multiple Sclerosis Clinical Characteristics in Molecularly-Defined Patient Populations —Ahmed Enayetallah, Raghavendra Hosur, Richard Ransohoff, Jaya Goyal

S38: General Neurology: Therapeutics

6:30 a.m. S38.001

Edaravone, a Free Radical Scavenger, Delays Symptomatic and Pathological Progression of Wobbler Mouse Motor Neuron Disease —Ken Ikeda, Yasuo Iwasaki

6:45 a.m. S38.002

Hematopoietic Stem Cell Transplantation in Late-Onset Krabbe Disease Halts Demyelination and Axonal Loss: A 4-Year Longitudinal Case Study —Cornelia Laule, Elham Shahinfard, Burkhard Mädl, Irene Vavasour, Jing Zhang, Ritu Aul, David Li, Alex MacKay, Sandra Sirrs

7:00 a.m. S38.003

Phase 2 Open-Label Extension Study (OLE) of Patisiran, an Investigational RNAi Therapeutic for Familial Amyloid Polyneuropathy (FAP) —David Adams, Teresa Coelho, Isabel Conceicao, Marcia Waddington-Cruz, Hartmut Schmidt, Juan Buades, Josep Campistol, Jean Pouget, John Berk, Rick Falzone, Lindsey White,

Brian Bettencourt, Jeff Cehelsky, Sara Nochur, Akshay Vaishnav, Kirsten Gruis, Jared Gollob, Ole Suhr

7:15 a.m. S38.004

Functional and Imaging Studies of the Selective Inhibitor of Nuclear Export (SINE) Compound KPT-350 in a Clinically Relevant Murine Model of Closed Head Injury (CHI) —Claire Drolen, Haichen Wang, Talaighair Venkatraman, Chuan Fang, Yanli Tan, Sharon Tamir, Sharon Shacham, Christopher Lascola, Daniel Laskowitz

7:30 a.m. S38.005

Phase 1 Safety and Pharmacokinetics of the Novel Enzyme Replacement Therapy NeoGAA in Treatment-Naïve and Alglucosidase Alfa-Treated Late-Onset Pompe Disease Patients —Jaya Trivedi, Ans Van Der Ploeg, Richard Barohn, Barry Byrne, Claude Desnuelle, Ozlem Goker-Alpan, Shafeeq Ladha, Pascal Laforet, Eugen Mengel, Alan Pestronk, Jean Pouget, Benedikt Schoser, Volker Straub, Philip Van Damme, John Vissing, Peter Young, Raheel Shafi, Kerry Culm-Merdek, Gerard Short, Loren Pena, and the NeoGAA Investigator Group

7:45 a.m. S38.006

Phase 1 Exploratory Efficacy of the Novel Enzyme Replacement Therapy NeoGAA in Treatment-Naïve and Alglucosidase Alfa-Treated Late-Onset Pompe Disease Patients —Loren Pena, Richard Barohn, Barry Byrne, Claude Desnuelle, Ozlem Goker-Alpan, Shafeeq Ladha, Pascal Laforet, Eugen Mengel, Alan Pestronk, Jean Pouget, Benedikt Schoser, Volker Straub, Jaya Trivedi, Philip Van Damme, John Vissing, Peter Young, Beth Thurberg, Kerry Culm-Merdek, Gerard Short, Ans van der Ploeg, and the NeoGAA Investigator Group

8:00 a.m. S38.007

The Effect of Bolus Volume and Mechanical Forces on the Biodistribution of ASOs Following Lumbar Intrathecal Administration in Cynomolgus Monkeys —Daniel Wolf, Jenna Sullivan, Curt Mazur, Eric Swayze, Berit Powers, Jack Hoppin, Ajay Verma

8:15 a.m. S38.008

Kinetics of ASO Distribution and Pharmacodynamics in the CNS After an Intrathecal Bolus Dose in Rat —Eric Swayze, Berit Powers, Fredrik Kamme, Curt Mazur, Daniel Wolf, Jenna Sullivan, Ajay Verma

- ③ A registration fee is required
- 🎧 The program is one of the AAN Leadership University sessions
- 📅 The course is part of a Subspecialty in Focus track
- 🗣️ The program is one of the I Talk sessions



The program is part of the Experiential Learning Area sessions

Meeting Schedule

6:30 a.m.–8:30 a.m.

S36 Update in Muscle Disorders

S37 Risk Factors for Multiple Sclerosis

S38 General Neurology: Therapeutics

C166 SIF Acute Neurological Emergencies

Director: Paul Alan Nyquist, MD, MPH, Baltimore, MD

C167 SIF Current State of Alzheimer's Disease Imaging Biomarkers and the Road Ahead

Director: Liana Apostolova, MD, FAAN, Indianapolis, IN

C168 Clinical E-Pearls

Director: Robert M. Pascuzzi, MD, FAAN, Indianapolis, IN

C169 Clinical Epilepsy I

Director: Tracey A. Milligan, MD, FAAN, Boston, MA

C170 Principles of Genomic Medicine: Clinical Exome Sequencing in Neurologic Disease

Director: Brent L. Fogel, MD, PhD, Los Angeles, CA

C171 Management of Behavioral Disturbances in Dementias

Director: Maria Katakis, MD, PhD, Columbus, OH

C172 Neuro Flash: Neuro-ophthalmology

Director: Valerie Biousse, MD, Atlanta, GA

C173 Therapy of Movement Disorders: A Case-based Approach

Director: Stephen G. Reich, MD, FAAN, Baltimore, MD

C174 Clinical EMG I

Director: Ruple S. Laughlin, MD, Rochester, MN

C175 The Interface Between Infection and Cerebrovascular Disease

Director: Reza Behrouz, DO, San Antonio, TX

C176 Therapy of Headache

Director: Stephanie J. Nahas, MD, FAAN, Philadelphia, PA

8:00 a.m.–9:00 a.m.

1 Telemovement Demonstration

Directors: Eric Anderson, MD, PhD, Decatur, GA
Jaime Hatcher-Martin, MD, Atlanta, GA

8:30 a.m.–7:00 p.m.

P5 Poster Session V 112

9:00 a.m.–11:00 a.m.

Clinical Trials Plenary Session 123

11:00 a.m.–4:00 p.m.

Exhibit Hall

1:00 p.m.–2:00 p.m.

1 Personalized Neurogenomic Medicine

Director: Joseph J. Higgins, MD, FAAN, Marlborough, MA

Health & Wellness Integrating Management of Activity and Exercise in Routine Clinical Practice

Director: Lisa M. Shulman, MD, Baltimore, MD

ITALKS

I Talks Offer Dynamic, Interactive Learning

Location: Room 110

I Talks are dynamic, one-hour programs at the 2016 AAN Annual Meeting that promote innovation, audience participation, and interaction. Learn how to get the most out of the AAN's apps and online resources; join discussions about the latest standards for measuring quality in neurology and hot-topic ethical issues physicians are facing today; and participate in social media Q+A's and a live neurology exam. Live, real-time intraoperative monitoring will demonstrate the growing importance of the use of telemedicine and include discussion of how live patient interactions are set up.

Learn more at AAN.com/view/ITalks.

Wed - April 20

8:30 a.m.–7:00 p.m.

Poster Session

P5 Poster Session V

Presenters Stand by Posters 5:30 p.m.–7:00 p.m.

Poster Discussion Session: Neuromuscular and Clinical Neurophysiology

Eight abstracts have been selected for presentation during a poster discussion session. Authors will present a 5-minute data blitz presentation.

In addition to the regular poster time, authors also have a specific time slot over lunch. Times below are standard across poster sessions.

Discussion: 11:45 a.m.–11:50 a.m.

P5.001 Evaluation of Mitochondrial Function in CHCHD10 Mutation—*Jianhua Yan, Kreshnik Ahmeti, Nailah Siddique, Eanna Barra Ryan, Thomas John Lukas, Han-Xiang Deng, Lisa M Kinsley, Shi Yong, Yi Yang, Ma Yongchao, Miller Nimrod, Nicola Corbett, Daniel Nicholson, Teepu Siddique*

Discussion: 11:50 a.m.–11:55 a.m.

P5.002 Ataluren Confirmatory Trial in DMD: Effect of Ataluren on Activities of Daily Living in Nonsense Mutation Duchenne Muscular Dystrophy—*Ros Quinlivan, Xiaohui Luo, G. Elfring, Hans Kroger, Peter Riebling, Tuyen Ong, Robert Spiegel, Stuart Peltz, Jan Kirschner*

Discussion: 11:55 a.m.–12:00 p.m.

P5.003 Adaptive Design Single Center Phosphodiesterase Type 4 (PDE4) Inhibitor - Ibudilast (MN-166-ALS-1201) Phase 1b/2a Clinical Trial Double-Blind

(DB) with Open Label Extensions (OLE) [NCT02238626] for Amyotrophic Lateral Sclerosis (ALS) Patients [1] Not Requiring Non-Invasive Ventilation (no-NIV) Up to 5 Years (Early Cohort-EC) and [2] Requiring Non-Invasive Ventilation (NIV) Up to 10 Years (Advanced NIV Cohort-ANC) from Disease Onset - Behavior of Creatinine As a Biomarker in Short Clinical Trials—*Benjamin Brooks, Elena Bravver, Mohammed Sanjak, Velma Langford, Donna Graves, Linda Moore, Cynthia Lary, Allison Newell-Sturdivant, Priscilla Russo, Maryanne Burdette, Nicole Lucas, Charity Patterson, William Anderson, William Bockenek, Urvi Desai, Scott Lindblom, Joanna Dojillo, Kazuko Matsuda, Yuichi Iwaki*

Discussion: 12:00 p.m.–12:05 p.m.

P5.004 Interim Results of a Phase 2 Clinical Study of Nusinersen (ISIS-SMNRx) in Patients with Infantile-Onset Spinal Muscular Atrophy—*Richard Finkel*

Claudia Chiriboga, Jiri Vajsar, John Day, Jacqueline Montes, Darryl De Vivo, Mason Yamashita, Frank Rigo, Gene Hung, Eugene Schneider, Daniel Norris, Shuting Xia, Frank Bennett, Kathie Bishop

Discussion: 12:05 p.m.–12:10 p.m.

P5.005 A Comparison of the Effects of Deflazacort and Prednisone Versus Placebo on Timed Functional Tests in Boys with Duchenne Muscular Dystrophy—*James Meyer, Timothy Cunniff, Stephen Wanaski, Jordan Dubow*

Discussion: 12:10 p.m.–12:15 p.m.

P5.006 Should Motor Function Determine the Timing of Scoliosis Surgery in Spinal Muscular Atrophy (SMA)?—*Sally Dunaway Young, Jacqueline Montes, Rachel Salazar, Allan Glanzman, Amy Pasternak, Janet Quigley, Elizabeth Ciurylo, Susan Riley, William Martens, Richard Gee, Tina Duong,*

Matthew Civitello, Claudia Chiriboga, Gihan Tennekoon, John Day, Richard Finkel, Basil Darras, Darryl De Vivo

Discussion: 12:15 p.m.–12:20 p.m.

P5.007 Electrical Impedance Myography Correlates to Muscle Pathology on MRI and in Muscle Biopsies in Facioscapulohumeral Muscular Dystrophy Type 1—*Melanie Glenn, Omar Jawdat, Ahmad Abuzinadah, Duaa Jabari, Phil Lee, Ayla McCalley, Laura Herbelin, April McVey, Mamatha Pasnoor, Mazen Dimachkie, Richard Barohn, Jeffrey Statland*

Discussion: 12:20 p.m.–12:25 p.m.

P5.008 Hu Antigen R Is a Positive Regulator of ALS-Associated RNA Binding Proteins TDP-43 and FUS—*Liang Lu, Lei Zheng, Ying Si, Peter King*

e-Poster Session: Neuromuscular Disease and Epilepsy

Ten e-posters in six neurologic topics have been selected for on-site, interactive display. e-Posters will be grouped in a separate area where attendees are invited to explore more deeply through touch screen displays.

P5.009 Comparing Anti-Epileptic Drug Preferences Between Neurologists and Patients: Results from a National Survey and Discrete Choice Experiment—*Alan Ettinger, Fulton Velez, John Carter*

P5.010 RTMS Induces Changes in FDG Brain Metabolism in Patients with Epilepsy—*Laura Seynaeve, Bliede Van den Broeck, Patrick Dupont, Karolien Goffin, Wim Van Paesschen*

P5.011 Validating StatNet EEG As a Reliable and Effective Tool in the Diagnosis of Non-Convulsive Status Epilepticus: Phase 2—*Alexandra Voll, Dianne Dash, Wes Sutherland, Lizbeth Hernandez-Ronquillo, Jose Tellez Zenteno, Farzad Moien Afshari*

P5.012 Status Epilepticus in Patients with SMART—*Pei'en Fan, Heiber Gabriel, Elizabeth Gerard, Stephan Schuele*

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P5.386 Predictors of Cognitive Decline in FXTAS — *Joash Lazarus, Lisa Shubeck, Emily Allen, Debra Hamilton, Jennifer Choi, Stephanie Sherman, Jorge Juncos*

P5.387 Long-Term Effect of Epoetin Alfa on Clinical and Biochemical Markers in Friedreich Ataxia — *Francesco Sacc, Giorgia Puorro, Angela Marsili, Antonella Antenora, Chiara Pane, Carlo Casali, Christian Marcotulli, Giovanni Defazio, Daniele Iuzzi, Chiara Tatillo, Donata Cambriglia, Giuseppe Schiano di Cola, Luigi Giuliani, Vincenzo Guardasole, Andrea Salzano, Antonio Ruvolo, Anna De Rosa, Antonio Cittadini, Giuseppe De Michele, Alessandro Filla*

P5.388 EPI-743 for Friedreich's Ataxia Patients with Point Mutations — *Kelly Sullivan, Mary Freeman, Jessica Shaw, Clifton Gooch, Yangxin Huang, Matthew Klein, Guy Miller, Theresa Zesiewicz*

P5.389 Difficulties in Making an Antemortem Diagnosis of Sporadic Fatal Insomnia, a Rare Form of Sporadic Prion Disease — *Parg Lee, Sandra Camelo-Piragua, Ignazio Cali, Mark Cohen, Vikram Shakkottai*

P5.390 Co-Existence of Novel KIF1A Mutation (SPG30) and Intronic Expansion of BEAN (SCA31) in a Family: Clinical and Genetic Characterization—*Arika Hasegawa, Ryoko Koike, Akio Kawakami, Kishin Koh, Yoshihisa Takiyama, Takeshi Ikeuchi*

P5.391 Novel CACNB4 Variant Associated with a Case of Progressive Ataxia—*Alexandra Lloyd-Smith, Shyamal Mehta, Sian Spacey*

P5.392 X-linked Spinocerebellar Ataxia (SCA) Type 1A: a Novel Late Onset Phenotype of the ATP2B3 Mutation—*Christopher Stephen, Kathleen Sweadner, John Penniston, Jeremy Schmammann*

P5.393 Neuropathology of Parkinsonism in Spinocerebellar Ataxia Type 6: a Case Report—*Diviya Kaul, Keith Morley, Marius Pakalnikis, William Hickey, Stephen Lee*

Movement Disorders: Ataxia and Dystonia

P5.394 A Mutation Causing Reduced BK Channel Activity Leads to Cognitive Impairment and Progressive Cerebellar Ataxia—*Julia Staisch, Xiaofei Du, Joao Carvalho-de-Souza, Tomoya Kubota, Francisco Bezanilla, Christopher Gomez*

P5.395 49 Year Old Male with Rapidly Progressive Cerebellar Ataxia Secondary to Non-Paraneoplastic Voltage-Gated Calcium Channel Antibodies (VGCC): Case Report—*Shnehal Patel, Ilia Itin*

P5.396 Prolonged Cerebellar Syndrome After Legionnaire's Disease—*Brandon Barton*

P5.397 The Broadening Clinical Spectrum Associated with *ATP1A3* Mutations—*Inge Meijer, Naomi Lubarr, Paul Greene, Steven Frucht, Deborah Raymond, William Severt, Vicki Shanker, Rivka Sachdev, Susan Bressman, Laurie Ozellus, Rachel Saunders-Pullman*

P5.398 Likely Underrecognized Mosaicism in Genetic Disease: High Frequency of Mosaic Mutations in ADCY5-Related Dyskinesia—*Dong-Hui Chen, Jennifer Friedman, Aurélie Méneret, Emily Bonkowski, Fuki Hisama, Marie Davis, Phillip Swanson, Saundar Bernes, Marie Vidailhet, Emmanuel Roze, Thomas Bird, Wendy Raskind*

P5.399 Clinical Characteristics and Natural History of Oromandibular and Lingual Dystonia—*Laura Scorr, Stewart Factor, H. Jinnah*

P5.400 Functional Dystonia: 10-year Experience in a Specialized Dystonia Clinic—*Christopher Stephen, David Perez, Nutan Sharma*

P5.401 The Role of Acetyl-L-Carnitine Levels and 95A>G Mutations in the SLC22A5 Gene on Parkinson's Disease in Faroe Islands—*Maria Skaalum Petersen, Jónrit Halling, Debes Christiansen, Sára Bech*

P5.402 Preclinical Model of Parkinson's Disease Using Circuit Specific Optogenetics—*Neel Patel, Vishakh Iyer, Kala Venkiteswaran, Erin Handly, Caitlin White, Naila Iqbal, Pooja Sridhar, Kedar Thiagarajan, Zhiwen Liu, Charu Ramakrishnan, Karl Deisseroth, Thyagarajan Subramanian*

Frequently Asked Questions

Do I need to register for the Annual Meeting courses that I want to take?

No. A big change this year is that most courses no longer require pre-registration. You are free to attend any course you like. Courses that require pre-registration are clearly marked.

How do I plan my Annual Meeting schedule?

The Annual Meeting Mobile App and Itinerary Planner (available within the registration site) are optional tools available to assist you in customizing your itinerary. You can edit your itinerary at any time; adding course(s) or event(s) to your schedule does not require you to attend.

During the meeting, you are free to move between sessions, as you wish. We only ask that you are mindful of the speakers and other attendees and enter and exit with as little disruption as possible.

How can I guarantee that I have a seat in a particular session?

The sessions that do not require pre-registration are first-come, first-serve seating. Please arrive early to any session(s) that you must attend. Full session(s) may be overflowed to a second room.

How can I access my course syllabi?

New for 2016, all attendees will receive complimentary online access to all Annual Meeting Syllabi for one year. Notifications will be sent out prior to the meeting with instructions for access. Attendees may choose to upgrade to a USB drive for permanent access.

Wed - April 20

AAN 2016 Annual Meeting Experiential Learning Areas

Stop by the new Experiential Learning Areas at the Annual Meeting to experience a new way of learning through interaction, engagement, and exploration.



Solutions for Everyday Practice

Get information on new payment models like MACRA and Neurology Compensation and Productivity data that you can use to improve your day-to-day practice. Engage one-on-one with subject matter experts over such featured daily topics as neurology business strategies, solo/small practitioners, ICD-10-CM, advance care planning, PQRS, and telemedicine.



Taking Care of Yourself So That You Can Take Care of Others!

Get inspired and motivated about the importance of exercise and nutrition for well-being and as part of a treatment program for patients. Activities include morning yoga sessions, seated massages, meditation area, step challenge, and a presentation stage.



Recognizing Breakthroughs in Research that led to Improved Patient Care

Discover breakthroughs in research that have led to improved patient care through the interactive touch-screen video wall featuring discovery timelines, information about the AAN research program and the expanded Neuroscience Is... campaign, and examples of how the AAN advocates for additional research dollars.



Explore Academy Products, Programs, and Services

This unique learning environment will allow you to explore Academy programs and services on your own, ask staff and experts questions, or purchase your favorite programs like Annual Meeting On Demand or *Continuum*®. Demonstrations of NeuroSAE®, NeuroPISM, NeuroLearnSM, *Neurology*®, *Neurology Now*®, *Neurology Today*®, AAN Guidelines, EBM online for residents, and Axon RegistryTM will be available—just to name a few! The Learning Lab also features the exciting new HeadTalks stage where 15-minute presentations modeled after TED talks will be offered.



Interactive Learning, Innovative Ideas

Improve your practice through dynamic one-hour programs that promote innovation, audience participation, and interaction. Presentations include using AAN apps and online resources, measuring quality in neurology, hot topic ethical issues, live neuro exam presentation, live real-time intraoperative monitoring sessions, telemedicine, and more.



Choosing a Track, Changing Tracks, Staying on Track

Get useful, comprehensive career-development advice at the three focus areas: choosing a track, staying on track, and changing tracks. The area has something for everyone—medical students, residents, fellows, junior faculty, senior faculty, and advanced practice providers—with activities that include one-on-one mentoring sessions, a presentation stage, advice on how to manage each career stage with experts telling their own stories, talks on how to establish and maintain effective partnerships between neurologists and advanced practice providers, advice on conflict resolution, and tips on interviewing and giving and receiving feedback.

Clinical Trials Plenary Session

Wednesday, April 20, 2016 9:00 a.m. to 11:00 a.m.

This midday seminar covers important clinical topics identified from other society meetings that affect patient care. The latest updates within several clinical trials conducted over the course of the last year will be presented with an open panel discussion at the conclusion.

Moderators



Natalia S. Rost, MD, FAAN
Vice-Chair, AAN Science Committee



Petra Kaufmann, MD, FAAN
Member, AAN Science Committee



Ocrelizumab No Evidence of Disease Activity (NEDA) Status at 96 Weeks in Patients with Relapsing Multiple Sclerosis: Analysis of the Phase III Double-Blind, Double-Dummy, Interferon beta-1a-Controlled OPERA I and OPERA II Studies

Anthony Traboulsee MD
University of British Columbia
Vancouver, BC, Canada



Efficacy and Safety of Dichlorphenamide for the Treatment of Periodic Paralysis: a Phase 3 Randomized, Double-Blind, Parallel-Group, Placebo-Controlled Trial

James Burge, MD
University College of London
London, United Kingdom



CODEL (Alliance-N0577; EORTC-26081/22086; NRG-1071; NCIC-CEC-2): Phase III Randomized Study of RT vs. RT+TMZ vs. TMZ for Newly Diagnosed 1p/19q-Codeleted Anaplastic Oligodendroglial Tumors. Analysis of Patients Treated on the Original Protocol Design

Kurt A. Jaeckle, MD, FAAN
Mayo Clinic
Jacksonville, FL



Interim Results from a Phase 2/3 Study of the Efficacy and Safety of Ex Vivo Gene Therapy with Lentiviral Vector (Lenti-D) for Childhood Cerebral Adrenoleukodystrophy

Florian Eichler, MD
Massachusetts General Hospital
Boston, MA



Insulin Resistance Intervention After Stroke (IRIS) Trial: Secondary Stroke Prevention, Phase 3 Trial

Karen L. Furie, MD, MPH
Rhode Island Hospital/Warren Alpert Medical School at Brown University
Providence, RI



KINECT 3: A Randomized, Double-Blind, Placebo-Controlled Phase 3 Trial of Valbenazine (NBI-98854) for Tardive Dyskinesia

Robert A. Hauser, MD, MBA, FAAN
University of South Florida
Tampa, FL



A 5-HT₆ Antagonist as Adjunctive Therapy to Cholinesterase Inhibitors in Patients with Mild-to-Moderate Alzheimer's Disease: Idalopirdine in Phase III

Alireza Atri, MD, PhD
California Pacific Medical Center Research Institute
San Francisco, CA

Wed-April 20

1:00 p.m.–3:00 p.m.

Scientific Platform Sessions

S39: Aging and Dementia: Pathology and Imaging

1:00 p.m. S39.001

Deep Clinical and Neuropathological Phenotyping of Pick's Disease —*David Irwin, Johannes Brettschneider, Corey McMillan, Felicia Cooper, Christopher Olm, Steven Arnold, Vivanna Van Deerlin, William Seeley, Bruce Miller, Edward Lee, Virginia Lee, Murray Grossman, John Trojanowski*

1:15 p.m. S39.002

Clinicopathological Correlations of AD Neuropathology in the Logopenic Variant of Primary Progressive Aphasia —*Lucia Giannini, David Irwin, Corey McMillan, Sharon Ash, David Volk, Anna Isenberg, Katya Rascofsky, John Trojanowski, Murray Grossman*

1:30 p.m. S39.003

Relationship Between Hippocampal Sclerosis and TDP-43, and Duration of the Symptoms of Dementia in Alzheimer's Disease Patients —*Oscar Lopez, Julia Kofler, Alexis Steinberg, James Becker, Robert Sweet, Sarah Berman, Eric McDade, Eric Rodriguez, Ilyas Kamboh, William Klunk*

1:45 p.m. S39.004

Validity of Clinical Research Criteria for Chronic Traumatic Encephalopathy: The Understanding Neurologic Injury and Traumatic Encephalopathy (UNITE) Study —*Jesse Mez, Todd Solomon, Daniel Daneshvar, Philip Montenegro, Patrick Kiernan, Lauren Murphy, Joshua Kriegel, Bobak Abdolmohammadi, Michael Alosco, Thor Stein, Lee Goldstein, Douglas Katz, Neil Kowall, Robert Cantu, Robert Stern, Ann McKee*

2:00 p.m. S39.005

Plasma Neurofilament Light Chain Predicts Progression in Progressive Supranuclear Palsy —*Julio Rojas-Martinez, Anna Karydas, Jee Bang, Richard Tsai, Kaj Blennow, Victor Liman, Joel Kramer, Howard Rosen, Bruce Miller, Henrik Zetterberg, Adam Boxer*

2:15 p.m. S39.006

Effects of Brain Derived Neurotrophic Factor on White Matter Integrity in Middle-Aged Adults: A Voxel-Based Diffusion Tensor Imaging Study —

Pauline Maillard, Claudia Satizabal, Alexa Beiser, Jayandra Himali, Tai Chen, Ramachandran Vasan, Sudha Seshadri, Charles DeCarli

2:30 p.m. S39.007

Cascading Network Failure Across the Alzheimer's Disease Spectrum —*David Jones, David Knopman, Jeffery Gunter, Jonathan Graff-Radford, Prashanthi Vemuri, Bradley Boeve, Ronald Petersen, Michael Weiner, Clifford Jack*

2:45 p.m. S39.008

An MRI Atlas for Imaging and Pathologic Correlation Studies in Alzheimer's Disease —*Mekala Raman, Christopher Schwarz, Melissa Murray, Val Lowe, Dennis Dickson, Clifford Jack, Kejal Kantarci*

S40: Movement Disorders: Parkinson's Disease Clinical Trials and Therapeutics

1:00 p.m. S40.001

RTMS for On-Freezers with Advanced PD: A Long Term Follow Up Study —*Hatem Shehata, Nevin Shalaby, Mohamed El-Tamawy, Shaimaa Jaafari*

1:15 p.m. S40.002

Continuous Subcutaneous Administration of Carbidopa Enhances Levodopa Pharmacokinetics: A Series of Studies Conducted in the Pig, Mouse and Healthy Volunteers —*Oron Yacoby-Zeevi, Eduardo Zawoznik, Irena Weinstock, Mara Nemas, Yossi Caraco, Peter LeWitt, Sheila Oren, Ronit Shaltiel-Karyo*

1:30 p.m. S40.003

Clinical Outcomes in Parkinson's Disease for Asleep Deep Brain Stimulation with Electrodes Placed Using Intraoperative Imaging Versus Awake Deep Brain Stimulation with Microelectrode Recording —*Matthew Brodsky, Shannon Anderson, Mara Seier, Jennifer Wilhelm, Kitty Leelaamornvichet, Aaron Vederman, Kim Burchiel*

1:45 p.m. S40.004

EPI-743 Improves Motor Function and CNS Biomarkers in PD: Results from a Phase 2A Pilot Trial —*Theresa Zesiewicz, Kevin Allison, Israt Jahan, Jessica Shaw,*

F. Murtagh, Tracy Jones, Clifton Gooch, Jason Salemi, Matthew Klein, Guy Miller, Kelly Sullivan

2:00 p.m. S40.005

Nilotinib Improves Motor Skills, Cognition and Autonomic Function in Open-Label Phase I Clinical Trial in Parkinsons Disease with Dementia and Lewy Body Dementia —*Fernando Pagan, Ellen Valadez, Yasar Torres-Yaghi, Michaeline Hebron, Ramsey Falconer, Sean Rogers, Reversa Mills, Howard Helen, Barbara Wilmarth, Charbel Moussa*

2:15 p.m. S40.006

Nilotinib Significantly Alters CSF Biomarkers and Increases Endogenous Dopamine in Open-Label Phase I Clinical Trial in Parkinsons Disease with Dementia and Lewy Body Dementia —*Charbel Moussa, Michaeline Hebron, Xiaoxia Li, Huang Xu, Ellen Valadez, Torres-Yaghi Yasar, Sean Rogers, Drew Falconer, Reversa Mills, Fernando Pagan*

2:30 p.m. S40.007

A Double Blind Investigation of Efficacy and Safety of IncobotulinumtoxinA in Parkinson Disease Tremor- A Customized Injection Approach —*Shivam Mittal, Rezvan Rostami, Duarte Machado, Diana Richardson, Bahman Jabbari*

2:45 p.m. S40.008

Computerized Alerts Can Decrease Ordering of Dopamine Blocking Drugs for Hospitalized Patients with Parkinson's Disease —*Scott Kraft*

S41: Advanced Neuroimaging in Multiple Sclerosis

1:00 p.m. S41.001

Structural Disconnection Is Responsible for Increased Resting State Functional Connectivity in Multiple Sclerosis —*Kevin Patel, Sean Tobyn, Boratyn Daria, John Bireley, Victoria Smith, Eric Klawiter*

1:15 p.m. S41.002

An Abnormal Periventricular Gradient in Magnetisation Transfer Ratio Occurs Early in Multiple Sclerosis —*J William Brown, Matteo Pardini, Wallace Brownlee, Kryshani Fernando, Rebecca Samson, Claudia Nandini Wheeler-Kingshott, Olga Ciccarelli, David Miller, Declan Chard*

1:30 p.m. S41.003

Neurite Orientation Dispersion and Density Imaging (NODDI) Is Sensitive to Microstructural Damage Related to Disability in Relapse-Onset MS —*Wallace Brownlee, Patricia Alves Da Mota, Ferran Prados, Torben Schneider, M. George Cardoso, Daniel Altmann, Sebastian Ourselin, Claudia Gandini Wheeler-Kingshott, Olga Ciccarelli, David Miller*

1:45 p.m. S41.004

Leptomeningeal Enhancement on 7T MRI in Multiple Sclerosis Is Associated with Cortical Gray Matter Atrophy —*Daniel Harrison, Kevin Wang, Fiol Julie, Walter Royal, Izlem Izbudak*

2:00 p.m. S41.005

Cortical [11C]PBR28 PET Measures of Microglial Inflammation Explain Differences in Cognitive Performance of People with MS —*Gourab Datta, Marco Battaglini, Gregory Scott, Özgür Yaldizli, Andre Santos-Ribeiro, Eugenii Rabiner, Roger Gunn, David Owen, Omar Malik, Olga Ciccarelli, Richard Nicholas, Dawn Langdon, Nicola De Stefano, Paul Matthews*

2:15 p.m. S41.006

Leptomeningeal Contrast Enhancement is Associated with Development of Gray Matter Atrophy Over 5 Years in Multiple Sclerosis —*Robert Zivadinov, Deepa Ramasamy, Sirin Gandhi, Avinash Chandra, Jesper Hagemeier, Niels Bergsland, David Hohnacki, Bianca Weinstock-Guttman*

2:30 p.m. S41.007

Brain Tissue Sodium Concentration in Clinically Isolated Syndrome —*Niamh Cawley, Bhavana Solanky, Ferran Prados, Sara Collorone, Sebastian Ourselin, Claudia Gandini Wheeler-Kingshott, Ahmed Toosy, David Miller, Alan Thompson, Olga Ciccarelli*

2:45 p.m. S41.008

Differential Relationship Between Cortical Thinning and Myelin Water Fraction in RMS and SPMS —*Michael Dayan, Sandra Hurtado Rua, Elizabeth Monohan, Sneha Pandya, Jai Perumal, Nancy Nealon, Timothy Vartanian, Thanh Nguyen, Ashish Raj, Susan Gauthier*

- 📄 A registration fee is required
- 🎧 The program is one of the AAN Leadership University sessions
- 📺 The course is part of a Subspecialty in Focus track
- 🗣️ The program is one of the I Talk sessions



The program is part of the Experiential Learning Area sessions

Meeting Schedule

1:00 p.m.–3:00 p.m.

S39 Aging and Dementia: Pathology and Imaging

S40 Movement Disorders: Parkinson's Disease Clinical Trials and Therapeutics

S41 Advanced Neuroimaging in Multiple Sclerosis

Ask the Expert: Telemedicine

Director: *Eric Anderson, MD, PhD, Decatur, GA*

C177 Therapy in Neurology III

Director: *Steven L. Lewis, MD, FAAN, Chicago, IL*

C178 Clinical Epilepsy II

Director: *Page B. Pennell, MD, Boston, MA*

C179 Sports Concussion and Other Mild Concussive Injuries I

Director: *David W. Dodick, MD, Phoenix, AZ*

C180 Genomic Neurology Workshop: Developing Practical Knowledge of Tools and Concepts Through Case Studies I

(registration required)

Director: *Jeffery M. Vance, MD, PhD, Miami, FL*

C181 Multiple Sclerosis Therapy: Disease-modifying Treatment I

Director: *Bruce A. C. Cree, MD, PhD, MCR, San Francisco, CA*

C182 Neuro-otology I

Director: *Terry D. Fife, MD, FAAN, Phoenix, AZ*

C183 Clinical EMG II

Director: *Mark B. Bromberg, MD, PhD, FAAN, Salt Lake City, UT*

C184 Navigating Primary Brain Tumors for the Neurologist I

Director: *Erin M. Dunbar, MD, Atlanta, GA*

C185 Autism Spectrum Disorders - What We Know and Where We Are Going

Director: *Patricia K. Crumrine, MD, FAAN, Pittsburgh, PA*

C186 Neurologic Case Studies in Pregnancy I

Director: *Mary Angela O'Neal, MD, Boston, MA*

C187 Rehabilitation in Neurology

Director: *Karunesh Ganguly, MD, PhD, San Francisco, CA*

C188 Clinical Uses of Botulinum Toxin for Headache Skills Workshop

(registration required)

Director: *Andrew M. Blumenfeld, MD, Encinitas, CA*

1:00 p.m.–5:00 p.m.

C234 The Most Important Tool in Your Black Bag: Gallup StrengthsFinder™ Assessment II

(registration required)

Directors: *Julie Anderson, Stillwater, MN*
Keri Bischoff, Stillwater, MN



Friday, April 15–Thursday, April 21: 7:00 a.m.–5:30 p.m.
Location: West Level 1

Health & Wellness: Taking Care of Yourself So That You Can Take Care of Others!

Get educated, inspired, and motivate about the importance of taking care of your mental and physical health at this exciting new Experiential Learning Area at the 2016 AAN Annual Meeting. Learn about the importance of interventions, such as exercise and nutrition, for personal well-being and as part of a treatment program for your patients. Recharge with a healthy beverage, receive a free chair massage, participate in fun and functional mental and physical fitness breaks—including yoga and guided meditation sessions—or in lively group discussions, or join the AAN Annual Meeting Step Challenge for a chance to win daily prizes.

Learn more at AAN.com/view/HealthWellness.

Wed-April 20

1:00 p.m.–5:30 p.m.

Integrated Neuroscience Session

111 **SIF** Neurocritical Care and Neuroscience Crossroads: From Bench To Bedside

This program is offered in partnership with the Neurocritical Care Society and the Critical Care and Emergency Neurology Section.

Coordinators: Susanne Muehlschlegel, MD, MPH, and Holly E. Hinson, MD



Program Description: This INS session in neurocritical care will focus on translational discoveries in the Neuro ICU patient population and their potential translation into clinical practice. The field of neurocritical care has evolved rapidly in the last decade, incorporating new technology such as multi-modality monitoring and advanced imaging techniques. Observations gleaned from basic science have illuminated etiologies for previously mysterious entities, including inflammatory encephalitis. This session will highlight these bench to bedside insights, giving participants a grasp of cutting-edge neuroscience as it applies to the care of critically ill patients.

Upon Completion: Participants should be able to describe the evidence base for the use of new technology in the ICU, including multi-modality monitoring. Participants will become familiar with the differential diagnosis and work-up of inflammatory encephalitis, receive updates on emerging areas of research including cortical spreading depression, the use of depth electrodes in the diagnoses of non-convulsive status epilepticus, and become comfortable with the complexities of disorders of consciousness.

Part I

1:00 p.m.–3:00 p.m.

1:00 p.m.–1:10 p.m. Introduction

Susanne Muehlschlegel, MD, MPH, and Holly E. Hinson, MD

1:10 p.m.–1:45 p.m. Invited Speaker

Cortical Spreading Depression
Jed Hartings, PhD, Cincinnati, OH

1:45 p.m.–1:50 p.m. 111.001 Data Blitz

Using the Selective Inhibitor of Nuclear Export (SINE) Compound KPT-350 to Reduce Cortical Circuit Hyperexcitability and Interneuron Cell Loss in the Controlled Cortical Impact (CCI) Model of Traumatic Brain Injury (TBI)—David Cantu, Danielle Croker, Sharon Tamir, Sharon Shacham, Chris Dulla

1:50 p.m.–1:55 p.m. 111.002 Data Blitz

Dynamics of Quantitative EEG Changes During Cerebral Hypoperfusion—Babak Razavi, Kimford Meador

1:55 p.m.–2:05 p.m. Audience Q&A

2:05 p.m.–2:40 p.m. Invited Speaker

ICU Depth EEG vs surface EEG—What Does this Mean?
Jan Claassen, MD, PhD, New York, NY

2:40 p.m.–2:45 p.m. 111.003 Data Blitz

Ganaxolone Administered Intravenously Prevents Behavioral Seizures and Promotes Survival in the Rat Lithium-Pilocarpine Model of Status Epilepticus—Michael Saporito, Julia Tsai, Albena Patroneva, Steve White, Cameron Metcalf, Melissa L. Barker-Haliski

2:45 p.m.–2:50 p.m. 111.004 Data Blitz

Frequency and Time-Course of Epileptiform Abnormalities in Subarachnoid Hemorrhage—Jennifer Kim, Sydney Cash, Eric Rosenthal, M. Westover

2:50 p.m.–3:00 p.m. Audience Q&A

Guided Poster Rounds

3:00 p.m.–3:30 p.m.

111.001 Using the Selective Inhibitor of Nuclear Export (SINE) Compound KPT-350 to Reduce Cortical Circuit Hyperexcitability and Interneuron Cell Loss in the Controlled Cortical Impact (CCI) Model of Traumatic Brain Injury (TBI)—David Cantu, Danielle Croker, Sharon Tamir, Sharon Shacham, Chris Dulla

111.002 Dynamics of Quantitative EEG Changes During Cerebral Hypoperfusion—Babak Razavi, Kimford Meador

111.003 Ganaxolone Administered Intravenously Prevents Behavioral Seizures and Promotes Survival in the Rat Lithium-Pilocarpine Model of Status Epilepticus—Michael Saporito, Julia Tsai, Albena Patroneva, Steve White, Cameron Metcalf, Melissa L. Barker-Haliski

111.004 Frequency and Time-Course of Epileptiform Abnormalities in Subarachnoid Hemorrhage—Jennifer Kim, Sydney Cash, Eric Rosenthal, M. Westover

111.005 Sulfonylurea Receptor-1 As a Novel Biomarker for Cerebral Edema in Patients with Severe Traumatic Brain Injury—Ruchira Jha, Ava Puccio, Sherry Chou, Chung-Chou Chang, Jessica Wallisch, Bradley Molyneaux, Benjamin Zusman, Lori Shutter, Samuel Poloyac, Janesko-Feldman Keri, David Okonkwo, Patrick Kochanek

111.006 GAMES (Glyburide Advantage in Malignant Edema and Stroke) RP: A Phase II Study Toward Preventing Edema After Ischemia—Kevin Sheth, Jordan Elm, Holly Hinson, Bradley Molyneaux, Lauren Beslow, Gordon Sze, Ann-Christin Ostwaldt, Gregory Del Zoppo, J Simard, Sven Jacobson, W. Kimberly

111.007 Extended Clinical Spectrum of Anti-NMDA Receptor Encephalitis in Children—Ajay Goenka, Hiroki Nariai, Mitchell Steinschneider, Alfred Spiro, Vimal Jain

111.008 Persistent EEG Patterns in Anti-NMDA Receptor Encephalitis: Implications for Pathophysiology—Michelle Ubels Van Noord, Evelyn Tecoma, Leena Kansal, Navaz Karanjia, Vicente Iragui-Madoz

111.009 Biomarkers of Vascular Integrity After Traumatic Brain Injury (TBI), and Correlation with Cerebrovascular Reactivity and Phosphodiesterase 5 Inhibition—Yunhua Gong, Christopher Campbell, Bao-Xi Qu, Erika Silverman, Carol Moore, Kimbra Kenney, Ramon Diaz-Arrastia

111.010 GAMES (Glyburide Advantage in Malignant Edema and Stroke) RP Trial: Intermediate Endpoint Analysis As Proof-Of-Concept—W. Taylor Kimberly, Jordan Elm, Holly Hinson, Bradley Molyneaux, Lauren Beslow, Gordon Sze, Ann-Christin Ostwaldt, Gregory Del Zoppo, Marc Simard, Kevin Sheth

111.011 ApoE E3 Allele and DRS Outcome in Patients with Severe Traumatic Brain Injury (TBI)—Lucido Ponce Mejia, Jovany Cruz Navarro, Goodman Jerry, Claudia Robertson

111.012 FTY720 Preserves Blood-Brain Barrier Integrity Following Subarachnoid Hemorrhage in Rats—Abdullah Muhammad, Jennifer Harris, Benjarat Changyaleket, Dale Pelligrino, Hao-liang Xu, Fernando Testai

111.013 WITHDRAWN

Part II

3:30 p.m.–5:30 p.m.

3:30 p.m.–4:05 p.m. Invited Speaker

SUR-1 Channel and Malignant Brain Edema
J. Marc Simard, MD, PhD, Baltimore, MD

4:05 p.m.–4:10 p.m. 111.005 Data Blitz

Sulfonylurea Receptor-1 As a Novel Biomarker for Cerebral Edema in Patients with Severe Traumatic Brain Injury—Ruchira Jha, Ava Puccio, Sherry Chou, Chung-Chou Chang, Jessica Wallisch, Bradley Molyneaux, Benjamin Zusman, Lori Shutter, Samuel Poloyac, Janesko-Feldman Keri, David Okonkwo, Patrick Kochanek

4:10 p.m.–4:15 p.m. 111.006 Data Blitz

GAMES (Glyburide Advantage in Malignant Edema and Stroke) RP: A Phase II Study Toward Preventing Edema After Ischemia—Kevin Sheth, Jordan Elm, Holly Hinson, Bradley Molyneaux, Lauren Beslow, Gordon Sze, Ann-Christin Ostwaldt, Gregory Del Zoppo, J. Simard, Sven Jacobson, W. Kimberly

4:15 p.m.–4:25 p.m. Audience Q&A

4:25 p.m.–5:00 p.m. Invited Speaker

Autoimmune Encephalitis and Epilepsy
Josep O. Dalmau, MD, PhD, Barcelona, Spain

5:00 p.m.–5:05 p.m. 111.007 Data Blitz

Extended Clinical Spectrum of Anti-NMDA Receptor Encephalitis in Children—Ajay Goenka, Hiroki Nariai, Mitchell Steinschneider, Alfred Spiro, Vimal Jain

5:05 p.m.–5:10 p.m. 111.008 Data Blitz

Persistent EEG Patterns in Anti-NMDA Receptor Encephalitis: Implications for Pathophysiology—Michelle Ubels Van Noord, Evelyn Tecoma, Leena Kansal, Navaz Karanjia, Vicente Iragui-Madoz

5:10 p.m.–5:20 p.m. Audience Q&A

5:20 p.m.–5:30 p.m. Conclusion

Meeting Schedule

1:00 p.m.–5:30 p.m.

**I11 SIF Neurocritical Care and Neuroscience
Crossroads: From Bench To Bedside**

**I12 SIF Amyloid and Beyond:
From Bench to Bedside 128**

**C189 S Neuromuscular Bedside Rounds
Skills Workshop**
(registration required)
Director: *Michelle L. Mauermann, MD, Rochester, MN*

3:00 p.m.–4:00 p.m.
 **Guts & Glory:
The Importance of Diet & Exercise in
Managing Persons with Multiple Sclerosis**
Director: *Barbara S. Giesser, MD, FAAN, Los Angeles, CA*

3:30 p.m.–4:30 p.m.
 **Mastering EMG Wave Form Recognition
Skills in One Hour!**
Director: *Devon I. Rubin, MD, FAAN, Jacksonville, FL*

-  A registration fee is required
-  The program is one of the AAN Leadership University sessions
-  The course is part of a Subspecialty in Focus track
-  The program is one of the I Talk sessions
-  The program is part of the
-  Experiential Learning Area
-  sessions
-  sessions
-  sessions

Invited Science: Multiple Sclerosis



**Wednesday, April 20,
3:30 p.m. to 5:30 p.m.**

Top abstracts previously presented at European Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS) will be presented by their authors in 20-minute platform sessions. Select abstracts from their “best of” lineups emphasize basic, clinical, and translational sciences as they evolve toward a more complete understanding of Multiple Sclerosis with the overall goal of developing more effective prevention and treatment.

3:30 p.m. to 3:50 p.m.

Novel In Vivo Immunoglobulin G-driven
Model of Multiple Sclerosis

Kevin Blauth, PhD, Aurora, CO

3:50 p.m. to 4:10 p.m.

PML Risk Stratification During Natalizumab
Therapy Using Anti-JCV Antibody Index
and L-selectin

Nicholas Schwab, PhD, Münster, Germany

4:10 p.m. to 4:30 p.m.

Efficacy and Safety of Ocrelizumab in Relapsing
Multiple Sclerosis – Results of the Interferon-
beta-1a-Controlled, Double-blind, Phase III
OPERA I and II studies

Stephen L. Hauser, MD, San Francisco, CA

4:30 p.m. to 4:50 p.m.

Minocycline Reduces the Relative Risk of
Multiple Sclerosis in People Experiencing Their
First Demyelinating Event by 44.6%; Results
of Phase III Double-blind Placebo-controlled
Canadian Multicentre Trial

Luanne Metz, MD, Calgary, AB, Canada

4:50 p.m. to 5:10 p.m.

Dynamic Model for Predicting Prognosis
in CIS Patients

Mar Tintore, MD, Barcelona, Spain

5:10 p.m. to 5:30 p.m.

Functional Consequences of Risk Genes

Calliope A. Dendrou, PhD

Wed-April 20

1:00 p.m.–5:30 p.m.

Integrated Neuroscience Session

112 Amyloid and Beyond: From Bench to Bedside

This program is offered in partnership with the Geriatric Neurology Section.

Coordinators: David S. Knopman, MD, FAAN, and Liana Apostolova, MD, FAAN

Program Description: Amyloid and more recently tau imaging have demonstrated excellent sensitivity and specificity for detecting amyloid and tau pathology in the human brain. In this INS we will review the latest scientific evidence regarding the basic mechanisms for amyloid toxicity, as well as the most recent advances in tau and amyloid imaging in research and clinical care.

Upon Completion: Participants should be able to gain knowledge of the role of amyloid species in normal aging and AD, understand the role new imaging methods play in neurodegenerative diseases, gain knowledge of the specific imaging biomarker signatures of the major classes of neurodegenerative diseases and understand how biomarkers can be used in conjunction with clinical findings to refine the differential diagnosis.

Part I

1:00 p.m.–3:30 p.m.

1:00 p.m.–1:10 p.m. Introduction

Liana Apostolova, MD, FAAN, and David S. Knopman, MD, FAAN

1:10 p.m.–1:50 p.m. Invited Speaker

Amyloid Oligomers vs. Fibrillar Amyloid in Aging and Alzheimer's Disease
Karen Hsiao Ashe, MD, PhD, Minneapolis, MN

1:50 p.m.–1:55 p.m. 112.001

FERMT2 Is Associated with Brain Amyloidosis in Cognitively Normal and Mild Cognitive Impairment Subjects —*Naira Goukasian, Triet Do, Jonathan Grotts, Dan Silverman, David Elashoff, Liana Apostolova*

1:55 p.m.–2:00 p.m. 112.002

Multimorbidity and Neuroimaging Biomarkers Among Cognitively Normal Persons —*Maria Vassilaki, Jeremiah Aakre, Michelle Mielke, Yonas Geda, Walter Kremers, Rabe Alhurani, Mary Machulda, David Knopman, Ronald Petersen, Val Lowe, Clifford Jack, Rosebud Roberts*

2:00 p.m.–2:05 p.m. 112.003

Differences in 11C-PIB-PET Imaging Patterns Between Alzheimer's Disease Patients with and Without Cerebral Cortical/Subcortical Microbleeds —*Yuichi Hayashi, Jun Shinoda, Nobuaki Yoshikura, Masahiro Waza, Hiroshi Nishida, Yoshitaka Asano, Akio Kimura, Takashi Inuzuka*

2:05 p.m.–2:20 p.m. Audience Q&A

2:20 p.m.–3:00 p.m. Invited Speaker

Current State of Tau PET Imaging
Bradford Dickerson, MD, Charlestown, MA

3:00 p.m.–3:05 p.m. 112.004

Literature Review of Genetic Disorders with Tau Pathology —*Pawel Tacik, Zbigniew Wszolek, Monica Sanchez-Contreras, Rosa Rademakers, Dennis Dickson*

3:05 p.m.–3:10 p.m. 112.005

Imaging Tau Pathology In Vivo in AD and FTLD Spectrum Tauopathies with [18F] AV1451 PET —*Bradford Dickerson, Sara Makaretz, Christina Caso, Michael Stepanovic, Megan Quimby, Chenjie Xia, Scott McGinnis, Matthew Froesch, Keith Johnson*

3:10 p.m.–3:15 p.m. 112.006

Amyloid- β and Hyperphosphorylated Tau Synergy Drives Metabolic Decline in Preclinical Alzheimer's Disease —*Tharick Pascoal, Sulantha Mathotaarachchi, Andrea Benedet, Tom Beaudry, Serge Gauthier, Pedro Rosa Neto*

3:15 p.m.–3:30 p.m. Audience Q&A

Guided Poster Rounds

3:30 p.m.–4:15 p.m.

112.001 FERMT2 Is Associated with Brain Amyloidosis in Cognitively Normal and Mild Cognitive Impairment Subjects —*Naira Goukasian, Triet Do, Jonathan Grotts, Dan Silverman, David Elashoff, Liana Apostolova*

112.002 Multimorbidity and Neuroimaging Biomarkers Among Cognitively Normal Persons —*Maria Vassilaki, Jeremiah Aakre, Michelle Mielke, Yonas Geda, Walter Kremers, Rabe Alhurani, Mary Machulda, David Knopman, Ronald Petersen, Val Lowe, Clifford Jack, Rosebud Roberts*

112.003 Differences in 11C-PIB-PET Imaging Patterns Between Alzheimer's Disease Patients with and Without Cerebral Cortical/Subcortical Microbleeds —*Yuichi Hayashi, Jun Shinoda, Nobuaki Yoshikura, Masahiro Waza, Hiroshi Nishida, Yoshitaka Asano, Akio Kimura, Takashi Inuzuka*

112.004 Literature Review of Genetic Disorders with Tau Pathology —*Pawel Tacik, Zbigniew Wszolek, Monica Sanchez-Contreras, Rosa Rademakers, Dennis Dickson*

112.005 Imaging Tau Pathology In Vivo in AD and FTLD Spectrum Tauopathies with [18F] AV1451 PET —*Bradford Dickerson, Sara Makaretz, Christina Caso, Michael Stepanovic, Megan Quimby, Chenjie Xia, Scott McGinnis, Matthew Froesch, Keith Johnson*

112.006 Amyloid- β and Hyperphosphorylated Tau Synergy Drives Metabolic Decline in Preclinical Alzheimer's Disease —*Tharick Pascoal, Sulantha Mathotaarachchi, Andrea Benedet, Tom Beaudry, Serge Gauthier, Pedro Rosa Neto*

112.007 Prevalence of Amyloid Pathology in Primary Progressive Aphasia Variants: A Systematic Review and Meta-Analysis —*David Bergeron, Robert Laforce, Rik Ossenkoppele*

112.008 Rapidly Progressive Alzheimer's Disease in Two Distinct Autopsy Cohorts —*Jagan Pillai, Brian Appleby, Jiri Safar, James Leverenz*

112.009 Biomarker Confirmed Alzheimer's Disease Presenting As Amnesic, Aphasic, and Visual Variants: Hippocampal Volume Comparison —*Alissa Butts, Mary Machulda, Joseph Duffy, Edythe Strand, Daniel Drubach, Scott Przybelski, Ronald Petersen, Clifford Jack, Val Lowe, Keith Josephs, Jennifer Whitwell*

112.010 Cascading Network Failure Across the Alzheimer's Disease Spectrum —*David Jones, David Knopman, Jeffery Gunter, Jonathan Graff-Radford, Prashanthi Vemuri, Bradley Boeve, Ronald Petersen, Michael Weiner, Clifford Jack*

112.011 Behavioral Correlates of Cognitive Decline in Normal Aging and Prodromal Alzheimer's Disease —*Naira Goukasian, Triet Do, Jonathan Grotts, John Ringman, David Elashoff, Liana Apostolova*

112.012 Effect of Brain Amyloidosis on the Emergence of Neuropsychiatric Behaviors in MCI over Time —*Liana Apostolova, Naira Goukasian, Triet Do, Jonathan Grotts, John Ringman, David Elashoff*

112.013 Sensitivity, Specificity and Reliability of Three Pathological Criteria for Alzheimer's Disease —*Alexis Steinberg, Oscar Lopez, Julia Kofler, James Becker, Robert Sweet, Sarah Berman, Eric McDade, Eric Rodriguez, William Klunk*

Part II

4:15 p.m.–5:30 p.m.

4:15 p.m.–4:55 p.m. Invited Speaker

PET Imaging of Alzheimer's Disease Variants and non-Alzheimer's Disease Dementias
Robert Laforce Jr., MD, PhD, Quebec, Canada

4:55 p.m.–5:00 p.m. 112.007

Prevalence of Amyloid Pathology in Primary Progressive Aphasia Variants: A Systematic Review and Meta-Analysis —*David Bergeron, Robert Laforce, Rik Ossenkoppele*

5:00 p.m.–5:05 p.m. 112.008

Rapidly Progressive Alzheimer's Disease in Two Distinct Autopsy Cohorts —*Jagan Pillai, Brian Appleby, Jiri Safar, James Leverenz*

5:05 p.m.–5:15 p.m. Audience Q&A

5:15 p.m.–5:30 p.m. Conclusion

3:30 p.m.–5:30 p.m. Scientific Platform Sessions

S42: Stroke Mechanism and Modifiers**3:30 p.m. S42.001**

Can CREST Procedural Results Be Reproduced in General Practice in Post CREST Era? Analysis of National Surgical Quality Improvement Program (NSQIP) Registry—*Vishal Jani, Aiman Zafar, Mohammad Afzal, Adnan Qureshi*

3:45 p.m. S42.002

Prevalence, Risk Factors, and Clinical Significance of Asymptomatic Extracranial Vertebral Artery Disease in Patients with Symptomatic Internal Carotid Artery Stenosis: Analysis of Stent-Protected Angioplasty Versus Carotid Endarterectomy (SPACE) Trial—*Adnan Qureshi, Saqib Chaudhry, Olav Jansen, Hans-Henning Eckstein, Peter Ringleb*

4:00 p.m. S42.003

Incidence of Atrial Fibrillation Within One Year of Cryptogenic Stroke Among a Large, Real-World Population with Insertable Cardiac Monitors—*John Rogers, Allan Nichols, Mark Richards, Scott Ferreira, Shantanu Sarkar, Jodi Koehler, Eduardo Warman, Paul Ziegler*

4:15 p.m. S42.004

Elevated FVIII Predicts Subsequent Acute Ischemic Stroke in Patients with Transient Ischemic Attack—*Eleanor Semmes, Dominique Monlezun, Jr, Alanya Samai, Sheryl Martin-Schild*

4:30 p.m. S42.005

Household Secondhand Smoke Exposure Confers Higher Stroke Risk and Poorer Stroke Prognosis—*Michelle Lin, Bruce Ovbiagele, Daniela Markovic, Amy Towfighi*

4:45 p.m. S42.006

Placental Pathology in Neonatal Stroke: A Retrospective Case-Control Study—*Miya Bernson-Leung, Theonia Boyd, Amy Danehy, Emily Meserve, Michael Rivkin*

5:00 p.m. S42.007

Intra-Arterial Mesenchymal Stem Cells in a Large Animal Endovascular Canine Stroke Model: Findings on Serial Diffusion Tensor Imaging—*Luis Guada, Pradip Pattany, Kevin Ramdas, Dileep Yavagal*

5:15 p.m. S42.008

Incidental Cerebral Microbleeds and Cerebral Hypoperfusion in Cognitively Normal Elderly Individuals—*Nicholas Gregg, Davneet Minhas, Albert Kim, Edip Guroi, Oscar Lopez, Howard Aizenstein, Julie Price, Chester Mathis, Jeffrey James, Beth Snitz, Ann Cohen, M. Kamboh, Lisa Weissfeld, Erica Tamburo, William Klunk*

S43: Motor Neuron Disease, Outcome, and Assessment to Therapy in Neuromuscular Disorders**3:30 p.m. Presentation of the Sheila Essey Award: An Award for ALS Research**

Presented by the American Academy of Neurology and the ALS Association and supported through the philanthropy of the Essey Family Fund and the ALS Association.

Recipient:

Ammar Al-Chalabi, MD ChB, PhD
London, United Kingdom

4:00 p.m. S43.003

Pilot Placebo-Controlled Study of Early Noninvasive Ventilation for ALS—*Teresa Jacobs, Jonggyu Baek, Devin Brown, Erin Migda, Timothy Funckes, Gruis Kirsten*

4:15 p.m. S43.004

"Dominant-Negative Effect" Mechanism in OPTNE478G-Linked Amyotrophic Lateral Sclerosis—*Yong Shi, Faisal Fecto, Y. Taylan Esengul, Teepu Siddique, Han-Xiang Deng*

4:30 p.m. S43.005

Functional Outcomes in Hereditary Spastic Paraplegia: A Prospective Cohort Study—*Nicolas Chrestian, Nicolas Dupre, Jean-Denis Brisson, Ziv Gan-Or, Anna Szuto, Shiyi Chen, Anil Venkitachalam, Jodi Warman Chardon, Sohnee Ahmed, Setareh Ashtiani, Heather MacDonald, Pierre Provencher, Kym Boycott, Dimitri Stravopoulos, Patrick Dion, Peter Ray, Oksana Suchowersky, Guy Rouleau, Grace Yoon*

4:45 p.m. S43.006

Biomarker Development for C9ORF72 Antisense Therapy Using IPS Neurons—*Lindsey Hayes, Chris Donnelly, Tania Gendron, Leonard Petrucelli, Jeffrey Rothstein*

5:00 p.m. S43.007

Can Pyrimethamine Lower CSF SOD1 Levels in Familial ALS? Results from a Multicenter Phase Ib Trial—*Dale Lange, Rahul Remanan, Mona Shahbazi, Vincenzo Silani, Albert Ludolph, Senda Ajroud-Driss, Stanley Appel, Lindsay Kaplan, Kara Fields, Stefan Marklund, Peter Andersen*

5:15 p.m. S43.008

Disease Burden and Functional Outcomes in Congenital Myotonic Dystrophy: A Cross-Sectional Study—*Nicholas Johnson, Man Hung, Melissa Dixon, Deanna DiBella, Evan Pucillo, Kiera Berggren, Heather Hayes, Wei Chen, Russell Butterfield, Chad Heatwole, Craig Campbell*

Meeting Schedule

3:30 p.m.–5:30 p.m.

S42 Stroke Mechanism and Modifiers**S43 Motor Neuron Disease, Outcome, and Assessment to Therapy in Neuromuscular Disorders****C190 Therapy in Neurology IV**

Director: *Steven L. Lewis, MD, FAAN, Chicago, IL*

C191 Clinical Epilepsy III

Director: *Page B. Pennell, MD, Boston, MA*

C192 Sports Concussion and Other Mild Concussive Injuries II

Director: *David W. Dodick, MD, Phoenix, AZ*

C193 Genomic Neurology Workshop: Developing Practical Knowledge of Tools and Concepts Through Case Studies II

Director: *Jeffery M. Vance, MD, PhD, Miami, FL*

C194 Multiple Sclerosis Therapy: Disease-modifying Treatment II

Director: *Bruce A. C. Cree, MD, PhD, MCR, San Francisco, CA*

C195 The Neurology of Social Behavior

Director: *Bradford Dickerson, MD, Charlestown, MA*

C196 Neuro-otology II

Director: *Terry D. Fife, MD, FAAN, Phoenix, AZ*

C197 Approach to the Shaky Patient

Director: *Vicki Shanker, MD, New York, NY*

C198 Clinical EMG III

Director: *Mark B. Bromberg, MD, PhD, FAAN, Salt Lake City, UT*

C199 Navigating Primary Brain Tumors for the Neurologist II

Director: *Erin M. Dunbar, MD, Atlanta, GA*

C200 Neurologic Case Studies in Pregnancy II

Director: *Mary Angela O'Neal, MD, Boston, MA*

C201 Neurocysticercosis and Globalization

Director: *Jorge G. Burneo, MD, MSPH, FAAN, London, ON*

Invited Science: Multiple Sclerosis 127

6:00 p.m.–7:30 p.m.

Emerging Science Session

Thursday, April 21

Plan Your Experience

6:30 a.m.–8:30 a.m.

- C202  The Eyes and the Ears of Traumatic Brain Injury
- C203 Vascular Cognitive Impairment and Dementia: Current Status and Future
- C204 Important Drug Interactions for Neurologists and Psychiatrists
- C205 Cerebellar and Afferent Ataxias: Diagnosis and Management
- C206 Neuro Flash: MRI and Multiple Sclerosis
- C207 Stroke in Young Adults and Women
- C208 Approach to Sleep Symptoms: Sleepy or Sleepless
- C209 What Neurologists Really Need to Know About Normal Pressure Hydrocephalus
- C210 Non-Neuro-oncology Palliative Care
- C211 Emergency Room Neuro-ophthalmology
- C212 Overview of Parkinson's Disease
- S44 Developments in Peripheral Neuropathies . . . 132
- S45 MRI and OCT Outcomes in Multiple Sclerosis . . 132
- S46 Critical Care 132

8:00 a.m.–9:00 a.m.

-  It's a Bird, It's a Plane, It's...The Doctor Who Cured My Benign Paroxysmal Positional Vertigo

8:30 a.m.–5:30 p.m.

- P6 Poster Session VI
- Presenters Stand by Posters 4:00 p.m.–5:30 p.m. 134

9:00 a.m.–11:30 a.m.

**Neurology Year in Review
Plenary Session 143**

11:00 a.m.–3:00 p.m.

Exhibit Hall
Visit the exhibit hall for a look at the latest products and services available in the neurologic industry. You may also learn about programs you can support to help those suffering from neurologic disorders. Lunch will be served. The exhibits will be open at this time.

1:00 p.m.–1:30 p.m.

-  The Role of Exercise in Treatment of Peripheral Neuropathy

1:00 p.m.–3:00 p.m.

- C213 Primer of Behavioral Neurology I
- C214 Neurology Update III
- C215 Deep Brain Stimulation Management I

- C216 Neuromyelitis Optica Spectrum Disorders
- C217 Neuromuscular Junction Disorders I
- C218 Hot Topics in Sleep Neurology I
- C219 Neurologic Complications of Medical Disease: An Overview
- C220 Non-Alzheimer's Dementia I
- C221 Hot Topics in Headaches and Related Disorders I
- C222 Critical Care EEG Monitoring
- S47 IV-tPA and Endovascular Therapy 144
- S48 Neuro-ophthalmology/Neuro-otology 144
- S49 Clinical Trials in Multiple Sclerosis I 144
- S50 Section Topic Controversies: Discontinuing Antiepileptic Drug Therapy Following Seizure Remission—Good Idea or Bad? 144

 Ask the Expert

1:00 p.m.–5:30 p.m.

- C223  Neuromuscular Ultrasound Skills Workshop (registration required)
- I13  Sports-related Concussion: Vision and Vestibular Insights 146
- I14 Practical Approaches to Narrowing the Epilepsy Treatment Gap. 147

3:30 p.m.–5:30 p.m.

- C224 Primer of Behavioral Neurology II
- C225 Neurology Update IV
- C226 Deep Brain Stimulation Management II
- C227 Organize and Run a Successful Code Stroke System
- C228 Neuromuscular Junction Disorders II
- C229 Hot Topics in Sleep Neurology II
- C230 Neurologic Complications of Medical and Surgical Therapies
- C231 Non-Alzheimer's Dementia II
- C232 Hot Topics in Headaches and Related Disorders II
- S51 Clinical Trials in Multiple Sclerosis II 148
- S52 Clinical Epilepsy, Genetics, and Devices 148
- S53 Infectious Disease 148

5:30 p.m.–7:00 p.m.

Closing Party Happy Hour 163

- Ⓜ A registration fee is required
- Ⓜ The program is one of the AAN Leadership University sessions
- Ⓜ The course is part of a Subspecialty in Focus track
- Ⓜ The program is one of the I Talk sessions



The program is part of the Experiential Learning Area sessions

My Thursday

Time _____ to _____

Program # _____ Program Name _____

Time _____ to _____

Program # _____ Program Name _____

Time _____ to _____

Program # _____ Program Name _____

9:00 a.m.–11:30 a.m. Neurology Year in Review Plenary Session

Lunch

Time _____ to _____

Program # _____ Program Name _____

Time _____ to _____

Program # _____ Program Name _____

Time _____ to _____

Program # _____ Program Name _____

5:30 p.m.–7:00 p.m. Closing Party Happy Hour

Thu - April 21

Frequently Asked Question

How can I access my course syllabi?

New for 2016, all attendees will receive complimentary online access to all Annual Meeting Syllabi for one year. Notifications will be sent out prior to the meeting with instructions for access. Attendees may choose to upgrade to a USB drive for permanent access.

6:30 a.m.–8:30 a.m.

Scientific Platform Sessions

S44: Developments in Peripheral Neuropathies

6:30 a.m. S44.001

The Diagnostic Performance and Clinical Relevance of Corneal Confocal Microscopy (CCM) in Patients with Diabetic Peripheral Neuropathy —A. Gordon Smith, Gabriel Kowalsky, Peter Hauer, Adrienne Aperghis, J. Singleton

6:45 a.m. S44.002

Identification of ALS5/SPG11/KIAA1840 Mutations in Patients with Autosomal Recessive Form of Charcot-Marie-Tooth Disease Type 2 —Celeste Montecchiani, Lucia Pedace, Temistocle Lo Giudice, Antonella Casella, Marzia Mearini, Fabrizio Gaudiello, Jose Luiz Pedrosa, Chiara Terracciano, Carlo Caltagirone, Roberto Massa, Peter St George-Hyslop, Orlando Barsottini, Toshitaka Kawai, Antonio Orlicchio

7:00 a.m. S44.003

New Molecules for an Irreversible Disorder: MRNAs and MiRNAs in Experimental Diabetic Neuropathy —Douglas Zachodne, Chu Cheng, Masaki Kobayashi

7:15 a.m. S44.004

The Marriage of High-Resolution Sonography and Nerve Conduction Studies in IgM MGUS Polyneuropathy: More Generalised Than Length Dependent? —Stephan Goedee, Nicolette Notermans, Ludo Van Der Pol, Hessel Franssen, Jan-Thies Van Asseldonk, Leendert Visser, Leonard Van den Berg

7:30 a.m. S44.005

Three-Dimensional Study of Neuromuscular Junctions (NMJ) in Heterozygous R98C Knock-in CMT1B Mouse Model by Overexpression Neuregulin 1 Type III —Yunhong Bai, Chiara Pisciotto, Suola Wang, Xingyao Wu, Markus H Schwab, Klaus Armin Nave, Michael Shy

7:45 a.m. S44.006

Characterization of Pain in a Large Cohort of Patients with Charcot-Marie-Tooth Diseases —Derek Huang, Michael Shy, Callyn Kirk, Christopher Lee, Jun Li

8:00 a.m. S44.007

Evaluation of Sarm1 Gene Deletion in a Mouse Model of Vincristine-Induced Neuropathy —Stefanie Geisler, Ryan Doan, Amy Strickland, Huang Xin, Jeffrey Milbrandt, Aaron DiAntonio

8:15 a.m. S44.008

Target-Enrichment Sequencing and Copy Number Evaluation in Inherited Polyneuropathy —Christopher Klein, Wei Wang, Chen Wang, Brian Dawson, Thorland Erik, Patrick Lundquist, Bruce Eckloff, Yanhong Wu, Saurabh Baheti, Jared Evans, Steven Scherer, Peter Dyck

S45: MRI and OCT Outcomes in Multiple Sclerosis

6:30 a.m. S45.001

Thalamic Atrophy As Primary Endpoint for Phase 2 Trials in MS: Sample Size Calculations —Christina Azevedo, Daniel Pelletier

6:45 a.m. S45.002

The Baseline MRI Scan in Clinically Isolated Syndromes: Predictors of Disability After 15 Years —Wallace Brownlee, Daniel Altmann, Claudia Wheeler-Kingshott, Katherine Miskiel, Olga Ciccarelli, David Miller

7:00 a.m. S45.003

Comparison of MRI Criteria for the Diagnosis of Multiple Sclerosis: Role of Cortical Lesions —Paolo Preziosa, Maria Rocca, Sarlota Mesaros, Massimiliano Copetti, Alex Rovira, Jaume Sastre Garriga, Jelena Drulovic, Amgad Droby, Frauke Zipp, Massimiliano Calabrese, Massimo Filippi

7:15 a.m. S45.004

INSPIRATION-MRI: Standardized Acquisition and Centralized Quantitative Reading of MRI Scans of RRMS Patients in German Daily Clinical Practice —Achim Gass, Johannes Gregori, Stefan Hoffmann, Alexander Fuchs, Christian Cornelissen

7:30 a.m. S45.005

Neurological Software Tool for RELiable Atrophy Measurement (NeuroSTREAM) in Multiple

Sclerosis —Michael Dwyer, Diego Silva, Niels Bergsland, Dana Horakova, Deepa Ramasamy, Jackie Durfee, Manuela Vaneckova, Eva Havrdova, Robert Zivadinov

7:45 a.m. S45.006

A Comparison of Two Methods for Quantifying Blood-Brain Barrier Disruption, with Application to Multiple Sclerosis —Nolan Chen, Kartiga Selvaganesan, Daniel Reich, Govind Nair, Richard Leigh

8:00 a.m. S45.007

Retinal Atrophy Measured by Optical Coherence Tomography Predicts Disability Progression in Multiple Sclerosis —Elena Martinez-Lapiscina, Samuel Arnow, James Wilson, Shiv Saidha, Jana Preiningerova, Timm Oberwahrenbrock, Alexander Brandt, Luis E Pablo, Simone Guerrieri, Ines Gonzalez, Olivier Outterryck, Ann-Kristin Mueller, Phillip Albrecht, Wesley Chan, Sebastian Lukas, Lisanne Balk, Clare Fraser, Jette Lautrup Frederiksen Battisti, Jennifer Resto, Teresa Frohman, Christian Cordano, Irati Zubizarreta, Bernardo Sanchez-Dalmau, Albert Saiz, Robert Bermel, Alexander Klitoner, Axel Petzold, Sven Schippling, Fiona Costello, Orhan Aktas, Patrick Vermersch, Celia Oreja-Guevara, Giancarlo Comi, Letizia Leocani, Elena Garcia-Martin, Friedemann Paul, Eva Havrdova, Elliot Frohman, Laura Balcer, Ari Green, Peter Calabresi, Pablo Villoslada

8:15 a.m. S45.008

Disease Modifying Therapies Modulate Retinal Atrophy in Multiple Sclerosis: A Retrospective Study —Julia Button, Omar Al-Louzi, Andrew Lang, Pavan Bhargava, Scott Newsome, Laura Balcer, Elliot Frohman, Jerry Prince, Peter Calabresi, Shiv Saidha

S46: Critical Care

6:30 a.m. S46.001

Sulfonylurea Receptor-1 As a Novel Biomarker for Cerebral Edema in Patients with Severe Traumatic Brain Injury —Ruchira Jha, Ava Puccio, Sherry Chou, Chung-Chou Chang, Jessica Wallisch, Bradley Molyneux, Benjamin

Zusman, Lori Shutter, Samuel Poloyac, Janesko-Feldman Keri, David Okonkwo, Patrick Kochanek

6:45 a.m. S46.002

Thermoregulatory Variability Is an Independent Predictor of Death or Poor Outcome After Brain Injury: A Cohort Study —Varoon Thavapalan, Fred Rincon

7:00 a.m. S46.003

Factors Considered by Physicians Versus Nurses When Prognosticating Acute Intracerebral Hemorrhage Outcomes —David Hwang, Stacy Chu, Cameron Dell, Mary Sparks, Tiffany Watson, Carl Langefeld, Mary Comeau, Jonathan Rosand, Thomas Battey, Sebastian Koch, Mario Perez, Michael James, Jessica McFarlin, Jennifer Osborne, Daniel Woo, Steven Kittner, Kevin Sheth

7:15 a.m. S46.004

Utility of Brain MRI in Infective Endocarditis —Tia Chakraborty, Eugene Scharf, Daniel DeSimone, El-Rafei Abdelghani, Alejandro Rabinstein, Eelco Wijdicks, Larry Baddour, Jennifer Fugate

7:30 a.m. S46.005

Observations of Paradoxical ICP Patterns Within 24 Hours Preceding Neurovascular Related Mortality —Paul Sampognaro, Nirav Shah, Wade Smith, Xiao Hu

7:45 a.m. S46.006

Neurointensivist Prognostication Aids Decision Making in Anoxic Brain Injury Patients —Neha Prakash, Joanna Ramiro, Eliahu Feen, Abhay Kumar

8:00 a.m. S46.007

ApoE3 Allele and DRS Outcome in Patients with Severe Traumatic Brain Injury (TBI) —Lucido Ponce Mejia, Jovany Cruz Navarro, Goodman Jerry, Claudia Robertson

8:15 a.m. S46.008

Prognostic Value of the Neurological Exam in Cardiac Arrest Patients Treated with Therapeutic Hypothermia —Elizabeth Matthews, Jessica Magid-Bernstein, Angela Velazquez, Christina Falo, Soojin Park, Jan Claassen, Sachin Agarwal

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Meeting Schedule

6:30 a.m.–8:30 a.m.

S44 Developments in Peripheral Neuropathies

S45 MRI and OCT Outcomes in Multiple Sclerosis

S46 Critical Care

C202  The Eyes and The Ears of Traumatic Brain Injury

Director: *Laura J. Balcer, MD, MSCE, FAAN, New York, NY*

C203 Vascular Cognitive Impairment and Dementia: Current Status and Future

Director: *Larry B. Goldstein, MD, FAAN, FAHA, Lexington, KY*

C204 Important Drug Interactions for Neurologists and Psychiatrists

Director: *Laurence J. Kinsella, MD, FAAN, St. Louis, MO*

C205 Cerebellar and Afferent Ataxias: Diagnosis and Management

Director: *Massimo Pandolfo, MD, FAAN, Brussels, Belgium*

C206 Neuro Flash: MRI and Multiple Sclerosis

Director: *Robert T. Naismith, MD, St. Louis, MO*

C207 Stroke in Young Adults and Women

Director: *Aneesh B. Singhal, MD, FAAN, Boston, MA*

C208 Approach to Sleep Symptoms: Sleepy or Sleepless

Director: *Raman K. Malhotra, MD, St. Louis, MO*

C209 What Neurologists Really Need to Know About Normal Pressure Hydrocephalus

Director: *Michael A. Williams, MD, FAAN, Seattle, WA*

C210 Non-Neuro-oncology Palliative Care

Director: *Maisha T. Robinson, MD, MS, Jacksonville, FL*

C211 Emergency Room Neuro-ophthalmology

Director: *Heather Moss, MD, PhD, Chicago, IL*

C212 Overview of Parkinson's Disease

Director: *Melissa J. Nirenberg, MD, PhD, FAAN, New York, NY*

8:00 a.m.–9:00 a.m.

 It's a Bird, It's a Plane, It's...The Doctor Who Cured My Benign Paroxysmal Positional Vertigo

Director: *Kevin A. Kerber, MD, Ann Arbor, MI*

8:30 a.m.–5:30 p.m.

P6 Poster Session VI

9:00 a.m.–11:30 a.m.

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11:00 a.m.–3:00 p.m.

Exhibit Hall

1:00 p.m.–1:30 p.m.

 The Role of Exercise in Treatment of Peripheral Neuropathy

Director: *A. Gordon Smith, MD, FAAN, Salt Lake City, UT*

 A registration fee is required

 The program is one of the AAN Leadership University sessions

 The course is part of a Subspecialty in Focus track

 The program is one of the I Talk sessions

 The program is part of the Experiential Learning Area sessions



Thu - April 21

8:30 a.m.–5:30 p.m.

Poster Session

P6 Poster Session VI

Presenters Stand by Posters 4:00 p.m.–5:30 p.m.

Poster Discussion Session: Cerebrovascular Disease and Interventional Neurology

Eight abstracts have been selected for presentation during a poster discussion session. Authors will present a 5-minute data blitz presentation.

In addition to the regular poster time, authors also have a specific time slot over lunch. Times below are standard across poster sessions.

Discussion: 11:45 a.m.–11:50 a.m.

P6.001 ARTSS-2: Final Results of a Pilot, Phase IIb, Randomized, Multi-Center Trial of Argatroban in Combination with Recombinant Tissue Plasminogen Activator for Acute Stroke—*Andrew Barreto, Gary Ford, Loren Shen, Chunyan Cai, Claudia Pedroza, Jon Tyson, Mohammad Rahbar, James Grotta*

Discussion: 11:50 a.m.–11:55 a.m.

P6.002 Onset to Reperfusion Times Strongly Determine Clinical Outcome Across a Wide Range of ASPECTS Scores in Endovascular Ischemic Stroke Therapy—*Joon-Tae Kim, Mayank Goyal, Vitor Pereira-Mendes, Alain Bonafe, Jan Gralla, Reza Jahan, Elad Levy, David Liebeskind, Jeffrey Saver*

Discussion: 11:55 a.m.–12:00 p.m.

P6.003 Final Infarct Volume As an Early Indicator the Clinical Outcome: Insight from ESCAPE Trial—*Fahad Al-Ajlan, Mayank Goyal, Bijoy Menon, Andrew Demchuk, Michael Hill*

Discussion: 12:00 p.m.–12:05 p.m.

P6.004 Intra-arterial ALD401 Cell Therapy Is Associated with Reduction in Stroke Volume at 90 Days in a Subset of the RECOVER-Stroke Trial—*Kunakorn Atchaneeyasakul, Sushrut Dharmadhikari, Charif Sidani, Kevin Ramdas, Luis Delgado, Ryan Pafford, David Huang, Jim Hinson, Sean Savitz, Dileep Yavagal*

Discussion: 12:05 p.m.–12:10 p.m.

P6.005 Pregnancy in Advanced Age Increases the Risk of Hemorrhagic Stroke in Post-Menopausal Women. Analysis of Women's Health Initiative Study—*Adnan Qureshi, Omar Saeed, Ahmed Malik, Jan Degenhardt, Roland Axt-Fliedner, Thomas Kohl, Muhammad Suri*

Discussion: 12:10 p.m.–12:15 p.m.

P6.006 Stroke Incidence Rates in a Biracial Metropolitan Population: The Importance of County-Level Data—*Brett Kissela, Jane Khoury, Kathleen Alwell, Charles Moomaw, Matthew Flaherty, Daniel Woo, Opeolu Adeoye, Pooja Khatri, Sharyl Martini, Felipe De Los Rios La Rosa, Simona Ferioli, Dawn Kleindorfer*

Discussion: 12:15 p.m.–12:20 p.m.

P6.007 Antithrombotic Strategy in Cerebral Venous Thrombosis: Differences Between Neurologists and Haematologists in a Canadian Survey—*Sohaila Alshimemeri, Marie-Christine Camden, Gary Lui, Agnes Lee, Thalia Field*

Discussion: 12:20 p.m.–12:25 p.m.

P6.008 Overcoming Barriers to Reduce Door to Needle Times in Acute Ischemic Stroke Patients: Field to CT—*Spazhmy Panezai, Florence Chukwunke, Audrey Arango, Jaskiran Brar, Joshua Daniel, Daniel Korya, Siddhart Mehta, Mohammad Moussavi, Jawad Kirmani*

e-Poster Session: Cerebrovascular Disease and Interventional Neurology

Ten e-posters in six neurologic topics have been selected for on-site, interactive display. e-Posters will be grouped in a separate area where attendees are invited to explore more deeply through touch screen displays.

P6.009 Exploring Protein Quantitation Methods to Detect Useful Plasma Biomarkers for Distinguishing Ischemic Stroke from Mimic—*Andrew Penn, Robert Balshaw, Mary Lesperance, Viera Saly, Angela Jackson, Derek Smith, Kristine Votava, Linghong Lu, Jaclyn Morrison, Shelagh Coutts, Christoph Borchers*

P6.010 A Comparison of Three Different CTA Collateral Scoring Systems' Ability to Predict MR Lesion Volume and Outcome After Ischemic Stroke—*Adam De Havenon, Steve O'Donnell, Haimel Wang, Lee Chung, Gordon Smith, Jennifer Majersik*

P6.011 Stroke Unit Evaluation of Sleep Apnea: Validity of Screening Tools and Use of a Portable Sleep Study—*Hugo*

Javier Aparicio, Tudor Sturzoiu, Helena Lau, Judith Clark, Julie Grimes, Hesham Masoud, Thanh Nguyen, Sanford Auerbach, Yelena Pyatkevich

P6.012 Acute Stroke Educational Video Associated with Improved Stroke Literacy and Increased Patient Satisfaction—*Mary Carter Denny, Farhaan Vahidy, Rutvij Shah, Kim Yen Thi Vu, Anjail Sharief, Sean Savitz*

P6.013 Acute Kidney Injury in Acute Ischemic Stroke Patients Receiving Endovascular Treatment: Analysis of the Interventional Management of Stroke (IMS) - III—*Nabeel Heria, Muhammad Saleem, Muhammad Shah Miran, Adnan Qureshi*

P6.014 Spatial-Motor Flexibility (SMF) and Post-Stroke Cognitive Recovery—*A. Barrett, Rui Zhang, Scott Frey, Mooyeon Oh-Park*

P6.015 Effect of Hypothyroidism on Unruptured Cerebral Aneurysm Dimensions and Endovascular Coiling Outcome—*Kunakorn Atchaneeyasakul, Anita Tipimeni, Tony Zhang, Priyank Khandelwal, Luis Delgado, Kevin Ramdas, Sushrut Dharmadhikari, Sudheer Ambekar, Brian Snelling, Dileep Yavagal*

P6.016 Cerebral Venous Thrombosis: An Unusual Etiology of Insidious Behavioral Changes—*Simy Kabaria*

P6.017 Symptomatic Intracranial Hemorrhage Rates and Intravenous Tissue Plasminogen Activator Treatment Time Windows: Does Treatment Window Make a Difference?—*Jeffrey Wagner, Alessandro Orlando, Christopher Fanale, Kathryn McCarthy, Michelle Whaley, Judd Jensen, David Bar-Or*

P6.018 Septic Thromboembolic Stroke Via Atrial-Esophageal Fistula As a Delayed Complication of Cardiac Ablation—*Talal Derani, Saqib Chaudhry, Gautam Sachdeva, Daniel Long, Kate Hughes, Suwen Kumar, Howard Chang, Anmar Razak*

Ischemic Stroke Diagnosis

P6.019 Correlation of Transcranial Doppler Breath Holding Test and Acetazolamide SPECT Scan for Anterior Circulation Steno-Occlusive Disease—*Prachi Parikh, Russell Cerejo, Larry Raber, Nicolas Thompson, Ken Uchino, Irene Katzan*

P6.020 Inter-Rater Variability for Evaluation of ASPECT Score Between a Neurologist and Neuroradiologist in Acute Stroke Patients—*Jiri Kral, Michal Bar, Tomas Jonszta, Vaclav Marcian, Martin Kuliha*

P6.021 The Bed Cycling Test: a New Bedside Test to Detect Mild Unilateral Cerebral Dysfunction of the Lower Limb—*Katharina Feil, Nicolina Boettcher, Franziska Lezius, Tobias Hoegen, Katrin Huettemann, Carolin Muth, Ozan Eren, Florian Schoeberl, Andreas Zwergal, Otmar Bayer, Michael Strupp*

P6.022 Proprietary Software Enhancement of Digital Subtraction Angiography for Perfusion Mapping of Posterior Circulation—*Gregoire Avignon, Siddhart Mehta, Daniel Korya, Audrey Arango, Jaskiran Brar, Mohammad Moussavi, Jawad Kirmani*

P6.023 Spanish Version of the National Institutes of Health Stroke Scale: Awareness and Use in the United States: A Survey Study—*Enrique Villalobos, Scott Barnes, Alberto Maud, Ihtesham Qureshi, Paisith Piriawat, Gustavo Rodriguez, Salvador Cruz-Flores*

P6.024 Collateral Changes in Various MR Sequences and Their Clinical Implication in Acute Stroke Patients—*Faisal Ibrahim, Saadat Kamran, H. Sattar, Naveed Akhtar, Hisham Elkhider, Paula Bourke, Ashfaq Shuaib*

P6.025 The Relationship Between Bone Mineral Density and Cerebral Pulsatility Index in Patients with Acute Ischemic Stroke—*Joong Hyun Park, Jae Hyeon Park, Seung-Han Suk, Im-Seok Koh, Sung-Hee Hwang, Hong-Ki Song, Jun Hong Lee*

P6.026 WITHDRAWN

P6.027 The Risk for In-Patient Stroke (RIPS) Scale: Development of a Stroke Recognition Instrument—*Philip Chang, Deborah Bergman, Shyam Prabhakaran*

P6.028 4 Cases of Aseptic Encephalitis Mimicking Right Middle Cerebral Artery Syndrome—*Christopher Way, Navdeep Sangha*

Telestroke and Other Innovations and TIA

P6.029 Racial and Gender Differences in Tissue Plasminogen Activator Metrics Over Telemedicine—*Amanda Jagolino, Shima Bozorgi, Jignesh Patel, Malcolm Irani, Christy Ankrom, Tiffany Cossey, Anjail Sharief, Farhaan Vahidy, Sean Savitz, Tzu-Ching Wu*

P6.030 Comparison of Standard Emergency Room Care with Tele-Stroke Evaluation in Acute Intracerebral Hemorrhage Management—*Sierra Ford, Zahra Ajani, Qiaoling Chen, Vedasto Sorreda, Grace Tu, David McCartney, Christina Valdovinos, Catherine Liu, Catherine Liu, Adam Sharp, Navdeep Sangha*

P6.031 Rural iPad Telestroke—*John Falconer*

P6.032 Critical Shortage of Neurologists in the Management of Cerebrovascular Accidents in Developing Countries: The Role of Telemedicine—*Joseph Asemota*

P6.033 Telestroke Vs Phone Consultation in Stroke Patients Eligible for Intra-Arterial Therapy—*Nicholas Osteras, James Connors, Shawna Cutting, Sarah Song, Laurel Cherian, Elizabeth Diebolt, Joshua Bock, Vivien Lee*

P6.034 Precise Diagnostic Score (PREDISC) Improves Diagnosis of Transient Ischemic Attacks—*Paul George, Carlo Cereda, Michael Mlynash, Gregory Albers*

P6.035 Inpatient Versus Outpatient Management of TIA or Minor Stroke: Clinical Outcome—*John Rothrock, Shahram Majidi, Kathy Burger, Christopher Leon-Guererro*

P6.036 Quality of Care for Patients with TIA with an Eye Towards Quality Improvement: How Are We Doing?—*Chandni Kalaria, Zachary Flair, Carolyn Cronin, Steven Kittner, Michael Phipps*

In-Hospital Stroke and Stroke Complications

P6.037 Failing a Dysphagia Screening Test After Acute Ischemic Stroke: Baseline Patient Factors and Outcomes—*Raed Joundi, Rosemary Martino, Gustavo Saposnik, Jimming Fang, Vasily Giannakeas, Moira Kapral*

P6.038 Incidence of Cerebral Ischemia Associated Seizures in Patients with Narrowing or Occlusion of the Ipsilateral Internal Carotid or Middle Cerebral Artery: The EC/IC Bypass Study—*Ahmed Malik, Muhammad Shah Miran, Muhammad Fareed Suri, Adnan Qureshi*

P6.039 Anti-Seizure Medication Management Associated with Electroencephalography in Patients with Acute Ischemic Stroke Suspected of Seizure—*Rahul Rao, Dominique Monlezun, Jr, Tara Kimbrough, Alyana Samai, Brian Burkett, Rami El Khoury, Sheryl Martin-Schild*

P6.040 Gastrointestinal Bleeding in Acute Ischemic Stroke: Recent Trend and Predictors.—*Harshil Shah, Achint Patel, Urvish Patel, Arpita Hazra, Abhishek Lunagariya, Parth Mishra, Vishal Jani, Sonal Mehta, Mounzer Kassab, Sayed Hussain, Adnan Qureshi*

P6.041 Clinical Predictors of Hemorrhagic Transformation in Non Lacunar Ischemic Stroke—*Maria Zurru, Pedro Colla Machado, Claudia Alonzo, Laura Brescacin, Santiago Pigretti, Ariel Luzzi, Natalia Balian, Gabriel Waisman, Edgardo Cristiano*

P6.042 Predictors of Surgical Feeding Tube Placement in Intracerebral Hemorrhage—*Umair Saeed, Kristin Brown, Anjail Sharief, Hari Indupuru, Amber Jacobs, Maria DeGuzman, Paige Shoemaker, Alana Clayton, Stephanie Cooper, Andreea Xavier, Chunyan Cai, Kim Yen Thi Vu, Andrew Barreto*

P6.043 Predictors of In-Hospital Ischemic Stroke During Acute Myocardial Infarction Hospitalizations—*Harshil Shah, Achint Patel, Parisha Bhatia, Vishal Jani, Abhishek Lunagariya, Sanjeeva Onteddu, Parth Mishra, Mounzer Kassab, Sonal Mehta*

P6.044 In-Hospital Mechanisms of Stroke in Patients on Hemodialysis: A 10-Year Retrospective Study—*Pawani Sachar, Mohammad Sunbuli, Kumar Rajamani*

P6.045 Strokes Occurring in the Hospital: Quality of Care and Outcome in a Tertiary Academic Medical Center—*Haris Kamal, Ashkan Mowla, Peyman Shirani, Navdeep Lail, Babar Cheema, Aurangzeb Memon, Christopher Deline, Annemarie Crumlish, Karanbir Singh, Marilou Ching, Robert Sawyer*

P6.046 Procedure- Related and Perioperative Strokes in Patients on Hemodialysis: A 10-Year Retrospective

Study—*Mohammad Sunbuli, Pawani Sachar, Kumar Rajamani*

Prehospital Stroke Care and Uses of NIHSS

P6.047 An EHR Template and Housestaff Incentive Program to Improve the Frequency of NIHSS Documentation for Code Stroke—*Xiaoming Jia, Ethan Brown, Christine Hessler, Jessica Deleon, Tennille Parsons, Katherine Ching, Wade Smith, S. Josephson, Anthony Kim*

P6.048 Getting the Most from the NIH Stroke Scale—*Argye Hillis, Cameron Davis*

P6.049 Sensitivity and Specificity of the Prehospital NIHSS for Screening Intra-Arterial Thrombectomy Candidates: Experience on a Mobile Stroke Unit—*Amanda Jagolino, Chunyan Cai, Mohammad Rahbar, Ritvij Bowry, Stephanie Parker, James Grotta*

P6.050 Geospatial Mapping of Alberta Province—*Prasanna Venkatesan Eswaradass, Michael Hill, Rick Swartz, Jamey Rosen, Patrice Lindsay*

P6.051 Decreased Recognition of Minor Stroke Leads to Longer Door-to-Needle Time—*Sara Rostanski, Olajide Williams, Randolph Marshall, Alexander Merkle, Shadi Yaghi, Joshua Willey*

P6.052 90 Day Outcome After Reperfusion Therapy of Stroke Patients with Baseline Disability: Unique Observations from Patients Treated on the Mobile Stroke Unit—*Tareq Almaghrabi, Amrou Sarraj, Ritvij Bowry, Stephanie Parker, Jose-Miguel Yamal, James Grotta*

P6.053 Multidisciplinary Team Ability to Decrease Door-To-Needle Time in Acute Ischemic Stroke - A Single Center Saudi Experience—*Ismael Khatri, Ali Khathaami, Ousaima Alhamouieh, Ahmad Abulaban, Sarah Scriven, Maisoun Tarawneh, Deema Alrasheed, Sameerah AlSomali, Elmer Catangu, Christine Manalili, Azza Ghadalla, Abdulaziz Alanizi, Suleiman Kojan*

P6.054 NIH - K-Mod Stroke Unit Assessment Scale—*John Falconer*

Intracerebral Hemorrhage and Cerebral Amyloid Angiopathy

P6.055 Warfarin-Related Intracerebral Hemorrhage: Predictors of Hematoma Expansion and In-Hospital Mortality—*Saeed Alzahrani, Richa Patel, Jerry Chen, Abdulrahman Alharbi, Nasim Zamir, Hesham Masoud, Helena Lau, Jose Romero, Joseph Burns, Robert Hart, Carlos Kase, Ashkan Shoamanesh*

P6.056 Risk Factors Associated with Cerebral Amyloid Angiopathy Lobar Hemorrhage: A Single Center Cohort Analysis—*David Roh, J. Michael Schmidt, William Roth, Lawrence Honer, Alexander Merkle, Soojin Park, E. Sander Connolly, Hooman Kamel, Jan Claassen*

P6.057 Amyloid-Beta Related Angiitis and Reversible Cerebral Vasoconstriction Syndrome: A Case Report—*Thomas Tropea, Prasad Shirvalkar, Krithiga Sekar,*

Kyung-Wha Kim, Apostolos Tsiouris, Ehud Lavi, Alan Segal

P6.058 Characteristics of Fever in Intracerebral Hemorrhage—*Sabreena Gillow, Bichun Ouyang, Vivien Lee, Sayona John*

P6.059 Comparison of Three Stroke Severity Scales with Mortality Within an Intracerebral Hemorrhage Population: A Population-Based Study—*Brian Katz, Jane Khoury, Kathleen Alwell, Charles Moomaw, Brett Kissela, Matthew Flaherty, Daniel Woo, Opeolu Adeoye, Pooja Khatri, Simona Ferioli, Jason Mackey, Sharyl Martini, Felipe De Los Rios La Rosa, Dawn Kleindorfer*

P6.060 Hematoma Characteristics and Functional Outcome Do Not Differ in NOAC- Versus VKA-Associated Intracerebral Hemorrhage—*Stefan Gerner, Hannes Luecking, Martin Koehrmann, Hagen Huttner*

P6.061 WITHDRAWN

P6.062 WITHDRAWN

P6.063 Use of ICH Score to Predict Disposition of Patients with Intraparenchymal Hemorrhage—*Niranjan Singh, Venkatditya Dugyala*

P6.064 Predicting Mortality in Intraparenchymal Hemorrhage in Modern ICU—*Niranjan Singh, Venkatditya Dugyala*

Cerebrovascular Disease: Miscellaneous Interventions

P6.065 Extracranial Vertebral Artery Atherosclerotic Disease in Patients with Symptomatic Stenosis of the Internal Carotid Artery. The North American Symptomatic Carotid Endarterectomy Trial—*Muhammad Shah Miran, Adnan Qureshi, Ahmed Malik, Malik Adil, Aiman Zafar, Muhammad Fareed Suri*

P6.066 Intra-Arterial Stem Cell Therapy for a Persistent Vegetative State Patient: A DTI Analysis of Recovery—*Kevin Ramdas, Luis Guada, Ryan Pafford, Diogo Haussen, Pradip Pattany, Dileep Yavagal*

P6.067 Hemispherectomy Versus Conservative Treatment in Large Hemispheric Ischemic Stroke Patients: A Meta-Analysis of Randomized Controlled Trials—*Muhammad Ishfaq, Haseeb Rahman, Abraham Thomas, Adnan Qureshi*

P6.068 Recanalization Therapy of Acute Internal Carotid Artery Occlusion: Comparison of Carotid Endarterectomy and Endovascular Treatment—*Roman Herzig, Martin Roubec, David Skoloudik, Martin Kuliha, Daniel Sanak, Jan Waishaupt, Eva Vitkova, Katerina Blejcharova, Dagmar Krajickova, Ales Tomek, Antonin Krajina, Vaclav Prochazka, Martin Kocher, Frantisek Chavrat, Tana Fadna, Jana Zapletalova, Martin Valis*

P6.069 Flow-Diversion For Ophthalmic Segment Aneurysms.—*Norman Ajiboye*

P6.070 Endovascular Treatment of Posterior Circulation Strokes Improves Outcome —*Mohammad Moussavi, Siddhart Mehta, Daniel Korya, Jaskiran Brar, Azka Shaikh, Rushil Kalola, Shayan Nizam, Spozhmy Panezai, Jawad Kirmani*

P6.071 Endovascular Diagnosis and Treatment of Hyper-Acute Occlusion of Carotid Endarterectomy —*Lamba Nayan, Alfred See, Priyank Khandelwal, Nirav Patel, Mohammad Aziz-Sultan*

P6.072 Novel Method Measuring Intracranial Vessel Caliber Reveals Arterial Remodeling In HIV —*Paba De Alwis, Cristah Artrip, Winston Liu, Bryan Smith, Avindra Nath, Daniel Reich, Govind Nair*

P6.073 Pulmonary Edema As an Adverse Effect in Albumin Treatment for Acute Ischemic Stroke Study —*Haitham Hussein, Ihtesham Qureshi, Muhammad Shah Miran, Muhammad Saleem, Adnan Qureshi*

Cerebrovascular Disease: Spinal Cord Involvement and Traumatic Brain Injury

P6.074 Brain and Spinal Cord Infarcts Secondary to an Atrial-Esophageal Fistula. —*Swetha Renati, Cui Yang, Supreet Kaur, Anna Khanna*

P6.075 A Population-Based Study of the Incidence of Primary and Secondary Spinal Cord Infarction —*Mohammad Raul Afzal, Morad Chugtai, Mushtaq Qureshi, Qureshi Adnan*

P6.076 Clinical Outcomes Following Corticosteroid Administration in Patients with Delayed Diagnosis of Spinal Arteriovenous Fistulas —*Deena Nasr, Alejandro Rabinstein, Giuseppe Lanzino, Waleed Brinjikji*

P6.077 Outcome After Treatment of Spinal Dural Arteriovenous Fistula: A Single-Institution Case Series —*Anita Tipirneni, Kunakorn Atchaneyasakul, Pankaj Sharma, Nirav Shah, Dileep Yavagal*

P6.078 Cauda Equina Syndrome from Spinal Spinal Venous Congestion Secondary to Collateral Vein Enlargement from Occluded Inferior Vena Cava Treated with IVC Stent —*Huda Al Hashemi, Kuruvilla John*

P6.079 Clinical Predictors of Spinal Dural Arteriovenous Fistulas in Patients with Myelopathy —*Anita Tipirneni, Anita Tipirneni, Kunakorn Atchaneyasakul, Drew Bleicher, Dileep Yavagal*

P6.080 Brown Sequard Syndrome Due to Dural Arteriovenous Fistula —*Humaira Rizvi, Shyam Moudgil, To Yuen*

P6.081 Risk Factors for Vascular Myelopathies: When "Transverse Myelitis" Is Not Really TM —*Paula Barreras, Andrea Quiroga, Phillipe Gailloud, Carlos Pardo-Villamizar*

P6.082 A Modified Beam-Walking Apparatus for Assessment of Anxiety in a Rodent Model of Blast Traumatic Brain Injury —*Brian Sweis, Salam Bachour, Cyrus Safinia, Mario Hevesi, Afshin Divani*

P6.083 A Novel Method to Induce Blast Traumatic Brain Injury in Rodents —*Mario Hevesi, Salam Bachour, Cyrus Safinia, Brian Sweis, Afshin Divani*

Cerebrovascular Disease and Interventional Neurology: Patient Safety and Quality

P6.084 Improving Telestroke Performance in Rural Systems of Care - The EQUITe Initiative —*Nina Solenski, Andrew Southerland, Timothy Shephard, Diane Hillman, Timothy McMurry, Nick Lawrence, Patricia Schweickert, Katharine Wibberly*

P6.085 Factors Delaying Stroke Team Notification in the Emergency Department in Acute Ischemic Stroke Patients Receiving Thrombolytic Treatment —*Rick Gill, Jessica Ray, Niklas Eriksson, Ramon Durazo-Arzu, Sean Ruland*

P6.086 Multidisciplinary In Situ Mock Stroke Codes Improve Thrombolytic Delivery by Decreasing Door To Needle Times in a Comprehensive Stroke Center. —*Reuben Burstein, Anirudh Kapoor, Ceil Sorrentino, Cassara Michael, Claire Carrazco, Paul Wright*

Pain and Palliative Care: Patient Safety and Quality

P6.087 Use of the Serious Illness Conversation Guide in Advanced Parkinsonism: Pilot Study of a Palliative Care Communication Intervention —*Teresa Mangin*

P6.088 The What and When of Palliative Care for Multiple Sclerosis: A Scoping Review —*Sabrina Apel, Linda Carroll, Wendy Johnston, Penelope Smyth*

P6.089 Palliative Care is Underutilized in Ischemic Stroke Patients with Poor Functional Outcome —*Toby Gropen, April Sisson, Karen Albright, Sindhu Lakur, Marie Bakitas, Kara Sands, Manmeet Kaur, Michael Lyerly, Kathryn Burgio*

Headache: Basic Science and Clinical Presentation/Diagnosis

P6.090 Prepulse Inhibition During Migraine Attacks —*Ugur Uygunoglu, Derya Uluduz, Devrim Sel Harika Ertem, Baki Goksan, Sabahattin Saip, Aksel Siva, Meral Kiziltan*

P6.091 Pharmacokinetic and Pharmacodynamic Modeling of LY2951742, a Calcitonin Gene Related Peptide Antibody, in Migraine Patients —*William Kielbaso, Tonya Quinlan, Robert Bell, Bradley Miller, Vladimir Skljarevski*

P6.092 Langerhans Cell Histiocytosis Presenting As Worsening Migraine. —*Cesar Escamilla Ocanas, Madhureeta Achari*

P6.093 Episodic Headache, Confusion, Amnesia And, Limb Shaking: A New Syndrome? —*Fatemah Alshawaf, Samuel Potoicchio, Tariq Alfahad*

P6.094 Hyalinizing Clear Cell Carcinoma of the Base of Tongue: First Report of a Case Presenting With Headaches —*Salman Farooq, Nicholas Harding-Jackson, Michael Stadler, Frederick Freitag*

P6.095 Granulomatosis with Polyangiitis Causing Collet-Sicard Syndrome and Medically-Refractory Headache and Otitis Media —*Nathaniel Schuster, Stelios Karnezis, Lucas Restrepo*

P6.096 Expressive Aphasia As an Initial Manifestation of the Syndrome of Transient Headache and Neurologic Deficits with Cerebrospinal Fluid Lymphocytosis —*Simy Kabaria*

P6.097 Sympathetic Dysfunction Inter-ictally in Cluster Headache —*Katie Lehman, Nadini Kumar, Quang Vu, Rebecca Wells*

Headache: Clinical Presentation/Diagnosis

P6.098 Total Migraine Freedom for Breath Powered Intranasal Delivery System Containing 22 Mg Sumatriptan Powder (AVP-825) Vs 100 Mg Oral Sumatriptan from the COMPASS Study of Acute Treatment of Migraine —*Rashmi Halker, Stewart Tepper, Kenneth Shulman, Christopher Wallick*

P6.099 Internal Carotid Artery Stenosis and Flow Diversion: Relationship with Headache —*Nabeel Herial, Muhammad Shah Miran, Muhammad Saleem, Ihtesham Qureshi, Adnan Qureshi*

P6.100 Worldwide Migraine Epidemiology: Systematic Review and Meta-Analysis of 302 Community-Based Studies Involving 6,216,995 Participants —*Yohannes Woldeamanuel, Robert Cowan*

P6.101 Course of Migraine and TTH Over the Years - What Happens? A Longitudinal Nationwide Study —*Necdet Karli, Betül Baykan, Mehmet Zarifoglu, Mustafa Ertaş, Derya Uludüz, Ugur Uygunoglu, Esme Ekizoglu, Elif Orhan, Sabahattin Saip, Aksel Siva*

P6.102 Rapid Response in Migraine Patients Treated with Breath Powered Intranasal Delivery of Sumatriptan Powder (AVP-825): Efficacy Analysis by Prior Triptan History from the Phase 3 TARGET Study —*Paul Winner, Chris Wallick, Kenneth Shulman, Larisa Yedigaraova, Charles Yonan*

P6.103 Giant Cell Arteritis Presenting As Lesser Occipital Neuralgia —*Zwade Marshall, Daniel Vardeh*

P6.104 Clinical Features and Prognosis of Headache in Preeclampsia and Eclampsia —*Fiorito-Torres Franchesca, Matthew Robbins*

P6.105 Granulomatosis with Polyangiitis Presenting As Spontaneous Intracranial Hypotension: A Case Report —*Young Hee Jung*

P6.106 A Low Incidence of Atypical Sensations with AVP-825 (Breath Powered Intranasal Delivery System Containing 22 Mg Sumatriptan Powder)

Migraine Therapy Across Multiple Phase 2/3 Clinical Trials —*Stewart Tepper, Kenneth Shulman, Chris Wallick, Larisa Yedigaraova, Joao Siffert*

P6.107 Predictors of Poor Visual Outcome at Six Months in Patients with Idiopathic Intracranial Hypertension (IIH) —*Amit Agarwal, Deepti Vibha, Kameshwar Prasad, Rohit Bhatia, Mamta Singh Bhushan, Ajay Garg, Rohit Saxena*

MS and CNS Inflammatory Disease: CNS Inflammatory Diseases and Differential Diagnosis

P6.108 Inflammatory Diseases of the Central and Peripheral Nervous System in Patients with Systemic Lupus Erythematosus: Autoantibody Findings and Clinical Phenotype —*Anne-Katrin Proebstel, Madlaina Thanai, Barbara Erni, Lecourt Anne-Catherine, Leonore Branco, Camillo Ribi, Katrin Koenig, Uyen Huynh-Do, Carlo Chizzolini, Ludwig Kappos, Marten Trendelenburg, Tobias Derfuss*

P6.109 Clinical, Radiographic and Pathological Features of CLIPPERS (Chronic Lymphocytic Inflammation with Pontine Perivascular Enhancement Responsive to Steroids) —*W. Oliver Tobin, Yong Guo, Claudia Lucchinetti, Karl Krecke, Jan Debruyne, Joseph Parisi, Sean Pittcock, Mark Keegan*

P6.110 Proposed Revised Criteria for the Diagnosis of CLIPPERS —*Guillaume Taieb, Thibaut Allou, Nadege Limousin, Cecilia Rousselot, Caroline Arquiza, Valerie Rigau, Veronique Pantesco, Jean Chritophe Ouallet, Pierre Labauge*

P6.111 A Case of CLIPPERS Syndrome with Atypical Distribution Associated with Multiple Myeloma —*Nathaniel Bendahan, Jean-Martin Boulanger*

P6.112 A Rare Presentation of Chronic Lymphocytic Inflammation with Pontine Perivascular Enhancement Responsive to Steroids (CLIPPERS) As Acute Ischemic Stroke —*Rajan Gadhia, Stacy Smith, Eugene Lai, Andrew Lee*

P6.113 Is It Ever Lupus? A Single Centre Retrospective Review of the Rheumatologic Work-up in Patients with Clinically Isolated Syndrome —*Adrian Budhram, Joshua Yuen, Han Yan, Marcelo Kremenchtzky*

P6.114 Clinical and Radiological Presentation of Neurosarcoidosis: Single Center Cohort Study of 107 Cases —*Muhammad Affan, Loni Schultz, Mirela Cerghet, Stanton Elias*

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P6.377 Short- and Long-Term Safety of PEG-J Used for Continuous Infusion of Levodopa-Carbidopa Intestinal Gel —*Peter Draganov, Michael Epstein, Robert Hawes, David Johnson, Arvydas Vanagunas, Weining Robieson, Krai Chatamra, Janet Benesh, Susan Eaton*

P6.378 Prevalence of Upper Extremity Freezing in Parkinson Disease Patients —*Sol De Jesus, Bilal Ahmed, Leonardo Almeida, Leili Shahgholi Ghahfarokhi, Addie Patterson, Lisa Warren, Heather Simpson, Michael Okun, Christopher Hess*

P6.379 Role of Clinical Nurse Educators (CNEs) in Levodopa-carbidopa Intestinal Gel (LCIG) Clinical Studies in Parkinson's Disease (PD) —*Evelyn Olson, Edward Greene, Kristy Espay, Renee Wagner, Krai Chatamra, Janet Benesh, John Slevin, Alberto Espay*

P6.380 Pre Motor Symptoms of Parkinson Disease in Argentinean Patients with Type 1 Gaucher Disease. Preliminary Report —*Emilia Gatto, Jose Luis Etcheverry, Ana Sanguinetti, Martin Cesarini, Barbara Soberon, Nicolas Fernandez Escobar, Guillermo Drelichman*

P6.381 Postural Instability and Gait Disorder (PIGD) in Parkinson's Disease: Is There Another Target for Deep Brain Stimulation? —*Sivesh Kathir Kamarajah*

P6.382 Polychlorinated Biphenyl (PCB) Exposure, CYP2B6 Variability and Parkinson's Disease Risk in the Faroe Islands —*Lindsay Farrell, Ekaterina Nosova, Ilaria Guella, Matthew Farrer, Maria Petersen*

P6.383 Medication Reduction After DBS Placement in Parkinson's Disease —*Zain Guduru, Carol Schramke, Susan Baser, Timothy Lechlitter*

P6.384 Decreased Vestibular Efficacy Contributes to Non-Tremor Motor Impairments in Parkinson Disease —*Nicolaas Bohnen, Melanie Beaulieu, Martijn Muller*

P6.385 Decreased L-Aromatic-Amino-Acid Decarboxylase Activity and Vesicular Storage Contribute to Putamen Dopamine Depletion in Parkinson's Disease and Multiple System Atrophy —*David Goldstein, Yunden Jinsmaa, Courtney Holmes, Deborah Mash, Irwin Kopin, Yehonatan Sharabi*

P6.386 Nicotinamide: A Key Player in the Developmental Origins of Parkinson's Disease? —*Adrian Williams, Sile Griffin, Mark Pickard, Rosemary Fricker*

P6.387 Behavioral Variant Frontotemporal Degeneration or Parkinson's Disease? Not All Hypersexuality Is Impulse Control Disorder —*Kisha Young, Katherine McDonnell, Daniel Claassen*

P6.388 Subthalamic Oscillatory Activity in Parkinsonian Patients with Akinetic-Rigid Type Vs Mixed and Tremor Type —*Ping Zhuang, Mark Hallett, Huanhuan Feng, Yuqing Zhang, Jianyu Li, Yongjie Li*

P6.389 Effect of L-DOPA on the Sensory Cortex in Parkinson's Disease: A Neurophysiological Analysis —*Nobuyuki Ishii, Hitoshi Mochizuki, Kazutaka Shiomi, Masamitsu Nakazato*

P6.390 Genetic Variation Near the SNCA Gene Associates with Parkinson's Disease Motor Endophenotype and Progression —*Christine Cooper, Yosef Berlyand, Sharon Xie, Daniel Weintraub, John Trojanowski, Cyrus Zabetian, Alice Chen-Plotkin*

P6.391 Patient Preferences for Device-Aided Treatments Indicated for Advanced Parkinson's Disease (APD) —*Thomas Marshall, A. Brett Hauber, Angelyn Fairchild, Kavita Sail*

P6.392 Could Analysis of MRI Signals Differentiate Typical and Atypical Parkinsonism? —*Andrzej Friedman, Jolanta Galazka-Friedman, Radoslaw Kulinski*

Movement Disorders: Spinocerebellar Ataxias

P6.393 The Initial Clinical Presentation of Spinocerebellar Ataxias Type 1, 2, 3, and 6 —*Lan Luo, Jie Wang, Karla Figueroa, Stefan Pulst, Susan Perlman, George Wilmot, Christopher Gomez, Jeremy Schmahmann, Henry Paulson, Vikram Shakkottai, Sarah Ying, Theresa Zesiewicz, Khalaf Bushara, Michael Geschwind, Guangbin Xia, S Subramony, Tetsuo Ashizawa, Sheng-Han Kuo*

P6.394 Task-Functional MRI and Disease Severity in Individuals with Spinocerebellar Ataxia 6 —*Nyeonju Kang, Sankarasubramoney Subramony, Evangelos Christou, David Vaillancourt*

P6.395 Olfaction in Spinocerebellar Ataxia Type 10 —*Mariana Moscovich, Adriana Moro, Renato Munhoz, Walter Arruda, Helio Afonso Teive, Laura Silveira-Moriyama*

P6.396 The Role of Stauf1 in Aberrant RNA Metabolism in SCA2 —*Sharan Paul, Warunee Dansithong, Karla Figueroa, Daniel Scoles, Stefan Pulst*

P6.397 Patient with Hydrocephalus and SCA15 (ITPR1) Variant —*Philip Tipton, Patrick Blackburn, Kimberly Guthrie, Audrey Strongosky, Alexander Parker, Ronald Reimer, Zbigniew Wszolek*

P6.398 Biomarkers of Spinocerebellar Ataxia Type 7: GABA MR Spectroscopy, H-Reflex and Clinical Correlation —*Hyun Cho, Pattamon Panyakaew, Silvina Horovitz, Brian Brooks, Mark Hallett*

P6.399 Sleep Disruption in Spinocerebellar Ataxia Type 10 —*Ester London, Ana Crippa, Salmo Raskin, Helio Afonso Teive*

P6.400 Anthropometric Profile of Patients with Spinocerebellar Ataxia —*Helio Afonso Teive, Christiane Leite, Darla Macedo, Maria Schieferdecker, Regina Vilela, Adriana Moro*

P6.401 Estimation of Skeletal Muscle Mass in Patients with Spinocerebellar Ataxia —*Helio Afonso Teive, Christiane Leite, Darla Macedo, Maria Schieferdecker, Regina Vilela, Adriana Moro*

P6.402 Identification of a Novel Mutation in ADRBK1 in a Kindred with an Autosomal Dominant Cerebellar Ataxia —*Ronald Siu, Andrew Singleton, Bryan Traynor, Mark Connor, Carolyn Sue, Dominic Rowe*

Neurology Year in Review Plenary Session

Thursday, April 21, 2016 9:00 a.m. to 11:30 a.m.

This plenary session will feature six speakers, each focusing on the latest research that has happened in the last year within a specific subspecialty topic.

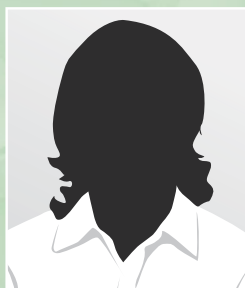
Moderator



Lisa M. DeAngelis, MD, FAAN
 Chair, AAN Science Committee



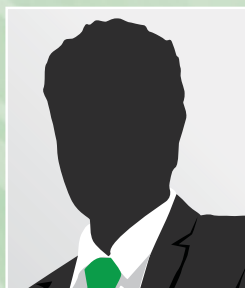
Massimo Pandolfo, MD, FAAN
 Universite Libre De Bruxelles
 Brussels, Belgium
*Genetic Disorders:
 Diagnosis and Treatment*



Rujuta Bhatt, MD
 University of California
 Los Angeles, CA
Neurodevelopmental Disorders



Christina Marra, MD, FAAN
 University of Washington
 Harborview Medical Center
 Seattle, WA
Neuro-infectious Disease



A. Jon Stoessl, MD, FAAN
 University of British Columbia
 Vancouver, BC, Canada
Neuroimaging



Ahmet Hoke, MD, PhD
 Johns Hopkins School of Medicine
 Baltimore, MD
Peripheral Nerve Disorders



Richard B. Lipton, MD, FAAN
 Albert Einstein College of Medicine
 Bronx, NY
Headache

Thu - April 21

1:00 p.m.–3:00 p.m.

Scientific Platform Sessions

S47: IV-tPA and Endovascular Therapy

1:00 p.m. S47.001

Early CT Changes in Patients Admitted for Thrombectomy: Intra- and Interrater Agreement and Systematic Review of the Literature —Naim Khoury, Robert Fahed, Francois Guilbert, Alexandre Poppe, Nicole Daneault, Behzad Farazin, Andre Durocher, Sylvain Lanthier, Hayet Boudjani, Daniel Roy, Alain Weill, Jean-Christophe Gentric, Andre Lima Batista, Laurent Letourneau-Guillon, Francois Bergeron, Marc-Antoine Henry, Tim E. Darsaut, Jean Raymond

1:15 p.m. S47.002

Proximal Occlusion Scale for Rapid Triage of Potential Endovascular Therapy Candidates —Derek Holder, Glen Jickling

1:30 p.m. S47.003

Arterial Recanalization in the Golden Hour of IV TPA Administration for Ischemic Stroke —Rodica Bernatowicz, Megan Donohue, Muhammad Hussain, Seby John, Dolora Wisco, Ken Uchino

1:45 p.m. S47.004

The Effect of 24 Hour Post-intravenous Alteplase CT Head on Management Decisions: a Single Center Experience —Theresa Sevilis, Leonardo Morantes Gomez, Neel Shah, Michael Wang, David Huang, William Powers

2:00 p.m. S47.005

Cost Effectiveness of Stent-Retriever Thrombectomy Compared with Intravenous Thrombolytic Therapy Alone in Acute Ischemic Stroke Patients —Saqib Chaudhry, Muhammad Ishfaq, Kamesh Sivagnanam, Adnan Qureshi

2:15 p.m. S47.006

Variability in Approach to Treatment of Acute Central Retinal Artery Occlusion in US Teaching Hospitals —Matthew Schrag, Teddy Youn, Morgan Patrylo, Joseph Schindler, Patrick Lavin, Howard Kirshner, David Greer

2:30 p.m. S47.007

Time is Brain: Standardized Neuro-Interventional Thrombectomy Protocols Lead to Faster Recanalization Times —Donald Frei, Lisa Caputo, Kathryn McCarthy, Kristin Salottolo, David Bar-Or

2:45 p.m. S47.008

Obesity Paradox in Patients Hospitalized for Acute Ischemic Stroke: An Analysis of Nationwide Inpatient Sample Data —Abhishek Lunagariya, Achint Patel, Chirag Savani, Urvis Patel, Vishal Jani, Syed Hussain, Sonal Mehta

S48: Neuro-ophthalmology/ Neuro-otology

1:00 p.m. S48.001

Perioperative Ischemic Optic Neuropathy (poION) in the United States from 1998-2011 in the Nationwide Inpatient Sample —Heather Moss, Isaac Parakati, Lorri Ann Lee, Daniel Rubin, Charlotte Joslin, Steven Roth

1:15 p.m. S48.002

Ganglion Cell Damage and Functional Recovery After Optic Neuritis —Alexander Brandt, Timm Oberwahrenbrock, Friedemann Paul, Fiona Costello

1:30 p.m. S48.003

Comparison of the Bedside with the Video Head Impulse Test in 500 Patients with Vertigo —Michael Strupp, Otmar Bayer, Chun Wai Yip

1:45 p.m. S48.004

In-Vivo Characterization of Retinal Pathology in Huntington's Disease: Putative Biomarker of Transcriptional Dysregulation —Marissa Dean, Jessica Chorostecki, Sheridan Reed, Edwin George, Christina Caon, Carla Santiago Martinez, Omar Khan, Navid Seraji-Bozorgzad

2:00 p.m. S48.005

Idebenone Is Effective and Well Tolerated in Leber's Hereditary Optic Neuropathy (LHON): Results of a 3-Year Expanded Access Program —Thomas Klopstock, Guenther Metz, Constanze Gallenmüller, Bettina von Livonius, Felice Lob, Thomas Meier, Claudia Catarino

2:15 p.m. S48.006

Regional Patterns of Brain Gray and White Matter Abnormalities in Patients with Hereditary Optic Neuropathies: Dominant Optic Atrophy vs Leber Hereditary Optic Neuropathy —Roberta Messina, Maria Rocca, Stefania Bianchi Marzoli, Melissa Petrolini, Jacopo Milesi, Fatima Darvizeh, Francesco Bandello, Giancarlo Comi, Andrea Falini, Massimo Filippi

2:30 p.m. S48.007

The Localization and Patterns of Dyschromatopsia in Prosopagnosic Subjects —Daniel Moroz, Sherryse Corrow, Jeffrey Corrow, Alistair Barton, Bradley Duchaine, Jason Barton

2:45 p.m. S48.008

Retinal Thickness and Visual Disability in Patients with Multiple Sclerosis and Disease-Free Controls with Myopia —Rachel Nolan, Diana Laura, Lisen Hasanaj, Peter Calabresi, Elliot Frohman, Steven Galetta, Laura Balcer

S49: Clinical Trials in Multiple Sclerosis I

1:00 p.m. S49.001

Efficacy and Safety of Ocrelizumab in Primary Progressive Multiple Sclerosis: Results of the Phase III Double-Blind, Placebo-Controlled ORATORIO Study —Xavier Montalban, Bernhard Hemmer, Kottil Rammohan, Gavin Giovannoni, Jerome De Seze, Amit Bar-Or, Douglas Arnold, Annette Sauter, Donna Masterman, Paulo Fontoura, Hideki Garren, Peter Chin, Jerry Wolinsky

1:15 p.m. S49.002

Effect of Ocrelizumab on MRI Inflammatory and Neurodegenerative Markers of Disease in Patients with Relapsing Multiple Sclerosis: Analysis of the Phase III, Double-Blind, Double-Dummy, Interferon Beta-1a-Controlled OPERA I and OPERA II Studies —Douglas Arnold, Amit Bar-Or, Giancarlo Comi, Hans-Peter Hartung, Stephen Hauser, Ludwig Kappos, Fred Lublin, Krzysztof Selmaj, Anthony Traboulsee, Gaelle Klingelschmitt, Donna Masterman, Paulo Fontoura, Peter Chin, Hideki Garren, Jerry Wolinsky

1:30 p.m. S49.003

Efficacy of Ocrelizumab in Patients with Relapsing Multiple Sclerosis: Pooled Analysis of Two Identical Phase III, Double-Blind, Double-Dummy, Interferon Beta-1a-Controlled Studies —Stephen Hauser, Douglas Arnold, Amit Bar-Or, Giancarlo Comi, Hans-Peter Hartung, Fred Lublin, Krzysztof Selmaj, Anthony Traboulsee, Gaelle Klingelschmitt, Donna Masterman, Paulo Fontoura, Peter Chin, Hideki Garren, Ludwig Kappos

1:45 p.m. S49.004

24-Month-Treatment With-MD1003 (High Doses of Biotin) in Progressive Multiple Sclerosis: Results of the MS-SPI Trial Extension Phase —Ayman Tourbah, Christine Lebrun-Frenay, Gilles Edan, Michel Clanet, Caroline Papeix, Sandra Vukusic, Jerome De Seze, Marc Debouverie, Olivier Gout, Pierre Clavelou, Gilles Defer, David Laplaud, Thibault Moreau, Pierre Labauge, Bruno Brochet, Frederic Sedel, Jean Pelletier

2:00 p.m. S49.005

Effect of MD1003 (High Doses of Biotin) in Chronic Visual Loss Related to Optic Neuritis in Multiple Sclerosis (MS-ON): Results of a Pivotal Randomized Double Masked Placebo Controlled Study —Ayman Tourbah, Carl Arndt, Alain Vighetto, Veronique Deburghgraeve, Jean Pelletier, Caroline Papeix, Christine Lebrun-Frenay, Pierre Labauge, Michel Clanet, Ahmed Toosy, David Laplaud, Patrick Vermersch, Thibault Moreau, Marc Debouverie, Pierre Clavelou, Olivier Heinzel, Jerome De Seze, Gilles Defer, Frederic Sedel, Olivier Gout

2:15 p.m. S49.006

Evidence That the Anti-LINGO-1 Monoclonal Antibody B1B033 Protects Against Multifocal Visual Evoked Potential Amplitude Loss in the Fellow Eye of Subjects with Unilateral Acute Optic Neuritis —Diego Cadavid, Alexander Klistorner, Yi Chai, Letizia Leocani, Orhan Aktas, Helmut Butzkueven, Tjalf Ziemssen, Focke Ziemssen, Jette Frederiksen, Lei Xu

2:30 p.m. S49.007

Autologous Hematopoietic Stem Cell Transplantation for Multiple Sclerosis in a Western Australian Cohort —Marzena Pedrini, Dustin Hall, Gavin Cull, Bradley Augustson, Susan Walters, Christina Crosbie, William Carroll, Allan Kermode

2:45 p.m. S49.008

Effect of Ocrelizumab on Disability Progression in Patients with Relapsing Multiple Sclerosis: Analysis of the Phase III, Double-Blind, Double-Dummy, Interferon Beta-1a-Controlled OPERA I and OPERA II Studies —Giancarlo Comi, Douglas Arnold, Amit Bar-Or, Hans-Peter Hartung, Stephen Hauser, Ludwig Kappos, Fred Lublin, Krzysztof Selmaj, Anthony Traboulsee, Gaelle Klingelschmitt, Donna Masterman, Paulo Fontoura, Peter Chin, Hideki Garren, Xavier Montalban

1:00 p.m.–3:00 p.m.

Section Topic Controversies

S50 Section Topic Controversies: Discontinuing Antiepileptic Drug Therapy Following Seizure Remission—Good Idea or Bad?

Director: Gregory D. Cascino, MD, FAAN

1:00 p.m.–1:40 p.m.

Introduction to Discontinuing Antiepileptic Drug Therapy
Gregory D. Cascino, MD, FAAN

1:40 p.m.–2:20 p.m.

Issues in the Adult Patient
Samuel Wiebe, MD, MSc, FRCPC, FCAHS

2:20 p.m.–3:00 p.m.

Issues in the Pediatric Patient
Elaine C. Wirrell, MD

Meeting Schedule

1:00 p.m.–3:00 p.m.

S47 IV-tPA and Endovascular Therapy

S48 Neuro-ophthalmology/Neuro-otology

S49 Clinical Trials in Multiple Sclerosis I

S50 Section Topic Controversies: Discontinuing Antiepileptic Drug Therapy Following Seizure Remission—Good Idea or Bad?

C213 Primer of Behavioral Neurology I

Director: *Maria Gorno Tempini, MD, PhD, San Francisco, CA*

C214 Neurology Update III

Director: *Barney J. Stern, MD, FAAN, Baltimore, MD*

C215 Deep Brain Stimulation Management I

Director: *Jill L. Ostrem, MD, San Francisco, CA*

C216 Neuromyelitis Optica Spectrum Disorders

Director: *Dean M. Wingerchuk, MD, FAAN, Scottsdale, AZ*

C217 Neuromuscular Junction Disorders I

Director: *Laura Marie Tormoehlen, MD, Indianapolis, IN*

C218 Hot Topics in Sleep Neurology I

Director: *Erik Kent St. Louis, MD, FAAN, Rochester, MN*

C219 Neurologic Complications of Medical Disease: An Overview

Director: *Sara E. Hocker, MD, Rochester, MN*

C220 Non-Alzheimer's Dementia I

Director: *Gil Dan Rabinovici, MD, San Francisco, CA*

C221 Hot Topics in Headaches and Related Disorders I

Director: *Peter Goadsby, MD, PhD, San Francisco, CA*

C222 Critical Care EEG Monitoring

Director: *Aatif M. Husain, MD, Durham, NC*

Ask the Expert

1:00 p.m.–5:30 p.m.

C223 Neuromuscular Ultrasound Skills Workshop

(registration required)

Director: *Lisa Hobson-Webb, MD, Durham, NC*

I13 Sports-related Concussion: Vision and Vestibular Insights 146

I14 Practical Approaches to Narrowing the Epilepsy Treatment Gap 147

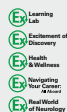
A registration fee is required

The program is one of the AAN Leadership University sessions

The course is part of a Subspecialty in Focus track

The program is one of the I Talk sessions

The program is part of the Experiential Learning Area sessions



Thu - April 21

1:00 p.m.–5:30 p.m.

Integrated Neuroscience Session

113 Sports-related Concussion: Vision and Vestibular Insights

This program is offered in partnership with the North American Neuro-ophthalmology Society and the AAN Neuro-ophthalmology/Neuro-otology Section.

Coordinators: Steven Galetta, MD, FAAN, and Laura J. Balcer, MD, MSEC, FAAN



Program Description: Sports-related concussion is recognized as a potential cause of both short- and long-term neurologic sequelae. Concussion is associated with many visual and vestibular signs and symptoms. Performance measures that capture these aspects of neurologic function enhance the detection of concussion on the sidelines. Through a combination of didactic, data-driven talks and platform and poster presentations of the latest research findings, this program will highlight the exciting and timely intersection of neuro-ophthalmology, neuro-otology, and sports neurology.

Upon Completion: Participants should be able to identify features of the visual and vestibular pathways that render them particularly vulnerable to concussion, and to articulate the importance, feasibility, and methodologies for incorporating vision- and vestibular-based assessments into sideline testing and concussion management. Importantly, participants will also understand the global nature of the concussion epidemic and be familiar with cutting-edge research findings that support the vision and vestibular systems as targets for diagnosis, management, and emerging therapies.

Part I

1:00 p.m.–2:45 p.m.

1:00 p.m.–1:05 p.m. Introduction

Laura J. Balcer, MD, MSCE, FAAN, and Steven Galetta, MD, FAAN

1:05 p.m.–1:35 p.m. Invited Speaker

The NCAA Experience: What is Our Vision for Concussion?
Brian W. Hainline, MD, FAAN

1:35 p.m.–1:40 p.m. 113.001 Data Blitz

Agreement of the Spiral-Bound and Computerized Tablet Versions of the King-Devick Test of Rapid Number Naming for Sports Related Concussion —Jenelle Raynowska, Lisena Hasanaj, Arlene Silverio, Janet Rucker, Steven Galetta, Laura Balcer

1:40 p.m.–1:45 p.m. 113.002 Data Blitz

Visual Performance of Non-Native Versus Native English Speakers on a Sideline Concussion Screen: An Objective Look at Eye Movement Recordings —Katharine Dempsey, Joel Birkemeier, Todd Hudson, Weiwei Dai, Ivan Selesnick, Lisena Hasanaj, Laura Balcer, Steven Galetta, Janet Rucker, John-Ross Rizzo

1:45 p.m.–1:55 p.m. Audience Q&A

1:55 p.m.–2:25 p.m. Invited Speaker

Concussion: The Anatomy and Physiology of Vision Testing
Steven Galetta, MD, FAAN, New York, NY

2:25 p.m.–2:30 p.m. 113.003 Data Blitz

Yield of the Clinical Neuro-Ophthalmologic Examination in Patients with Concussion —Katharine Dempsey, Joel Birkemeier, John-Ross Rizzo, Lisena Hasanaj, Laura Balcer, Steven Galetta, Janet Rucker

2:30 p.m.–2:35 p.m. 113.004 Data Blitz

Evaluating Concussion Recovery Through Oculomotor Testing —Melissa DiFabio, Jessie Oldham, Ryan DeWolf, Thomas Kaminski, Thomas Buckley

2:35 p.m.–2:45 p.m. Audience Q&A

Guided Poster Rounds

2:45 p.m.–3:15 p.m.

113.001 Agreement of the Spiral-Bound and Computerized Tablet Versions of the King-Devick Test of Rapid Number Naming for Sports Related Concussion —Jenelle Raynowska, Lisena Hasanaj, Arlene Silverio, Janet Rucker, Steven Galetta, Laura Balcer

113.002 Visual Performance of Non-Native Versus Native English Speakers on a Sideline Concussion Screen: An Objective Look at Eye Movement Recordings —Katharine Dempsey, Joel Birkemeier, Todd Hudson, Weiwei Dai, Ivan Selesnick, Lisena Hasanaj, Laura Balcer, Steven Galetta, Janet Rucker, John-Ross Rizzo

113.003 Yield of the Clinical Neuro-Ophthalmologic Examination in Patients with Concussion —Katharine Dempsey, Joel Birkemeier, John-Ross Rizzo, Lisena Hasanaj, Laura Balcer, Steven Galetta, Janet Rucker

113.004 Evaluating Concussion Recovery Through Oculomotor Testing —Melissa DiFabio, Jessie Oldham, Ryan DeWolf, Thomas Kaminski, Thomas Buckley

113.005 The Ocular Motor Underpinnings of Rapid Number-Naming As a Sideline Performance Measure for Concussion —Joel Birkemeier, Todd Hudson, John-Ross Rizzo, Weiwei Dai, Ivan Selesnick, Lisena Hasanaj, Laura Balcer, Steven Galetta, Janet Rucker

113.006 Rapid Number Naming and Quantitative Eye Movements May Reflect Contact Sport Exposure in a Collegiate Ice Hockey Cohort —Lisena Hasanaj, Nikki Webb, Joel Birkemeier, Liliana Serrano, Rachel Nolan, Jenelle Raynowska, Luiz Souza-Filho, Todd Hudson, John-Ross Rizzo, WeiWei Dai, Janet Rucker, Steven Galetta, Laura Balcer

113.007 Initial Validation of a Novel Neuro-Ophthalmologic Set-Shifting Saccade Task —Adam Simon, Stephen Martino, David Devilbiss

113.008 No Changes in Postural Control or Near-Point Convergence Following an Acute Bout of Soccer Heading —Jaclyn Caccese, Thomas Buckley, Thomas Kaminski

113.009 To Study Risk of Seizures After Mild Traumatic Brain Injury in General Population —Suresh Kumar, Pooja Shah, Martin Bringham

113.010 First Results from a 3 Year Study in Sports Concussion In Varsity Athletes at Lehigh University Using a Novel Biosensor Based Assessment Platform —Adam Simon, David Devilbiss

113.011 Multivariate Models of Biosensor Data to Actively Assess Sports Concussion and Mild Traumatic Brain Injury —Adam Simon, David Devilbiss

113.012 Changes in Balance Error Scoring System (BESS) Scores and Center-of-Pressure Following Concussion —Jaclyn Caccese, Thomas Buckley, Ryan DeWolf, Thomas Kaminski

113.013 Visual Tracking Eye Movement Characteristics in Concussion-Vulnerable Population and in Recovering Patients —Jessica Little, Jun Maruta, Stephanie Kolakowsky-Hayner, Jianliang Tong, Umesh Rajashekar, Ghajar Jamshid

Part II

3:15 p.m.–5:30 p.m.

3:15 p.m.–3:40 p.m. Invited Speaker

Seeing a Balance: The Ocular Motor and Vestibular Examination
Leonard Messner, OD, Chicago, IL

3:40 p.m.–3:45 p.m. 113.005 Data Blitz

The Ocular Motor Underpinnings of Rapid Number-Naming As a Sideline Performance Measure for Concussion —Joel Birkemeier, Todd Hudson, John-Ross Rizzo, Weiwei Dai, Ivan Selesnick, Lisena Hasanaj, Laura Balcer, Steven Galetta, Janet Rucker

3:45 p.m.–3:50 p.m. 113.006 Data Blitz

Rapid Number Naming and Quantitative Eye Movements May Reflect Contact Sport Exposure in a Collegiate Ice Hockey Cohort —Lisena Hasanaj, Nikki Webb, Joel Birkemeier, Liliana Serrano, Rachel Nolan, Jenelle Raynowska, Luiz Souza-Filho, Todd Hudson, John-Ross Rizzo, WeiWei Dai, Janet Rucker, Steven Galetta, Laura Balcer

3:50 p.m.–4:00 p.m. Audience Q&A

4:00 p.m.–4:25 p.m. Invited Speaker

Capturing Vision and Eye Movements: Where Science Meets the Sideline
Janet C. Rucker, MD, New York, NY

4:25 p.m.–4:55 p.m. Invited Speaker

Vestibular Dysfunction: Approaches and Updates
Terry D. Fife, MD, FAAN

4:55 p.m.–5:00 p.m. 113.007 Data Blitz

Initial Validation of a Novel Neuro-Ophthalmologic Set-Shifting Saccade Task —Adam Simon, Stephen Martino, David Devilbiss

5:00 p.m.–5:05 p.m. 113.008 Data Blitz

No Changes in Postural Control or Near-Point Convergence Following an Acute Bout of Soccer Heading —Jaclyn Caccese, Thomas Buckley, Thomas Kaminski

5:05 p.m.–5:20 p.m. Audience Q&A

5:20 p.m.–5:30 p.m. Conclusion

114 Practical Approaches to Narrowing the Epilepsy Treatment Gap

Coordinators: Gretchen L. Birbeck, MD, MPH, DTMH, FAAN, and Steven C. Schachter, MD, FAAN

Program Description: The Epilepsy Treatment Gap, meaning the proportion of people with epilepsy who warrant treatment but are not receiving it, provides critical but often over-simplified insights into epilepsy care access. The “treatment gap” alone does not detail who is left behind or why. Individual characteristics certainly influence care seeking behaviors and the capacity to successfully access care and adhere but the treatment gap is also heavily impacted by macroeconomic factors, sociocultural beliefs, health systems, human resources limitations, and regulatory barriers. Importantly, although the treatment gap metric is most often applied in resource-limited setting, in reality gaping holes in epilepsy care are universal and include delayed diagnoses and inequitable access to advanced diagnostics or subspecialty providers. This session will help attendees develop practical approaches to narrowing the treatment gap by delineating a conceptual framework, suggesting approaches to developing interventions/activities and consideration of proxy outcomes that may be needed for intervention evaluations.

Part I

1:00 p.m.–3:00 p.m.

1:00 p.m.–1:10 p.m. Introduction

Steven C. Schachter, MD, FAAN, and Gretchen L. Birbeck, MD, MPH, DTMH, FAAN

1:10 p.m.–1:45 p.m. Invited Speaker

Cost Considerations Across the SES Spectrum
John Langfitt, PhD, Rochester, NY

1:45 p.m.–1:50 p.m. 114.001 Data Blitz

Diagnostic Yield and Treatment Impact of Targeted Whole Exome Sequencing in Early Onset Epilepsy — Sarah Buerki, Eric Toyota, Ilaria Guella, Marna McKenzie, Dan Evans, Shelin Adam, Margot Van Allen, Cyrus Boelman, Gabriella Horvath, Clara Van Karnebeek, Patrice Eydoux, Linda Huh, Anita Datta, Kathy Selby, Aspasia Michoulas, Tanya Nelson, Mary Connolly, Matthew Farrer, Michelle Demos

1:50 p.m.–1:55 p.m. 114.002 Data Blitz

Characteristics and Resource Utilization of U.S. Emergency Department Visits (2008-2011) for Patients with Epilepsy and Convulsions — Allison Petrilla, Xiaoping Ning, Erin Sullivan, Jane Osterhaus, Andrew Mosso, Gregory Gilmet

1:55 p.m.–2:05 p.m. Audience Q&A

2:05 p.m.–2:40 p.m. Invited Speaker

Suboptimal Quality: A “Gap” by Any Other Name is a Still a “Gap”
Anne T. Berg, PhD, Dekalb, IL

2:40 p.m.–2:45 p.m. 114.003 Data Blitz

Medication Versus Management: Beyond Pills-to-Mouths Measures of Epilepsy Care — Erica McKenzie, Damber Nirola, Lhab Tshering, Sonam Deki, Bryan Patenaude, Sarah Clark, Sydney Cash, Ronald Thibert, Rodrigo Zepeda Garcia, Edward Leung, Alice Lam, Andrew Lim, Jo Mantia, Joseph Cohen, Andrew Cole, Farrah Mateen

2:45 p.m.–2:50 p.m. 114.004 Data Blitz

Use of a Digital Self-Management Platform for Improving Access in Epilepsy Patients — John Hixson

2:50 p.m.–3:00 p.m. Audience Q&A

Guided Poster Rounds

3:00 p.m.–3:30 p.m.

114.001 Diagnostic Yield and Treatment Impact of Targeted Whole Exome Sequencing in Early Onset Epilepsy —

Sarah Buerki, Eric Toyota, Ilaria Guella, Marna McKenzie, Dan Evans, Shelin Adam, Margot Van Allen, Cyrus Boelman, Gabriella Horvath, Clara Van Karnebeek, Patrice Eydoux, Linda Huh, Anita Datta, Kathy Selby, Aspasia Michoulas, Tanya Nelson, Mary Connolly, Matthew Farrer, Michelle Demos

114.002 Characteristics and Resource Utilization of U.S. Emergency Department Visits (2008-2011) for Patients with Epilepsy and Convulsions —

Allison Petrilla, Xiaoping Ning, Erin Sullivan, Jane Osterhaus, Andrew Mosso, Gregory Gilmet

114.003 Medication Versus Management: Beyond Pills-to-Mouths Measures of Epilepsy Care —

Erica McKenzie, Damber Nirola, Lhab Tshering, Sonam Deki, Bryan Patenaude, Sarah Clark, Sydney Cash, Ronald Thibert, Rodrigo Zepeda Garcia, Edward Leung, Alice Lam, Andrew Lim, Jo Mantia, Joseph Cohen, Andrew Cole, Farrah Mateen

114.004 Use of a Digital Self-Management Platform for Improving Access in Epilepsy Patients —

John Hixson

114.005 Prediction of Incident Epilepsy After First Seizure in Children with HIV/AIDS in Botswana —

David Bearden, Dennis Dlugos

114.006 Healthcare Resource Utilization Among Persons with Epilepsy Treated by Different Healthcare Providers —

Sandra Helmers, Shaloo Gupta, Russell Knott

114.007 Stigma Reduction Efforts: Evaluating a Multi-Faceted Intervention Aimed at Teachers in Zambia —

Masharip Atadzhanov, Natalie Thornton, Elwyn Chomba, Edward Mbewe, Gretchen Birbeck

114.008 Epilepsy Prevalence, Treatment Gap, and Stigma in Western Kenya —

Dilraj Sokhi, Monica Diaz, Anthony Ngugi, Tom Solomon, Eric Fevre, Ana-Claire Meyer

114.009 The Yield of EEG Studies in a Lower Income Country Epilepsy Referral Center —

Janice Wong, Sydney Cash, Ronald Thibert, Esther Bui, Rodrigo Zepeda Garcia, Alice Lam, Edward Leung, Liesly Lee, Andrew Lim, Jo Mantia, Joseph Cohen, Erica McKenzie, Damber Nirola, Sonam Deki, Lhab Tshering, Tali Sorets, Sarah Clark, Bryan Patenaude, Andrew Cole, Farrah Mateen

114.010 Comparing Anti-Epileptic Drug Preferences Between Neurologists and Patients: Results from a National Survey and Discrete Choice Experiment —

Alan Ettinger, Fulton Velez, John Carter

114.011 Factors Contributing to Diagnostic Delay in Psychogenic Non-Epileptic Spells —

Jessie Grewal, Jacqueline Cios

114.012 Evaluation of the Prevalence of Pharmacogenetic Polymorphisms in Pediatric Neurology Patients with Whole Exome Sequencing —

Shannon DiCarlo, Elizabeth Alter, M Brooke Bernhardt, Mindl Messinger, Angus Wilfong

114.013 The Impact of Comorbid HIV Infection on Epilepsy-Associated Stigma Among Zambian Adults —

Masharip Atadzhanov, Melissa Elafros, Joseph Gardiner, Izukanji Sikazwe, Jason Okulicz, Nigel Paneth, Julius Mulenga, Alan Haworth, Elwyn Chomba, Edward Mbewe, Gretchen Birbeck

Part II

3:30 p.m.–5:30 p.m.

3:30 p.m.–4:05 p.m. Invited Speaker

Practical Approaches to Narrowing the Gap: Considerations from a Resource Limited, Tropical Setting
Gretchen L. Birbeck, MD, MPH, DTMH, FAAN, Rochester, NY

4:05 p.m.–4:10 p.m. 114.005 Data Blitz

Prediction of Incident Epilepsy After First Seizure in Children with HIV/AIDS in Botswana — David Bearden, Dennis Dlugos

4:10 p.m.–4:15 p.m. 114.006 Data Blitz

Healthcare Resource Utilization Among Persons with Epilepsy Treated by Different Healthcare Providers — Sandra Helmers, Shaloo Gupta, Russell Knott

4:15 p.m.–4:25 p.m. Audience Q&A

4:25 p.m.–5:00 p.m. Invited Speaker

Stigma, a Wedge in the Gap?
Nathalie Jette, MD, MSc, FRCPC, Calgary, AB, Canada

5:00 p.m.–5:05 p.m. 114.007 Data Blitz

Stigma Reduction Efforts: Evaluating a Multi-Faceted Intervention Aimed at Teachers in Zambia — Natalie Thornton, Elwyn Chomba, Masharip Atadzhanov, Edward Mbewe, Gretchen Birbeck

5:05 p.m.–5:10 p.m. 114.008 Data Blitz

Epilepsy Prevalence, Treatment Gap, and Stigma in Western Kenya — Dilraj Sokhi, Monica Diaz, Anthony Ngugi, Tom Solomon, Eric Fevre, Ana-Claire Meyer

5:10 p.m.–5:20 p.m. Audience Q&A

5:20 p.m.–5:30 p.m. Conclusion

3:30 p.m.–5:30 p.m.

Scientific Platform Sessions

S51: Clinical Trials in Multiple Sclerosis II

3:30 p.m. S51.001

Alemtuzumab-Treated Patients with RRMS Demonstrate Durable Slowing of Brain Volume Loss Over 5 Years Despite Most Being Treatment-Free for 4 Years: CARE-MS I and II Extension Study — Sven Schippling, Jeffrey Cohen, Alasdair Coles, D Alastair Compston, Edward Fox, Massimo Filippi, Hans-Peter Hartung, Eva Havrdova, Krzysztof Selmaj, Frederik Barkhof, David Margolin, Karthinathan Thangavelu, Douglas Arnold

3:45 p.m. S51.002

Treatment-Naïve Patients with Active RRMS Who Received Alemtuzumab Demonstrate Durable Suppression of New MRI Lesion Formation: 5-Year Follow-Up of the CARE-MS I Study — Douglas Arnold, Jeffrey Cohen, Alasdair Coles, D Alastair Compston, Edward Fox, Hans-Peter Hartung, Eva Havrdova, Krzysztof Selmaj, David Margolin, Karthinathan Thangavelu, Anthony Troubleshoot

4:00 p.m. S51.003

Treatment-Naïve Patients with Highly Active RRMS Demonstrated Durable Efficacy with Alemtuzumab over 5 Years — Stephen Krieger, Barry Singer, Mark Freedman, Jan Lycke, Regina Berkovich, David Margolin, Karthinathan Thangavelu, Eva Havrdova

4:15 p.m. S51.004

Treatment-Naïve Patients with Active RRMS Demonstrate Durable Improvements in Relapse and Disability Following Treatment with Alemtuzumab: 5-Year Follow-Up of the CARE-MS I Study — Volker Limmoth, Gavin Giovannoni, Douglas Arnold, Jeffrey Cohen, Alasdair Coles, Edward Fox, Hans-Peter Hartung, Eva Havrdova, Krzysztof Selmaj, David Margolin, Karthinathan Thangavelu, D Alastair Compston

4:30 p.m. S51.005

Durable Efficacy in RRMS Patients Receiving Two Annual Courses of Alemtuzumab and No Additional Treatment for 4 Years: Pooled Analysis of CARE-MS I and II — Edward Fox, Douglas Arnold, Jeffrey Cohen, Gavin Giovannoni, Hans-Peter Hartung, Eva Havrdova, Krzysztof Selmaj, Volker Limmoth, David Margolin, Karthinathan Thangavelu, Alasdair Coles

4:45 p.m. S51.006

Time Course of Glatiramer Acetate Efficacy in Relapsing-Remitting Multiple Sclerosis Patients in the Glatiramer Acetate Low-Frequency Administration (GALA) Study — Mat Davis, Natalia Ashtamker, Joshua Steinerman, Volker Knappertz

5:00 p.m. S51.007

Brain Volume As a Predictor of Disability in Primary Progressive Multiple Sclerosis: Evidence from the INFORMS Trial — Jerry Wolinsky, Dieter Häring, Maria Pia Sormani, Fred Lublin, David Miller, Mark

Freedman, Bruce Cree, Howard Weiner, Catherine Lubetzi, Hans-Peter Hartung, Xavier Montalban, Bernard Uitdehaag, Martin Merschhemke, Bingbing Li, Norman Putzi, Ludwig Kappos

5:15 p.m. S51.008

MRI Parameters As Predictors of Long-Term Disease Outcome Over 8 Years in RRMS Patients — Douglas Jeffery, Daniela Piani Meier, Davorka Tomic, Dieter Häring, Timothy Vollmer

S52: Clinical Epilepsy, Genetics, and Devices

3:30 p.m. S52.001

Long-Term Outcome of Adults with Medically Intractable Mesial Temporal Lobe Seizures Treated with Responsive Neurostimulation — Paul Van Ness, Tara Crowder Skarpaas, Martha Morrell

3:45 p.m. S52.002

Effects of Low-Frequency Stimulation of Anterior Piriform Cortex on Kainate-Induced Seizures in Rats — Mohamad Koubeissi, Areeza Bayat, Mark Skopin, Mittlesh Siddu, Komei Tsuchiya, Sweta Joshi, Sahar Jahan, Phillip Connell

4:00 p.m. S52.003

Validation of the Smartphone Brain Scanner for the Detection of Epileptiform Discharges Among Epilepsy Outpatients in Bhutan — Erica McKenzie, Andrew Lim, Edward Leung, Andrew Cole, Rodrigo Zepeda Garcia, Alice Lam, Ronald Thibert, Esther Bui, Damber Nirola, Sonam Deki, Lhab Tshering, Liesly Lee, Sarah Clark, Joseph Cohen, Jo Mantia, Kate Brizzi, Sarah Wahlster, Tali Sores, Mikkel Aagaard, Arkadiusz Stopczynski, Lars Hansen, Sydney Cash, Farrah Mateen

4:15 p.m. S52.004

Evaluating the Prevalence of Neurological Autoantibodies Among Patients with Epilepsy of Unknown Etiology: Ongoing Prospective Study — Divyanshu Dubey, Ryan Hays, Abdulradha Alqallaf, Matthew Freeman, Kevin Chen, Chen Ding, Mark Agostini, Steven Vernino

4:30 p.m. S52.005

Severe Epileptic Encephalopathy Is a Frequent Neurological Comorbidity of Children Affected by the MECP2 Duplication Syndrome — Danah Marafie, Rebecca Schultz, Daniel Glaze, Alica Goldman, Bernhard Suter

4:45 p.m. S52.006

Novel Knock-in Mouse Model of Genetic Atp1a3 Dysfunction — Ashley Helseth, Syed Adil, Molly Linabarger, Eric Aehart, Nina Fainberg, Deepu Singh, William Wetsel, Ute Hochgeschwender, Arsen Hunanyan, Mohamad Mikati

5:00 p.m. S52.007

Sleep Homeostasis and NREM Slow Wave Activity in Animal Models and Humans with Focal or Generalized Epilepsy — Rama Maganti, Eli Wallace, Jesse Pfammater, Samantha Wright, Melanie Boly, Benjamin Jones, Mensen Armand, Mathew Jones, Giulio Tononi

5:15 p.m. S52.008

Hand Postures in Primary and Secondary Generalized Tonic-Clonic Seizures: A New Semiological Feature — Jason Siegel, William Tatum

S53: Infectious Disease

3:30 p.m. S53.001

VZV Neurovasculitis in the Setting of a Novel Adult-Onset Immunocompromised State with Autoantibodies to Interferon Alpha (anti-IFN α) — Rahila Ansari, Shivam Mittal, Zerbe Christa, Lindsey Rosen, Steven Holland, Robert Bonomo

3:45 p.m. S53.002

Post Infectious Neurological Manifestations of Acute Dengue Viral Fever - a Prospective Study from India — Devashish Ruikar, Sita Sattaluri, Mohandas Surath

4:00 p.m. S53.003

Survivors of Ebola Virus Disease Have Persistent Neurological Deficits — Lauren Bowen, Bryan Smith, Sally Steinbach, Bridgette Billioux, Angela Summers, Shila Azodi, Joan Ohayon, Matthew Schindler, Avindra Nath

4:15 p.m. S53.004

Neurocognitive Impairment of HIV Elite Controllers: Feature of Viral Suppression and Inflammation? — Nisha Bhatia, Evelyn Lee, Dietmar Fuchs, Magnus Gisslen, Henrik Zetterberg, Alex Russell, Barbara Shacklett, Richard Price, Serena Spudich

4:30 p.m. S53.005

Insulin Signaling Suppresses Virus Replication and Neuroinflammation in HIV/AIDS — Manmeet Mamik, Eugene Asachop, Yu Zhu, Brienne McKenzie, William Branton, Christopher Power

4:45 p.m. S53.006

Neurologic Signs and Symptoms Frequently Manifest in Acute HIV Infection — Joanna Hellmuth, James Fletcher, Victor Valcour, Eugène Kroon, Jintanat Ananworanich, Jintana Intasan, Sukanya Lerdlum, Jared Narvid, Mantana Pothisri, Isabel Allen, Shelly Krebs, Bonnie Slike, Peeriya Prueksaew, Linda Jagodzinski, Suwanna Puttamaswin, Nittaya Phanuphak, Serena Spudich

5:00 p.m. S53.007

Association Between Influenza Vaccination and Development of Guillain-Barré Syndrome in Adults: A Vaccine Safety Datalink (VSD) and Vaccine Adverse Event Reporting System (VAERS) Study — Francisco Gomez, Mohammad El-Ghanem, Abu Nasar, Nizar Souayah

5:15 p.m. S53.008

Clinical, Biological and Radiological Characteristics of Patients with Rocky Mountain Spotted Fever Encephalitis — Michael Bradshaw, Kelsey Ivey, Francesca Bagnato, NgocHanh Vu, Sumit Pruthi, Karen Bloch

Meeting Schedule

3:30 p.m.–5:30 p.m.

S51 Clinical Trials in Multiple Sclerosis II

S52 Clinical Epilepsy, Genetics, and Devices

S53 Infectious Disease

C224 Primer of Behavioral Neurology II

Director: Maria Gorno Tempini, MD, PhD, San Francisco, CA

C225 Neurology Update IV

Director: Barney J. Stern, MD, FAAN, Baltimore, MD

C226 Deep Brain Stimulation Management II

Director: Jill L. Ostrem, MD, San Francisco, CA

C227 Organize and Run a Successful Code Stroke System

Director: Enrique C. Leira, MD, MS, FAAN, Iowa City, IA

C228 Neuromuscular Junction Disorders II

Director: Laura Marie Tormoehlen, MD, Indianapolis, IN

C229 Hot Topics in Sleep Neurology II

Director: Erik Kent St. Louis, MD, FAAN, Rochester, MN

C230 Neurologic Complications of Medical and Surgical Therapies

Director: Sara E. Hocker, MD, Rochester, MN

C231 Non-Alzheimer's Dementia II

Director: Gil Dan Rabinovici, MD, San Francisco, CA

C232 Hot Topics in Headaches and Related Disorders II

Director: Peter Goadsby, MD, PhD, San Francisco, CA

5:30 p.m.–7:00 p.m.
Closing Party Happy Hour



New Date and Time:
CLOSING PARTY
HAPPY HOUR

THURSDAY, APRIL 21
5:30 P.M.–7:00 P.M.

Celebrate the end of a great meeting at a special early-evening happy hour event!

- Enjoy music, drinks, and socializing with colleagues
- Make plans to explore beautiful Vancouver afterwards



Annual Meeting Programs by Topic

Aging, Dementia, Cognitive, and Behavioral Neurology

- C28** Higher Cortical Visual Disorders: Case-based Review
- S1** Aging and Dementia: Therapeutics and Management . 18
- C29** Assessment of Rapidly Progressive Dementias and Related Neurologic Conditions I
- C42** Assessment of Rapidly Progressive Dementias and Related Neurologic Conditions II
- C51** Case Studies in Behavioral Neurology: Focus on Frontotemporal Degeneration
- C60** Dementia Update: Diagnostic Advances
- C71** Dementia Update: Imaging Modalities and CTE
- I5** Sex-related Factors in Neurological Disease 61
- C84** Dementia Update: Non-Alzheimer Dementias and Dementia Management
- C97** Severe TBI: From ICU to Rehabilitation
- C99** Morning Report: Memory Disorders
- S21** Aging and Dementia: Genetics 80
- I7** The Human Connectome: Implications for Clinical Neurology 84
- I8** Emerging Technologies for Neurological Research and Care: #Emerging-Tech #Neurologist @AAN 85
- C121** Emotional Communication: Chalk Talk
- C133** Mild Cognitive Impairment: Implications for Clinicians
- C142** Improving Accuracy of Dementia Diagnosis: Case Studies with Both Imaging and Neuropathology
- I9** **SIF** Sleep, Clocks, and Alzheimer's Disease 104
- S35** Behavioral and Cognitive Neurology 107
- C167** **SIF** Current State of Alzheimer's Disease Imaging Biomarkers and the Road Ahead
- C171** Management of Behavioral Disturbances in Dementias
- S39** Aging and Dementia: Pathology and Imaging 124
- I12** **SIF** Amyloid and Beyond: From Bench to Bedside . . . 128
- C195** The Neurology of Social Behavior
- C203** Vascular Cognitive Impairment and Dementia: Current Status and Future
- C209** What Neurologists Really Need to Know About Normal Pressure Hydrocephalus
- C213** Primer of Behavioral Neurology I
- C220** Non-Alzheimer's Dementia I
- C224** Primer of Behavioral Neurology II
- C231** Non-Alzheimer's Dementia II

Cerebrovascular Disease and Interventional Neurology

- C25** Update on Medical Management of Stroke

- Frontiers in Child Neurology: Cultivating Careers, Transitioning Care, and Highlighting Scientific Developments 34
- S4** Health Disparities and Sex Differences in Stroke. . . 37
- I2** Stroke in the Elderly and Young: Challenges for the Next Decade 40
- S7** Stroke Clinical Trials 41
- C70** Update on Endovascular Treatment of Cerebrovascular Diseases
- I5** Sex-related Factors in Neurological Disease 61
- S16** Prehospital/Emergency Room Stroke Care and Intracerebral Hemorrhage 62
- C95** **SIF** Stroke Team Action Therapy (STAT): Current State of the Art
- C98** Cerebrovascular Disease I: Prevention
- C107** Cerebrovascular Disease II: Hemorrhagic Stroke
- I6** **SIF** Future Directions and Challenges in Stroke Team Action Therapy (STAT). 82
- I8** Emerging Technologies for Neurological Research and Care: #Emerging-Tech #Neurologist @AAN 85
- C120** Cerebrovascular Disease III: Acute Ischemic Stroke
- C136** Controversies in Stroke Therapy
- S31** Stroke Risk, Outcomes, and Complications 102
- C159** Current Management of Incidental and Asymptomatic Cerebrovascular Lesions
- C175** The Interface Between Infection and Cerebrovascular Disease
- I11** **SIF** Neurocritical Care and Neuroscience Crossroads: From Bench To Bedside 126
- S42** Stroke Mechanism and Modifiers 129
- C207** Stroke in Young Adults and Women
- S47** IV-tPA and Endovascular Therapy 144
- C227** Organize and Run a Successful Code Stroke System

Child Neurology and Developmental Neurology

- Frontiers in Child Neurology: Cultivating Careers, Transitioning Care, and Highlighting Scientific Developments 34
- I2** Stroke in the Elderly and Young: Challenges for the Next Decade 40
- C64** Child Neurology I
- S10** Child Neurology 44
- C74** Child Neurology II
- C79** Emergency Neurology Topics: Status Epilepticus and Pediatric Neurology Emergencies
- C87** Child Neurology III
- C109** Pediatric MS: Diagnosis and Treatment

- ③ A registration fee is required
- ⦿ The program is one of the AAN Leadership University sessions
- Ⓜ The course is part of a Subspecialty in Focus track
- ① The program is one of the I Talk sessions



The program is part of the
Experiential Learning Area sessions

- I7 The Human Connectome: Implications for Clinical Neurology. 84
- C135 Neuro Flash: Child Neurology
- C156 EEG in Children: Developmental Maturation, Variants, Epilepsy Syndromes, and Identification of Surgical Candidates
- C185 Autism Spectrum Disorders—What We Know and Where We Are Going
- I11 Ⓜ Neurocritical Care and Neuroscience Crossroads: From Bench To Bedside 126
- C207 Stroke in Young Adults and Women

Epilepsy/Clinical Neurophysiology (EEG)

- C11 ③ Neurophysiologic Intraoperative Monitoring Skills Workshop (*registration required*)
- C24 Clinical EEG I
- C37 Clinical EEG II
- C48 Clinical EEG III
- C57 Case Studies: How to Analyze Spells by Video-EEG
- S14 Epilepsy: Antiepileptic Drugs and Epidemiology 57
- C83 ③ Epilepsy Skills Workshop (*registration required*)
- I5 Sex-related Factors in Neurological Disease 61
- C100 Neuro Flash: Epilepsy
- S22 Epilepsy/Clinical Neurophysiology: Cognition, Emotion, Women, and Injury 80
- I7 The Human Connectome: Implications for Clinical Neurology. 84
- I8 Emerging Technologies for Neurological Research and Care: #Emerging-Tech #Neurologist @AAN. 85
- C123 Status Epilepticus
- C134 Emerging Therapies in Epilepsy
- C156 EEG in Children: Developmental Maturation, Variants, Epilepsy Syndromes, and Identification of Surgical Candidates
- C169 Clinical Epilepsy I
- C178 Clinical Epilepsy II
- I11 Ⓜ Neurocritical Care and Neuroscience Crossroads: From Bench To Bedside 126
- C191 Clinical Epilepsy III
- C222 Critical Care EEG Monitoring
- S50 Section Topic Controversies: Discontinuing Antiepileptic Drug Therapy Following Seizure Remission—Good Idea or Bad? 144
- I14 Practical Approaches to Narrowing the Epilepsy Treatment Gap. 147
- S52 Clinical Epilepsy, Genetics, and Devices 148

General Neurology

- C3 ③ Maintenance of Certification Exam Preparation Course (*registration required*)
- C12 Advanced Neurologic Coding
- C18 Multiple Sclerosis Overview: Basic and Translational Science
- C23 Borderlands of Neurology and Internal Medicine: Chalk Talk
- C36 Neuroimaging for the General Neurologist: Spine and Peripheral Nerve I
- C39 Autoimmune Neurology I
- C47 Neuroimaging for the General Neurologist: Spine and Peripheral Nerve II
- C50 Autoimmune Neurology II
- C56 Test Your Knowledge: A Case-based Approach to Neuroimaging
- C62 Genetics in Neurology Overview
- C72 Neurology Update I
- C79 Emergency Neurology Topics: Status Epilepticus and Pediatric Neurology Emergencies
- C81 Functional Neurologic Disorders I
- I4 Advances in Acquired and Genetic Muscle Diseases 60
- I5 Sex-related Factors in Neurological Disease 61
- C86 Neurology Update II
- C92 Emergency Neurology Topics: Acute/Subacute Weakness and Subarachnoid Hemorrhage
- C94 Functional Neurologic Disorders II
- C96 Neurotoxicology
- S20 General Neurology 66
- C105 Therapy in Neurology I
- I8 Emerging Technologies for Neurological Research and Care: #Emerging-Tech #Neurologist @AAN. 85
- C118 Therapy in Neurology II
- C141 *Continuum*® Test Your Knowledge: A Multiple-choice Question Review I (*registration required*)
- C142 Improving Accuracy of Dementia Diagnosis: Case Studies with Both Imaging and Neuropathology
- C146 Neuroimaging for the General Neurologist: Brain I
- C148 Precision Neurology: The Promise and Perils of Whole Exome Sequencing for Neurological Disorders
- S33 Section Topic Controversies: Autoimmune/Paraneoplastic Neurological Disorders: Update on Imaging and Antibody Testing 102
- C155 *Continuum*® Test Your Knowledge: A Multiple-choice Question Review II (*registration required*)
- C160 How to Win Patient Satisfaction: Understanding the Net Promoter Score
- C161 Neuroimaging for the General Neurologist: Brain II

Annual Meeting Programs by Topic

Continued

- C162 Precision Neurology:
Precision Directed Genetic Therapeutics
- C168 Clinical E-Pearls
- C170 Principles of Genomic Medicine:
Clinical Exome Sequencing in Neurologic Disease
- S38 General Neurology: Therapeutics 110
- C177 Therapy in Neurology III
- C180 Genomic Neurology Workshop:
Developing Practical Knowledge of Tools
and Concepts Through Case Studies I
- C186 Neurologic Case Studies in Pregnancy I
- C190 Therapy in Neurology IV
- C193 Genomic Neurology Workshop:
Developing Practical Knowledge of Tools and
Concepts Through Case Studies II
- C200 Neurologic Case Studies in Pregnancy II
- C204 Important Drug Interactions for Neurologists
and Psychiatrists
- C206 Neuro Flash: MRI and Multiple Sclerosis
- C214 Neurology Update III
- C219 Neurologic Complications of Medical Disease:
An Overview
- C225 Neurology Update IV
- C230 Neurologic Complications of Medical
and Surgical Therapies

Global Health

- S6 Global Health 41
- I8 Emerging Technologies for Neurological Research and
Care: #Emerging-Tech #Neurologist @AAN 85
- I9  Sleep, Clocks, and Alzheimer's Disease 104
- C201 Neurocysticercosis and Globalization
- I14 Practical Approaches to Narrowing the Epilepsy
Treatment Gap. 147

Headache

- C30 Chronic Migraine Education Program I
- I2 Stroke in the Elderly and Young: Challenges for the
Next Decade 40
- C43 Chronic Migraine Education Program II
- C52 Case Studies: Challenging Headache Cases
- C59  Interventional Treatment of Migraine and
Other Headache Disorders
- I3  New and Emerging Therapeutic Options in
Migraine
and Other Headache Disorders 58
- I5 Sex-related Factors in Neurological Disease 61
- I8 Emerging Technologies for Neurological Research and
Care: #Emerging-Tech #Neurologist @AAN 85

- S26 Headache. 86
- C128 Management of Migraine and
Psychiatric Comorbidities
- C137 Introduction to Primary Headache Disorders I
- C152 Introduction to Primary Headache Disorders II
- C176 Therapy of Headache
- C221 Hot Topics in Headaches and Related Disorders I
- C232 Hot Topics in Headaches and Related Disorders II

Infectious Disease

- C21 Neuro Flash: Approach to Acute CNS Infections
- C35 Differential Diagnosis of Neurologic Infections
- C65 Infections of the Nervous System I
- C76 Infections of the Nervous System II
- C89 Infections of the Nervous System III
- C175 The Interface Between Infection and
Cerebrovascular Disease
- S53 Infectious Disease 148

Movement Disorders

- C15  Redefining Parkinson's Disease: Challenging the
Past and Preparing For the Future
- C17 Paroxysmal Movement Disorders
- C31 Hyperkinetic Movement Disorders: Videodiagnosis
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- S5 Movement Disorders: Parkinson's Disease and
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- I1  Redefining Parkinson's Disease: Novel
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Understanding Its Mechanisms and Developing
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- C53 Case Studies: Unusual Movement Disorders
- C66 Movement Disorders for the General Neurologist I
- C77 Movement Disorders for the General Neurologist II
- C90 Movement Disorders for the General Neurologist III
- S19 Movement Disorders: Parkinson's Disease and
Atypical Parkinsonian Syndromes: Phenomenology. 66
- C108 Nonmotor Manifestations of Parkinson's Disease I
- C116  Clinical Uses of Botulinum Toxin for Dystonia
Skills Workshop (*registration required*)
- I7 The Human Connectome: Implications for Clinical
Neurology. 84
- I8 Emerging Technologies for Neurological Research and
Care: #Emerging-Tech #Neurologist @AAN 85
- C122 Nonmotor Manifestations of Parkinson's Disease II
- S25 Movement Disorders: Huntington's Disease. 86
- C132 Balance and Gait Disorders
- C135 Neuro Flash: Child Neurology

- ③ A registration fee is required
- ⦿ The program is one of the AAN Leadership University sessions
- Ⓜ The course is part of a Subspecialty in Focus track
- Ⓜ The program is one of the I Talk sessions



The program is part of the
Experiential Learning Area sessions

S27	Movement Disorders: Essential Tremor and Tardive Dyskinesia	90
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S30	Movement Disorders: Ataxias and Other Hyperkinetic Movement Disorders	102
C158	The Dystonias: Diagnosis, Treatment, and Update on Causes	
C173	Therapy of Movement Disorders: A Case-based Approach	
C188	③ Clinical Uses of Botulinum Toxin for Headache Skills Workshop (<i>registration required</i>)	
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C212	Overview of Parkinson's Disease	
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MS and CNS Inflammatory Disease

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C101	Controversies in Multiple Sclerosis Therapy	
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S41	Advanced Neuroimaging in Multiple Sclerosis	124
C194	Multiple Sclerosis Therapy: Disease-modifying Treatment II	

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Annual Meeting Programs by Topic

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- C67 Therapy of Neuromuscular Disease
- C78 Evaluation and Management of Autonomic Disorders I
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- C91 Evaluation and Management of Autonomic Disorders II
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- C104 Clinical Approach to Muscle Disease I
- I8 Emerging Technologies for Neurological Research and Care: #Emerging-Tech #Neurologist @AAN 85
- C117 Clinical Approach to Muscle Disease II
- S28 Clinical Trials and Experimental Therapies in Neuromuscular Diseases 90
- C143 Small Fiber Neuropathies: Sensory, Autonomic and Both I
- C151  EMG Skills Workshop: Basic *(registration required)*
- C157 Small Fiber Neuropathies: Sensory, Autonomic, and Both II
- C174 Clinical EMG I
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- C183 Clinical EMG II
- C189  Neuromuscular Bedside Rounds Skills Workshop *(registration required)*
- C198 Clinical EMG III
- S43 Motor Neuron Disease, Outcome, and Assessment to Therapy in Neuromuscular Disorders. 129
- S44 Developments in Peripheral Neuropathies 132
- C217 Neuromuscular Junction Disorders I
- C223  Neuromuscular Ultrasound Skills Workshop *(registration required)*
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- C34 Case Studies: Neurologic Consultations in Cancer Patients I
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- C102 Neuro-oncologic Emergencies
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- C184 Navigating Primary Brain Tumors for the Neurologist I
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- C28 Higher Cortical Visual Disorders: Case-based Review
- C41  Neuro-ophthalmology and Neurovestibular Exam Lab Skills Workshop *(registration required)*

- C69 Eye Movement Disorders: A Systematic Approach to the Evaluation of Diplopia
- C80 Now You See It, Now You Know It—Pathognomonic Neuro-ophthalmology Findings
- C103 Idiopathic Intracranial Hypertension
- C130 Neuro-ophthalmology I
- C139 Neuro-ophthalmology II
- C154 Neuro-ophthalmology III
- C172 Neuro Flash: Neuro-ophthalmology
- C182 Neuro-otology I
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- C202  The Eyes and The Ears of Traumatic Brain Injury
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- I13  Sports-related Concussion: Vision and Vestibular Insights. 146

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- S9 Neurorehabilitation: New Targets and Therapies. . . 44
- C75 Myelopathies I
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- C20 The Palliative Care Guide in Neurology: What You Must Know About Neuro-oncology
- C27 Lumbar Radiculopathy, Lumbar Spinal Stenosis, Low Back Pain, and Post-laminectomy Syndrome
- S17 Pain and Palliative Care 62
- C106 Common Spine Disorders I: Evaluation
- C110 Core Concepts in Pain Management I: Refractory Neuropathic Pain—Practical Pharmacologics, Advances in Neuromodulation, and a Balanced look at Cannabinoids
- C119 Common Spine Disorders II: Treatment
- C124 Core Concepts in Pain Management II: Safe Opioid Prescribing—Practical Considerations, Unintended Consequences, and Legal Issues
- C210 Non-Neuro-oncology Palliative Care

Practice, Policy, and Ethics

- C5   Women in Leadership *(registration required)*
- C6 ICD-10-CM: How to Optimize for Accurate Diagnosis and Reimbursement

- ③ A registration fee is required
- ⊗ The program is one of the AAN Leadership University sessions
- Ⓜ The course is part of a Subspecialty in Focus track
- ① The program is one of the I Talk sessions



The program is part of the
Experiential Learning Area sessions

- C7 Applications of Teleneurology: General
- C9 Lost in Transition
- C12 Advanced Neurologic Coding
- C13 Applications of Teleneurology: Telestroke
- C26 Leadership in Neurology:
Be a Champion for Your Patients and Protector of Your
Specialty with Payers, Policymakers, and the Public
- S8 Practice and Policy 41
- C63 Improving Patients' and Families' Satisfaction
and Experiences with Neurologic Care
- C73 Quality Improvement in Practice
- C82 ⊗ Between Mars and Venus: How Great Leadership
Adopts Traits from the Best of Both Genders
(registration required)
- C112 Bedside Evidence-based Medicine: How to Find and
Deconstruct Articles in Order to Take Care of Patients I
- C114 Contemporary Ethical Issues
- C115 ⊗ ③ Improving Your Leadership Skills:
A Practical Approach (registration required)
- I8 Emerging Technologies for Neurological Research and
Care: #Emerging-Tech #Neurologist @AAN. 85
- C126 Bedside Evidence-based Medicine: How to Find and
Deconstruct Articles in Order to Take Care of Patients II
- C131 Practical Legal Issues for Neurologists
- C140 Clinical Neurology for Advanced Practice Providers I
- C233 ⊗ ③ The Most Important Tool in Your Black Bag:
Gallup StrengthsFinder™ Assessment I
(registration required)
- C160 How to Win Patient Satisfaction: Understanding the
Net Promoter Score
- C163 Clinical Neurology for Advanced Practice Providers II
- C234 ⊗ ③ The Most Important Tool in Your Black Bag:
Gallup StrengthsFinder™ Assessment II
(registration required)
- C210 Non-Neuro-oncology Palliative Care

Research Methodology, Education, and History

- C1 Resident Basic Science I: Neuropathology
- C2 Clerkship and Program Directors Conference
- C4 ③ Research Career Development Symposium: How
to Be Successful in Academic Neuroscience
(registration required)
- C5 ⊗ ③ Women in Leadership
(registration required)
- C8 Clinical Research: Introduction and Methods
- C10 Resident Basic Science II: Neuroanatomy
- C14 Clinical Research:
Drug Development and Clinical Trials
- C22 Career Development for Clinician Educators

- S3 Neurology Education 18
- C40 Resident Basic Science III: Neuropharmacology
- I3 Ⓜ New and Emerging Therapeutic Options in
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- S15 History of Neurology 62
- C93 Thinking Outside the Toolbox: Assessment of Clinical
Reasoning in The Modern Era of Medical Education
- C113 Humanism in Medicine, Humanizing Medicine,
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- C115 ⊗ ③ Improving Your Leadership Skills:
A Practical Approach (registration required)
- I8 Emerging Technologies for Neurological Research and
Care: #Emerging-Tech #Neurologist @AAN. 85
- C150 Recent History: Shapers of Modern Neurology I
- C233 ⊗ ③ The Most Important Tool in Your Black Bag:
Gallup StrengthsFinder™ Assessment I
(registration required)
- C160 How to Win Patient Satisfaction: Understanding the
Net Promoter Score
- C164 Recent History: Shapers of Modern Neurology II
- C234 ⊗ ③ The Most Important Tool in Your Black Bag:
Gallup StrengthsFinder™ Assessment II
(registration required)

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- C68 REM Sleep Behavior Disorder
- S13 Highlights in Sleep Medicine 57
- C111 Sleep for the Practicing Neurologist I: Can't Fall
Asleep—Insomnia, RLS and Related Disorders
- C125 Sleep for the Practicing Neurologist II: Sleep Duration,
CNS Hypersomnias, and Treating Physician Fatigue
- C127 Ⓜ Sleep Across the Lifecycle:
What Neurologists Need to Know
- C145 Circadian Rhythm Disorders
- I9 Ⓜ Sleep, Clocks, and Alzheimer's Disease 104
- C208 Approach to Sleep Symptoms: Sleepy or Sleepless
- C218 Hot Topics in Sleep Neurology I
- C229 Hot Topics in Sleep Neurology II

OVERVIEWS

TOPIC LIST

2016 Award Recipients

The research we celebrate, with the recipients below, has generated paradigm-changing discoveries in epilepsy, fundamental insights in multiple sclerosis, and pioneering breakthroughs in pain, to name a few of the transformative advances conceived by these luminaries. We honor those researchers and pay tribute to all those who play a role in the search for cures for brain disease, from mentors to colleagues to those just starting out on their journey.

AAN Alliance Awards

Founders Award

Sponsored by the American Academy of Neurology and endowed by the former American Academy of Neurology Alliance.

Recipient: **Michelle P. Lin, MD, MPH**

Los Angeles, CA

"Life's Simple 7" and Long-Term Mortality After Stroke

S31: Stroke Risk, Outcomes, and Complications
Tuesday, April 19, 1:00 p.m.

S. Weir Mitchell Award

Sponsored by the American Academy of Neurology and endowed by the former American Academy of Neurology Alliance.

Recipient: **Aaron D. Boes, MD, PhD**

Boston, MA

Coma-causing Brainstem Lesions Link to Cortical Regions Involved in Awareness

S35: Behavioral and Cognitive Neurology
Tuesday, April 19, 3:45 p.m.

A.B. Baker Award for Lifetime Achievement in Neurologic Education

Funded by an endowment created by matching funds from the A.B. Baker Family Trust and Novartis Pharmaceuticals.

Recipient: **Allan H. Ropper, MD, FAAN**

Boston, MA

C113: Humanism in Medicine, Humanizing Medicine, and the Role of Education
Monday, April 18, 1:00 p.m.

Award for Creative Expression of Human Values in Neurology

Sponsored by the American Academy of Neurology, the American Neurological Association, and the Child Neurology Society.

Recipient: **Sarah M. Schaefer, MD**

New Haven, CT

Dreifuss-Penry Epilepsy Award

Sponsored by the American Academy of Neurology and endowed by members of the AAN Epilepsy Section; Abbott Laboratories, Inc.; Cephalon, Inc.; Cyberonics, Inc.; Elan Pharmaceuticals, Inc.; GlaxoSmithKline; Novartis Pharmaceuticals; Ortho-McNeil Neurologics; Pfizer Inc; Shire US, Inc; and UCB Pharma.

Recipient: **Alexander Rotenberg, MD, PhD**

Boston, MA

S22: Epilepsy/Clinical Neurophysiology: Cognition, Emotion, Women, and Injury
Monday, April 18, 1:00 p.m.

John Dystel Prize for Multiple Sclerosis Research

Presented by the American Academy of Neurology and the National Multiple Sclerosis Society and made possible through a special contribution from the John Dystel Multiple Sclerosis Research Fund at the National Multiple Sclerosis Society.

Recipient: **Claudia F. Lucchinetti, MD, FAAN**
Rochester, MN

S12: Neuromyelitis Optica and Autoimmune Encephalities
Sunday, April 17, 1:00 p.m.

Sheila Essey Award: An Award for ALS Research

Presented by the American Academy of Neurology and the ALS Association and supported through the philanthropy of the Essey Family Fund and the ALS Association.

Recipient: **Ammar Al-Chalabi, MB ChB, PhD**
London, United Kingdom

S43: Motor Neuron Disease, Outcome, and Assessment to Therapy in Neuromuscular Disorders
Wednesday, April 20, 3:30 p.m.

American Brain Foundation Chair's Award

Sponsored by the American Brain Foundation.

Recipient: **John C. Mazziotta, MD, PhD, FAAN**
Los Angeles, CA

Norman Geschwind Prize in Behavioral Neurology

Sponsored by the American Academy of Neurology and the AAN Behavioral Neurology Section and endowed through Dr. Geschwind's family, friends, and colleagues; Pfizer Inc; and the Society for Behavioral and Cognitive Neurology.

Recipient: **Madhav R. Thambisetty, MBBS, DPhil**
Baltimore, MD

S35: Behavioral and Cognitive Neurology
Tuesday, April 19, 3:30 p.m.

Mitchell B. Max Award for Neuropathic Pain

Sponsored by the American Academy of Neurology and endowed by the United States Cancer Pain Relief Committee, the Mayday Fund, and friends of Dr. Mitchell Max.

Recipient: **Michael C. Rowbotham, MD**
San Francisco, CA

S17: Pain and Palliative Care
Sunday, April 17, 4:45 p.m.

Association of Indian Neurologists in America (AINA) Lifetime Achievement Award

Sponsored by the American Brain Foundation and endowed by the Association of Indian Neurologists in America (AINA).

Recipient: Mark Hallett, MD, FAAN
Bethesda, MD

During the AINA Business Meeting
Tuesday, April 19, 7:15 p.m.

International Scholarship Award

Sponsored by the American Academy of Neurology.

Recipients: Lucas Alessandro
Buenos Aires, Argentina
Andrea Barp
Padova, Italy
Leyla Baysal Kirac
Istanbul, Turkey
Carlos Camara-Lemarroy
Monterrey, Nuevo Leon
Valentina Damato
Rome, Italy
Milena de Albuquerque Campinas
São Paulo, Brazil
Ranhel De Roxas
Batangas, Philippines
Mauricio Farez
Buenos Aires, Argentina
Inigo Gabilondo Cuellar
Barakaldo, Spain
Jyh Yung Hor
Penang, Malaysia
Anne-Katrin Proebstel
Basel, Switzerland
Roopa Rajan
Trivandrum, Kerala, India
Agnes van Sonderen
The Hague, The Netherlands

Child Neurology Scholarship

Sponsored by the American Academy of Neurology.

Recipients: Alison L. Christy, MD, PhD
Portland, OR
Hsiao-Tuan Chao, MD
Houston, TX
Ashley Helseth, MD, PhD
Durham, NC
Dana Nader Marafi
Houston, TX
Erika Takle Axeen, MD
Charlottesville, VA

Lawrence C. McHenry Award: An Award for the History of Neurology

Sponsored by the American Academy of Neurology.

Recipients: Kimberley Fleuren
Heerlen, Netherlands
Peter J. Koehler, MD, PhD, FAAN
Heerlen, Netherlands
*Cinematography of Cerebellar Function:
Rademaker's Films of Cerebellectomized
Experimental Animals and Human Tumor
Cases (1926-1940)*
S15: History of Neurology
Sunday, April 17, 3:30 p.m.

Medical Student Essay Awards

Sponsored by the American Academy of Neurology.

Extended Neuroscience Award

Recipient: Stuart McCarter
Minneapolis, MN
*Cognitive Impairment and Driving Safety Errors in
Idiopathic REM Sleep Behavior Disorder*
Poster Session III: P3.401
Monday, April 18, 8:30 a.m.

G. Milton Shy Award in Clinical Neurology

Recipient: Diederik Koelman
Amsterdam, Netherlands
*Acute Disseminated Encephalomyelitis in 228
Patients: A Retrospective, Multi-center U.S. Study*
Poster Session III: P3.402
Monday, April 18, 8:30 a.m.

Roland P. Mackay Award in Historical Aspects

Recipient: Jennifer Romine
Indianapolis, IN
*Fear and Perseverance:
Polio's Progression from Epidemics
Towards Eradication*
Poster Session III: P3.403
Monday, April 18, 8:30 a.m.

Saul R. Korey Award in Experimental Neurology

Recipient: Benjamin Jacobs
Oxford, United Kingdom
*See-saw Signalling in the Brain:
Could Proton-sensing Receptors to
be a Target in Neuroprotection?*
Poster Session III: P3.404
Monday, April 18, 8:30 a.m.

2016 Award Recipients

Continued

Minority Scholars Program

Sponsored by a grant from the Allergan Foundation.

Recipients: **Daniella Sisniega**
Boston University
(Alzheimer's Disease Center)
Aynara Wulsin
University of Cincinnati College of Medicine
Christine Boone
Johns Hopkins School of Medicine
Aimee Juan
University of Pennsylvania
School of Medicine
Joshua Budhu
Morehouse School of Medicine
Fatima Traore
New York Medical College
Claudia Gambrah Sampaney
Perelman School of Medicine at
University of Pennsylvania
Belinda Nhundu
Yale School of Medicine
Modupe Adegoke
University of Pennsylvania
Rachelle Dugue
State University of New York
Downstate Medical Center

Movement Disorders Research Award

Sponsored by the American Academy of Neurology and the Parkinson's Disease Foundation through an endowment.

Recipient: **Susan B. Bressman, MD, FAAN**
New York, NY
S25: Movement Disorders: Huntington's Disease
Monday, April 18, 3:30 p.m.

Neurology® Resident & Fellow Section Writing Award

Recipient: **Sunil A. Mutgi, MD, Alicia M. Zha, MD, and**
Reza Behrouz, DO, for their article:
Emerging Subspecialties in Neurology:
Telestroke and Teleneurology

Neuro-oncology Investigator Award

Sponsored by the American Academy of Neurology and the AAN Neuro-oncology Section and supported by friends of Dr. Jerome Posner.

Recipient: **Eudocia Lee, MD, MPH**
Boston, MA
S34: Neuro-oncology
Tuesday, April 19, 3:30 p.m.

Neuro-oncology Scientific Award

Sponsored by the American Academy of Neurology and the AAN Neuro-oncology Section and supported by friends of Dr. WK Alfred Yung.

Recipient: **Jeremy Rich, MD**
Cleveland, OH
S34: Neuro-oncology
Tuesday, April 19, 3:45 p.m.

Neuroscience Research Prize

Sponsored by the American Academy of Neurology and the Child Neurology Society.

Recipient: **Swathi Srinivasan**
The Effect of Polyphenols in Spices on the Aggregation of the Amyloid-Beta Peptide 1-40; an In Vitro Study
Poster Session IV: P4.404
Tuesday, April 19, 8:30 a.m.

Brian Singer
To Brux or Not to Brux: The Development of Two Novel, Non-Invasive Devices for the Detection of Bruxism
Poster Session IV: P4.405
Tuesday, April 19, 8:30 a.m.

Han Xu
Ostracism and the Maximization of Social Reward
Poster Session IV: P4.406
Tuesday, April 19, 8:30 a.m.

Child Neurology Neuroscience Research Prize

Sponsored by the American Academy of Neurology and the Child Neurology Society.

Recipient: **Ryan Infante**
Armonk, NY
Analyzing the Development of Mouse Brains from Embryonic to Postnatal Time Points Utilizing the CLARITY Tissue Clearing Protocol

Palatucci Advocacy Leadership Forum Advocate of the Year

Sponsored by the American Academy of Neurology.

Recipient: **Elaine C. Jones, MD, FAAN**
Bristol, RI
Presented at the Palatucci Advocacy Leadership Forum on May 14, 2016.

Michael S. Pessin Stroke Leadership Prize

Sponsored by the American Academy of Neurology and endowed by Dr. Pessin's family, friends, and colleagues.

Recipient: **Bijoy Menon, MD**
Calgary, AB, Canada
S16: Prehospital/Emergency Room Stroke Care and Intracerebral Hemorrhage
Sunday, April 17, 3:30 p.m.

Potamkin Prize for Research in Pick's, Alzheimer's, and Related Diseases

Presented by the American Academy of Neurology and funded through the philanthropy of the Potamkin Family.

Recipients: Rosa Rademakers, PhD
Jacksonville, FL
Bryan Traynor, MD, PhD, MMSc, MRCPI
Bethesda, MD
S21: Aging and Dementia: Genetics
Monday, April 18, 1:00 pm

American Academy of Neurology President's Award

Sponsored by the American Academy of Neurology.

Recipient: Ralph F. Józefowicz, MD, FAAN
Rochester, NY

Neuroendocrine Research Award

Sponsored by the American Academy of Neurology and supported by friends of Dr. Andrew Herzog.

Recipient: Riley Bove, MD
San Francisco, CA
Presented at the Neuroendocrinology Section meeting

Bruce S. Schoenberg International Award in Neuroepidemiology

Sponsored by the American Academy of Neurology and endowed by GlaxoSmithKline, Inc.

Recipient: Rufus O. Akinyemi, MBBS, MSc, PhD, MWACP, FMCP
Ibadan, Nigeria
Cognitive Functions After Stroke: Insights from the Cognitive Functions After Stroke (CogFAST-Nigeria) Project
S32: Neuroepidemiology
Tuesday, April 19, 1:00 p.m.

Jon Stolk Award in Movement Disorders for Young Investigators

Sponsored by the American Academy of Neurology and endowed by Kyowa Pharmaceutical, Inc., Lineberry Research, Quintiles, and Dr. Dennis Gillings.

Recipient: Ken Nakamura, MD, PhD
San Francisco, CA
S30: Movement Disorders: Ataxias and Other Hyperkinetic Movement Disorders
Tuesday, April 19, 1:00 p.m.

Safety and Quality Award

Sponsored by the American Academy of Neurology

Recipients: Stephanie Ahrens, DO
Columbus, OH
Optimization of Pre-Hospital Treatment of Pediatric Seizures

Chantale Branson, MD
Dorchester, MA

Improving Care Among Stroke Patients Through a Resident-Based Neurology Handbook

Kathleen McGee, DNP, PNP-BC
Cincinnati, OH

Restructuring Interdisciplinary Rounds on a Pediatric Neurology Unit to Improve Communication, Collaboration, and Patient Safety

Yi Mao, MBBS, and Awss Zidan, MD
Syracuse, NY

Stroke Code Simulation Lab; Save Time Save Brain!

Sleep Science Award

Sponsored by the American Academy of Neurology and the AAN Sleep Section and endowed by Cephalon, Inc.

Recipient: Juliane Winkelmann, MD
Palo Alto, CA

S13: Highlights in Sleep Medicine
Sunday, April 17, 1:15 p.m.

Harold Wolff-John Graham: An Award for Headache/Facial Pain Research

Sponsored by the American Academy of Neurology and endowed by Endo Pharmaceuticals.

Recipient: Catherine Chong, PhD
Phoenix, AZ

S26: Headache
Monday, April 18, 3:30 p.m.

Kenneth M. Viste Jr., MD Patient Advocate of the Year Award

Sponsored by the American Academy of Neurology and endowed by gifts from Dr. Viste's colleagues, friends, and patients.

Recipient: Mamta Bhushan Singh, MBBS, MD, DM
New Delhi, India

H. Richard Tyler Award

Sponsored by the American Academy of Neurology and the AAN Archive Committee.

Recipient: Stefano Sandrone
London, United Kingdom

Wayne A. Hening Sleep Medicine Investigator Award

Sponsored by the American Academy of Neurology and endowed by UCB, Inc., Lilly USA, Elite Home Medical & Respiratory, Inc., Raleigh Neurology Associates, and friends of Dr. Wayne A. Hening.

Recipient: Bryce Mander, PhD
Berkeley, CA

S13: Highlights in Sleep Medicine
Sunday, April 17, 1:00 p.m.

2016 Research Fellowships

Clinical Research Training Fellowships

Cosponsored by the American Academy of Neurology and the American Brain Foundation.

Recipients: Ellen Penney, MD, PhD
Harvard Medical School

Caitlin Rollins, MD
Boston Children's Hospital
Harvard Medical School

Santosh Murthy, MD, MPH
Weill Cornell Medical College

Practice Research Training Fellowship

Cosponsored by the American Academy of Neurology and the American Brain Foundation.

Recipient: Mia T. Minen, MD, MPH
NYU Langone Medical Center

Susan S. Spencer Clinical Research Training Fellowship in Epilepsy

Cosponsored by the American Academy of Neurology, the American Brain Foundation, the American Epilepsy Society, and the Epilepsy Foundation.

Recipient: Paula Voinescu, MD, PhD
Brigham and Women Hospital

Clinical Research Training Fellowship in Epilepsy

Funded by Lundbeck.

Recipient: Vaishnav Krishnan, MD, PhD
Beth Israel Deaconess Medical Center

Clinical Research Training Fellowship in Tourette Syndrome

Cosponsored by the American Academy of Neurology, the American Brain Foundation, and the Tourette Association of America.

Recipient: Matthew Capriotti, PhD
University of California, San Francisco

Clinician-Scientist Development Three-Year Award in Myasthenia Gravis and Related Disorders of the Neuromuscular Junction

Cosponsored by the American Academy of Neurology, the American Brain Foundation, and the Myasthenia Gravis Foundation of America.

Recipient: Michael K. Hehir, MD
University of Vermont

Clinical Research Training Fellowship in Stroke

Cosponsored by the American Academy of Neurology, the American Brain Foundation, and Genentech.

Recipient: Nils Henninger, MD
University of Massachusetts Medical School

Robert Katzman, MD, Clinical Research Training Fellowship in Alzheimer's Research

Cosponsored by the American Academy of Neurology, the American Brain Foundation, and the Alzheimer's Association.

Recipient: Halima Amjad, MD, MPH
Johns Hopkins University School of Medicine

Clinical Research Training Fellowship in Parkinson's Disease

Funded by Lundbeck.

Recipient: Katherine McDonell, MD
Vanderbilt University Medical Center

Clinician-Scientist Development Three-Year Award in ALS Research

Funded by the ALS Association.

Recipient: Lindsey R. Hayes, MD, PhD
Johns Hopkins University

Clinical Research Training Fellowship in ALS Research

Funded by the ALS Association.

Recipient: Cindy V. Ly, MD, PhD
Washington University in St. Louis

John F. Kurtzke, MD, FAAN Clinician-Scientist Development Three-Year Award in Multiple Sclerosis

Cosponsored by the American Academy of Neurology, the American Brain Foundation, and the Consortium of Multiple Sclerosis Centers.

Recipient: Pavan Bhargava, MBBS, MD
Johns Hopkins University School of Medicine

Clinical Research Training Fellowship in Multiple Sclerosis

Funded by Genzyme, a Sanofi Company.

Recipient: Christopher Hemond, MD
Brigham & Women's Hospital

Clinical Research Training Fellowship in Alzheimer's Disease

Funded by the Allergan Foundation.

Recipients: Fanny Elahi, MD, DPhil
University of California, San Francisco

Stephanie S. Buss, MD
Beth Israel Deaconess Medical Center

Lawrence M. Brass, MD, Stroke Research Fellowship

Cosponsored by the American Academy of Neurology, the American Brain Foundation, and the American Heart Association/American Stroke Association.

Recipient: Karen Hirsch, MD
Stanford University

Clinician-Scientist Development Award in Multiple Sclerosis

Cosponsored by the American Academy of Neurology, the American Brain Foundation, and the National MS Society.

Recipient: Joseph Sabatino, Jr., MD, PhD
Johns Hopkins Hospital

Neuroscience Is...TM

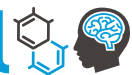
An AAN initiative to help build public awareness of neuroscience and demonstrate the importance of research in the care of neurology patients and the development of cures for brain diseases.

Neuroscience Is...TM
Cool 

Geared toward K-12 students, this initiative aims to attract the attention of young minds and help shape a lifelong interest in and commitment to the neuroscience field.

Neuroscience Is...TM
Rewarding 

This initiative is designed to inspire high school, college, and medical students to select a rewarding career in neurology by increasing awareness of the impact that neuroscience has on the prevention, diagnosis, and treatment of brain disease.

Neuroscience Is...TM
Essential 

Compelling facts are used throughout this initiative to demonstrate to practicing neurologists and other neuroscience professionals how research is essential to patient care and day-to-day practice.

Neuroscience Is...TM
Critical 

Without support from government agencies, industry, and the general public, there is not enough funding to sustain neuroscience research, which is critical to finding treatments and eventual cures. This initiative raises awareness of the AAN's support of researchers and access to practitioners to conduct trials and trial recruitment.

To learn more and get involved, visit
AAN.com/view/Neurosciences



Highlights

Experience New Ways to Connect and Thrive at Social Events

There's no better way to combine an evening of great fun and entertainment with unparalleled networking than to experience the Opening Party, Closing Party Happy Hour—or both. Whether you attend the Annual Meeting at the beginning or the end, these exciting social events are not-to-be-missed.

Opening Party

Sunday, April 17, 6:00 p.m.–10:00 p.m.

Neurobowl®

6:00 p.m.–8:00 p.m.

This popular event hosted by AAN former president Thomas R. Swift, MD, FAAN, is one of the Annual Meeting's premier happenings. Neurobowl showcases the best and brightest in neurology competing for the coveted Neurobowl trophy in an entertaining game-show format.



Native Thunder Productions Presents Story Telling Through Native Dancing

8:15 p.m.–9:00 p.m.

Dressed in colorful, vibrant, handmade traditional clothing, Native Thunder Productions uses compelling dance, vocal, and drum performances to tell the story of their people, while a three-time world champion hoop dancer uses 22 hoops to tell a story of the creation of life.



Sixwire

8:45 p.m.–10:00 p.m.

Five veterans of touring, recording, and songwriting who adopted their name from the six-string guitar—a fitting tribute to the instrument around which their sound is based—will bring their unique pop-country-meets-classic-rock, high-energy show to the Annual Meeting. Since 2000, Sixwire has achieved chart success, made many television appearances—including regular spots on ABC's "Nashville"—and performed around the world with dozens of iconic musical stars.



Exhibit Hall Opening Reception

Monday, April 18, 4:30 p.m.–6:30 p.m.

Attend the opening reception to mingle with fellow attendees and preview the latest products and services available in the neurologic industry. Light hors d'oeuvres and beverages will be served. The exhibits will be open at this time.

Sponsored by:

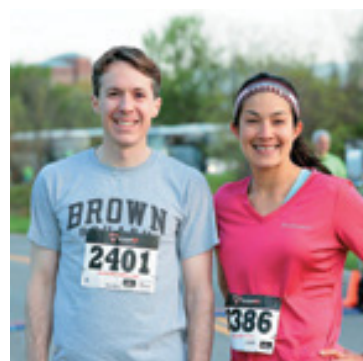


Run/Walk

Tuesday, April 19, 6:30 a.m.–8:30 a.m.

Support research in neurology and join us for a 5k run or one-mile walk along the stunning Vancouver waterfront. Both occasional and seasoned runners, as well as walkers, will enjoy this beautiful event for a good cause. All proceeds will go to help support brain research. The race is open to all meeting attendees and their families. Water and refreshments will be available following the race. The registration fee is \$40.

For registration and details, visit AAN.com/view/RunWalk or contact Andrew Halverson at ahalverson@aan.com or (612) 928-6117.



Awards Luncheon

Tuesday, April 19, 11:30 a.m.–1:00 p.m.

Join AAN leaders as they honor the recipients of the 2016 AAN and American Brain Foundation Awards. From enterprising high school students to world-renowned researchers, this program recognizes some of the top accomplishments in neuroscience research. Past keynote speakers on the importance of curing neurologic diseases include Walter Mondale, Ben Utecht, Billy McLaughlin, Dame Julie Andrews, Cuba Gooding Jr., Leeza Gibbons, and Michael J. Fox. Tickets will be available for \$60 through registration in February 2016. Buy a ticket and show your support for award recipients.

Reserve a Department Table and Be Recognized

Bring your department together and gain exposure for your team at the Awards Luncheon by reserving a department table. Give your residents and fellows the chance to sit together with department faculty and chairs in a place of honor among the top minds in the neurology/neuroscience



academic community. For questions, contact Laurie Dixon at ldixon@aan.com or (612) 928-6154. Registration for departments for the Awards Luncheon will open in February 2016.

Closing Party Happy Hour

Thursday, April 21, 5:30 p.m.–7:00 p.m.

Celebrate the end of a great meeting at a special early-evening happy hour event! Enjoy music, drinks, and socializing with colleagues.



Each registered meeting attendee will receive one free ticket to this event. Guest tickets are available through registration for \$50.

Reunion/In Conjunction With Meetings

Reconnect with your peers and program directors, and network with your fellow alumni at various department reunion meetings occurring throughout the Annual Meeting. These In Conjunction With (ICW) Meetings, formerly known as Affiliate Meetings, are designed for functions that include Annual Meeting attendees but are not planned by or sponsored by the AAN. If your department is interested in hosting its alumni meeting during the 2016 Annual Meeting, reserve your meeting today at AAN.com/view/ICW or by contacting Grace Henderson at ghenderson@aan.com or (612) 928-6103.

Experience Unique Opportunities for Students, Residents, and Fellows

The AAN Annual Meeting offers a unique experience for students, residents, and fellows with boundless opportunities to get exposure to a variety of interests and career disciplines, and network with leading neurologists and neurology professionals from around the world.

Registration

FREE for Medical Students

Annual Meeting Registration* is FREE to medical students, graduate students, and PhD candidates who present a student ID card or are AAN members. Sign up for an AAN complimentary student membership at AAN.com/view/membership.

Only \$245 for Junior Residents and Junior Fellows

Annual Meeting Registration is only \$245 (a more than \$800 savings from nonmember neurologist registration!) before the March 24, 2016, early registration deadline.

Gold Registration—Upgrade to Gold Registration to receive a copy of Annual Meeting On Demand.

See details and pricing on [page 6 »](#)

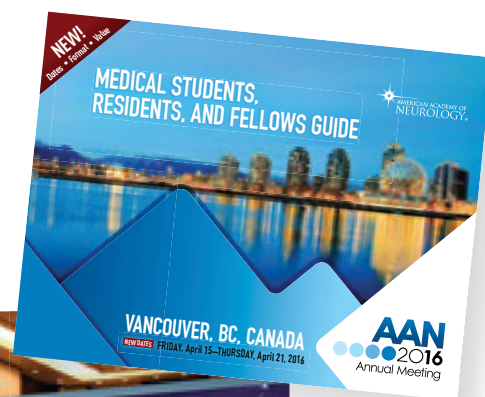
**Skills Workshops, Maintenance of Certification Exam Preparation Course, Between Venus and Mars: How Great Leadership Adopts Traits from the Best of Both Genders, Improving Your Leadership Skills: A Practical Approach, Women in Leadership, Research Career Development Symposium, The Most Important Tool in Your Black Bag: Gallup StrengthsFinder™ Assessment I & II, Continuum® Test Your Knowledge: A Multiple-choice Question Review I & II, Bedside Evidence-based Medicine: How to Find and Deconstruct Articles in Order to Take Care of Patients I & II, and Genomic Neurology Workshop: Developing Practical Knowledge of Tools and Concepts Through Case Studies I & II, are not included in the Annual Meeting registration price. These courses require pre-registration, may have a separate registration fee, and are subject to closure due to reaching maximum capacity.*

Volunteer Opportunities

Serve as a program monitor or a workshop volunteer (see [page 168 »](#).)

2016 Medical Student, Residents, and Fellows Guide

A detailed guide highlighting all events and opportunities of interest to Students, Residents, and Fellows is available now at AAN.com/view/Highlights.



HIGHLIGHTS



On Demand

Enhance your Annual Meeting experience with Annual Meeting On Demand.

There is no better place than the AAN Annual Meeting for a high-quality educational experience in neurology. With the NEW Annual Meeting Registration and a robust offering of concurrent courses, it is impossible to attend every one. Annual Meeting On Demand delivers captured content from the Annual Meeting to your doorstep so that you can experience the full value of the meeting.

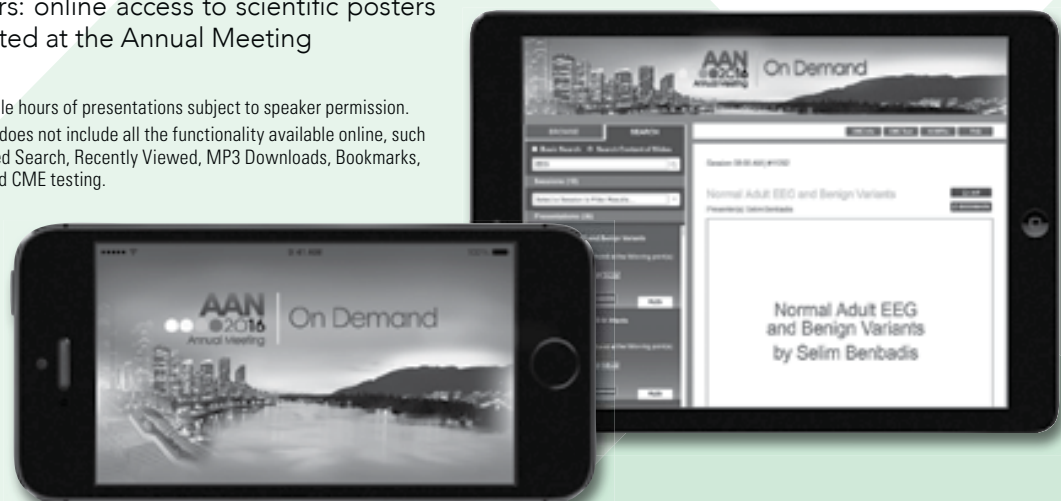
Annual Meeting On Demand is a CME accredited comprehensive digital library with more than 500 hours* of presentations from the 2016 AAN Annual Meeting educational programs including new Integrated Neuroscience topics and Invited Science Sessions and syllabi for 200+ programs.

Features of Annual Meeting On Demand include:

- Online access to content within 24 hours of live presentations
- Downloadable PDFs of presentation slides and MP3 files
- Integrated online CME testing
- Complimentary hard drive** to view presentations offline
- An advanced search engine that delivers a direct link to the specific presentations and slides containing your search terms
- iPosters: online access to scientific posters presented at the Annual Meeting

* Total available hours of presentations subject to speaker permission.

** Hard Drive does not include all the functionality available online, such as Advanced Search, Recently Viewed, MP3 Downloads, Bookmarks, iPosters and CME testing.



Annual Meeting Attendee Pricing:

Gold Registration

Upgrade to gold registration and receive all sessions at the meeting* as well a copy of Annual Meeting On Demand. With so many concurrent sessions, Gold Registration is the best value for attendees who want to experience the meeting.

*Skills Workshops, Maintenance of Certification Exam Preparation Course, Between Venus and Mars: How Great Leadership Adopts Traits from the Best of Both Genders, Improving your Leadership Skills: A Practical Approach, Women in Leadership, Research Career Development Symposium, The Most Important Tool in Your Black Bag: Gallup StrengthsFinder™ Assessment I & II, and Continuum® Test Your Knowledge: A Multiple-choice Question Review I & II, Bedside Evidence-based Medicine: How to Find and Deconstruct Articles in Order to Take Care of Patients I & II, Genomic Neurology Workshop: Developing Practical Knowledge of Tools and Concepts Through Case Studies I & II, are not included in the Annual Meeting registration price. These courses require pre-registration, may have a separate registration fee, and are subject to closure due to reaching maximum capacity.

Select Gold Registration when you register for the meeting!

New for 2016!

All attendees will receive complimentary online access to Annual Meeting Syllabi for one-year. Upgrade to a USB drive for permanent use.

Syllabi On Demand is a quick reference tool with 200+ programs from the 2016 Annual Meeting.

Order Online: AAN.com/view/Register

Not attending the 2016 Annual Meeting?

You can still pre-order On Demand products prior to the meeting and receive a special discount. Learn more by calling or visiting online.

Order Online: AANonDemand.com/PreMeeting

Order by Phone: (800) 501-2303 or (818) 844-3299

Pre-meeting discounts expire April 21, 2016.

Gold Registration

	BEFORE MARCH 24, 2016	AFTER MARCH 24, 2016
STUDENTS	\$199	\$199
SENIOR & HONORARY	\$399	\$399
JUNIOR	\$444	\$534
NON-NEUROLOGIST MEMBER	\$594	\$744
MEMBER	\$1,094	\$1,354
NONMEMBER	\$1,794	\$2,234

Syllabi USB Pricing

	Syllabi On Demand (USB upgrade)
MEMBER, SENIOR, & HONORARY	\$39
NONMEMBER	\$59
JUNIOR AND NON- NEUROLOGIST MEMBER	\$29

Non-Attendee Pricing

	Annual Meeting On Demand	Syllabi On Demand
MEMBER, SENIOR, & HONORARY	\$649	\$199
NONMEMBER	\$949	\$299
JUNIOR AND NON- NEUROLOGIST MEMBER	\$199	\$99



General Information

Accreditation/CME/Core Competencies

Accreditation

The American Academy of Neurology Institute (AANI) is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

AMA Credit Designation

The American Academy of Neurology Institute designates this live activity for a maximum of (*) *AMA PRA Category 1 Credit(s)*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

CME/Participation Records

AANI has mechanisms in place to record, and when authorized by the participating physician, verify participation in the CME activity. To receive CME for the Annual Meeting live program, participants must: (1) have their badge printed on site and be verified as eligible for credit; (2) attend the program(s); and (3) submit the evaluation form for the program(s). CME is given only when all three steps are completed. AAN member CME and participation transcripts are available approximately four to six weeks following the close of the meeting via the AAN's NeuroTracker[™] at AAN.com/view/NeuroTracker. Nonmembers' CME credits and participation transcripts will be sent automatically via email.

ABPN Statement

The American Board of Psychiatry and Neurology has reviewed the AAN Annual Meeting and has approved this product as a part of a comprehensive lifelong learning program which is mandated by the ABMS as a necessary component of maintenance of certification.

Core Competencies

The AANI develops its activities/educational interventions in the context of the desirable physician attributes; specifically, of the Accreditation Council for Graduate Medical Education (ACGME) Core Competencies which include:

- ▶ Patient Care
- ▶ Medical Knowledge
- ▶ Interpersonal and Communication Skills
- ▶ Practice-Based Learning and Improvement
- ▶ Professionalism
- ▶ Systems-Based Practice

For more information on the definitions of the ACGME core competencies, please consult the following webpage: ACGME.org.

Once again, the Annual Meeting CME offerings, at the program and lecture level, are identified according to these competencies. Through identifying individual programs by competencies, attendees can easily identify and attend programs that meet each core competency.

AMA CME Definition/Educational Content of Certified CME

The AMA HOD and the Council on Medical Education have defined continuing medical education as follows: CME consists of educational activities which serve to maintain, develop, or increase the knowledge, skills, and professional performance and relationships that a physician uses to provide services for patients, the public, or the profession. The content of CME is the body of knowledge and skills generally recognized and accepted by the profession as within the basic medical sciences, the discipline of clinical medicine and the provision of health care to the public. (HOD policy #300.988)

Certified CME is defined as:

1. Nonpromotional learning activities certified for credit prior to the activity by an organization authorized by the credit system owner, or
2. Nonpromotional learning activities for which the credit system owner directly awards credit

Accredited CME providers may certify nonclinical subjects (e.g., office management, patient-physician communications, faculty development) for *AMA PRA Category 1 Credit*[™] as long as these are appropriate to a physician audience and benefit the profession, patient care, or public health.

CME activities may describe or explain complementary and alternative health care practices. As with any CME activity, these need to include discussion of the existing level of scientific evidence that supports the practices. However, education that advocates specific alternative therapies or teaches how to perform associated procedures, without scientific evidence or general acceptance among the profession that supports their efficacy and safety, cannot be certified for *AMA PRA Category 1 Credit*[™].

Content Validation

The AANI, as an ACCME accredited provider, is responsible for validating the clinical content of CME activities that it provides. Specifically, 1. All the recommendations involving clinical medicine in a CME activity must be based on evidence that is accepted within the profession of medicine as adequate justification for their indications and contraindications in the care of patients. 2. All scientific research referred to, reported, or used in CME in support or justification of a patient care recommendation must conform to the generally accepted standards of experimental design, data collection, and analysis.

Disclaimers/Disclosures

Disclaimer

The primary purpose of the Annual Meeting is to meet the educational needs of its members and address practice gaps by providing practice-oriented and scientifically based educational activities that will maintain and advance competence and performance in the field of neurology.

A diversity of opinions exists in the medical field and the views of the Annual Meeting faculty do not represent those of the AAN/AANI or constitute endorsement by the AAN/AANI. The AAN/AANI disclaims any and all liability for the claims that may result from the use or nonuse of information, publications, therapies, and/or services discussed at the Annual Meeting.

The activities conducted and content distributed at the Annual Meeting are for educational purposes only and do not constitute standard of care or substitute for professional medical advice, diagnosis, or treatment. In all cases, the selected course of action should be considered by the treating provider in the context of treating the individual patient. Use of the content provided is voluntary. The AAN/AANI provide this information on an "as is" basis and makes no warranty, expressed or implied, regarding the information. The AAN/AANI specifically disclaim any warranties of merchantability or fitness for a particular use or purpose. The AAN/AANI assume no responsibility for any injury or damage to persons or property arising out of or related to any use of this information or for any errors or omissions. Attendee assumes any and all liability associated with attendance/participation at the Annual Meeting.

Relationship Disclosure and Conflict of Interest Resolution

According to AANI and ACCME policies, everyone who is in a position to control the content of an education activity must disclose

financial relationships with any commercial interest to the provider. An individual who refuses to disclose relevant financial relationships is disqualified from being a planning committee member, a teacher, or an author of CME, and cannot have control of, or responsibility for, the development, management, presentation or evaluation of the CME activity. In addition, the AANI must implement a mechanism to identify and resolve all conflicts of interest prior to the education activity being delivered to learners. The resolution of conflict is handled by the Education and Science Committees. Disclosures for everyone in the position to control Annual Meeting content can be found on the AAN Annual Meeting website. In addition, education and science faculty disclosures can also be found in the syllabi, slides, handouts, and/or are given verbally from the podium.

Unlabeled Use Disclosure

The AANI requires all Annual Meeting presenters to disclose if a therapy/product is not labeled for the use being discussed or if the therapy/product is still investigational. Unlabeled use disclosures can be found in the program materials.

Grants

Some Annual Meeting education and scientific programs are supported in part by educational grants from commercial entities. Disclosure of the educational grant is done through acknowledgment statements on the program materials, signs outside of the room, and verbally from the podium. Although educational grants are received, all programs are developed and implemented solely by the Education Committee and Science Committee. The terms, conditions, and purposes of the commercial support are documented in a written agreement between the AANI and commercial supporter. The AAN uses grant funds to support and enhance existing, as well as new, education programs.

Services

Child Care Information

A variety of child care options are available in Vancouver, BC, Canada. Check with the concierge at your hotel on or before your arrival to make your arrangements.

Coat Check

A coat check will be available in the Vancouver Convention Centre and open to all Annual Meeting attendees.

Luggage Check

No luggage check is available at the Vancouver Convention Centre. Check with your concierge at your hotel to make your arrangements.

Transportation

Due to the proximity of the hotels to the Vancouver Convention Centre (VCC), the AAN will not be providing shuttle service. Detailed options to the VCC are available on the housing website transportation map. It includes walking directions, public transportation options, and taxi fares. Please use this information when making your housing selection.

Wireless Connection

Wireless Internet hotspots will be available at the Vancouver Convention Centre.

First Aid Station

A First Aid station is located on the lobby level of the Vancouver Convention Centre. The station is staffed by licensed medical professionals and fully equipped with supplies, including automatic external defibrillators (AED). The station is operational throughout the duration of the Annual Meeting.

Prayer Room

A prayer room will be available in the convention center for attendees looking for a quiet space for thought, reflection, and prayer.

Mothers Room

A private room will be available on the third floor of the convention center for nursing mothers and others with sensitive personal health needs. Please note that this room will not be staffed.

General Information

Continued

Guidelines

Photography and Recording of Programs

The AAN strictly prohibits all unauthorized photography (flash, digital, or otherwise), audio and/or video recording during the Annual Meeting. Equipment will be confiscated. Photography is allowed only in the Poster Sessions.

Photography and Recording of Programs

The AAN strictly prohibits all unauthorized photography audio, and/or video recording during Annual Meeting courses and sessions, regardless of the device being used (camera, phone, tablet, etc.). Photography is allowed only in the Poster Sessions. Individuals disrupting or otherwise interfering with the ability of others to view, listen to, or otherwise engage in the program due to their use of devices will be asked to put the device away by the room monitor as a warning. Individuals engaging in disruptive behavior a second time will be asked to leave the room.

Consent to Use of Images

All portions of the Annual Meeting may be photographed, videotaped, or recorded for future rebroadcast, distribution, promotion, or other commercial purpose. By attending the Annual Meeting you are consenting to being recorded, photographed, and videotaped without acknowledgment, payment or remuneration of any kind. Any recordings, photographs, or videos of any nature are the sole property of AAN and its successors and assignees.

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Cell Phones

The AAN requests that attendees turn cellular phones and pagers to vibrate mode upon entering all Annual Meeting programs.

Language

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

No Smoking

The Vancouver Convention Centre is a nonsmoking facility. For the health and comfort of everyone, smoking is prohibited at Annual Meeting functions, which include all education and scientific activities and social functions.

Press Room

Only authorized media may use the Press Room at the Annual Meeting. Journalists must check in at the Press Room and provide proper credentials. For more information, contact Rachel Seroka at rseroka@aan.com or (612) 807-6968.

Volunteer Opportunities

Education and Scientific Program Monitors

Monitors are needed for all education program offerings and scientific platform sessions to assist directors, faculty, session co-chairs, and staff as required. The AAN will give discounts to registration fees as well as grant CME credit for the monitored program. Space is available on a first-come, first-served basis. You must be a current Junior or Student member of the American Academy of Neurology to serve as a monitor. For an application form or more information, contact Laurie Dixon at ldixon@aan.com or (612) 928-6154.

Skills Workshop Volunteers

Volunteers are needed to participate in the Neurophysiologic Intraoperative Monitoring Skills Workshop on Friday, April 15, the EMG Skills Workshop: Basic on Tuesday, April 19, and the Neuromuscular Ultrasound Skills Workshop on Thursday, April 21. Skills workshop subjects will receive a waived meeting registration and workshop fee as well as payment of \$40 per noninvasive session and \$60 per invasive session. Space is available on a first-come, first-served basis. You must be a current Junior or Student member of the American Academy of Neurology to serve as a workshop volunteer. For more information, contact Laurie Dixon at ldixon@aan.com or (612) 928-6154.

Weather/Attire

The climate in Vancouver, BC, Canada, in April is generally cool and pleasant. In April, temperatures usually range from 44 degrees to 54 degrees Fahrenheit. The AAN promotes business casual attire for the duration of the Annual Meeting. Consider bringing a light jacket or sweater to Annual Meeting activities since meeting room temperatures and personal comfort levels vary.

Hotel Reservations

Why Book a Hotel Room Through the AAN?

Booking your room through the official AAN housing company assures you are getting a room at the hotel that best fits your needs. You are also helping the AAN maintain consistent and competitive registration fees. The reason is simple. When a city is selected as the site for the AAN Annual Meeting, contracts are signed with several hotels reserving a specific number of rooms to be available for meeting attendees. If these rooms are not sold, the AAN is liable financially. Penalties incurred affect the overall costs of the Annual Meeting and what the AAN charges for registration, exhibit space, and other services.

Discounted hotel rates are available until February 24, 2016, or until the block is filled. After this date, reservations are subject to availability.

Hotel fees will be posted and charged in Canadian dollars.

Save on Hotel Reservations

Take advantage of the AAN's special hotel rates to make your trip more affordable. Annual Meeting hotel reservations are processed by Convention Management Resources (CMR).

AAN Online Hotel Reservations

AAN.com/view/BookHotel

The AAN makes it easy and convenient to book your hotel rooms for the 68th Annual Meeting. Booking online allows you to:

- ▶ Take advantage of the AAN's special hotel rates
- ▶ View room descriptions, photos, and availability
- ▶ Access maps of hotel proximity to Annual Meeting locations

Telephone Reservations

All correspondence, questions, and inquiries should be directed to CMR at:

Phone:
US/Canada (800) 676-4226
International (415) 979-2283

Hours:
Credit card reservations only
Monday–Friday
6:00 a.m.–6:00 p.m. PT

Deposits

- ▶ All hotels require a credit card guarantee of \$300 (US dollars) per room and \$500 (US dollars) per suite. Deposits will be credited towards your first night's room and tax.
- ▶ No hotel reservation will be processed without a credit card guarantee.
- ▶ Deposits are refundable up to seven days prior to arrival, after which there will be no refunds.
- ▶ Credit cards will be charged for one night's room and tax if you fail to arrive on the confirmed date of arrival or if you fail to cancel your reservation at least seven days prior to arrival.

Confirmations, Changes, and Cancellations

- ▶ You will receive your hotel confirmation from CMR. This is the only confirmation you will receive.
- ▶ Please check your arrival and departure dates on the confirmation carefully.
- ▶ After February 24, 2016, contact CMR to book a room. After this date, however, rooms are subject to availability.

Note: *Some hotels may charge a penalty for changes made to your departure date after you have checked in.*

Group Accommodations Deadline: February 24, 2016

Blocks of 10 or more sleeping rooms are considered a group. Email your written request to aanam.cmrushelp.com and you will be contacted by an AAN Housing Consultant.

Additional Tax/Assessments

- ▶ Rates do not include the 15% hotel tax.
- ▶ An \$8 per night assessment fee is included to offset the expense of the meeting.



Hotels and Amenities

Canada Line is Vancouver's fully automated rapid transit line. Detailed options to the Vancouver Convention Centre are available on the housing website transportation map.

	Hotel Name and Address	Rate (Canadian \$)	Distance to VCC	Walkable	Internet Cost/Day	Number of Restaurants
1	Best Western Plus Chateau Granville Hotel & Suites 1100 Granville Street	\$145	11 Blocks	Yes	Included	1
2	Blue Horizon Hotel 1225 Robson Street	\$149	9.5 Blocks	Yes	Included	1
3	Carmana Plaza 1128 Alberni Street	\$199	6 Blocks	Yes	Included	0
4	Coast Coal Harbour Hotel 1180 West Hastings Street	\$189	1.5 Blocks	Yes	Included	1
5	Comfort Inn Downtown Vancouver 654 Nelson Street	\$129	9 Blocks	Yes	Included	1
6	Century Plaza Hotel & Spa 1015 Burrard Street	\$159	9 Blocks	Yes	Included	1
7	Delta Vancouver Suites 550 West Hastings Street	\$195	7 Blocks	Yes	Included	1
8	Fairmont Hotel Vancouver 900 West Georgia Street	\$240	3.5 Blocks	Yes	\$14.95	1
9	Fairmont Pacific Rim 1038 Canada Place	\$285	Less Than 1 Block	Yes	\$13.95	1
10	Fairmont Waterfront 900 Canada Place	\$265	1 Block	Yes	\$14.65	1
11	Four Seasons Hotel Vancouver 791 West Georgia Street	\$245	5 Blocks	Yes	Included	1
12	Georgian Court Hotel 773 Beatty Street	\$179	12 Blocks	Yes	Included	1
13	Hampton Inn & Suites by Hilton Downtown 111 Robson Street	\$189	12 Blocks	Yes	Included	1
14	Holiday Inn & Suites Vancouver Downtown 1110 Howe Street	\$156	11 Blocks	Yes	Included	1
15	Holiday Inn Vancouver Centre 711 West Broadway	\$139	2.3 Miles	Canada Line	Included	1
16	Executive Hotel Le Soleil 567 Hornby Street	\$175	4 Blocks	Yes	Included	1
17	Listel Hotel 1300 Robson Street	\$189	8 Blocks	Yes	Included	1
18	Hyatt Regency Vancouver 655 Burrard Street	\$248	4 Blocks	Yes	Included	1
19	Metropolitan Hotel 645 Howe Street	\$199	3 Blocks	Yes	\$8.00	1
20	OPUS Hotel 322 Davie Street	\$289	1.4 miles	Canada Line	Included	1
21	Pan Pacific Hotel Suite 300-999 Canada Place	\$276	Less Than 1 Block	Yes	\$14.95	2
22	Park Inn & Suites by Radisson Vancouver 898 West Broadway	\$125	2.6 Miles	Canada Line	Included	1
23	River Rock Casino Resort 8811 River Road	\$182	7.5 Miles	Canada Line	Included	2
24	Residence Inn by Marriott 1234 Hornby Street	\$189	9 Blocks	Yes	Included	1
25	Ramada Limited Downtown 425 West Pender Street	\$109	6 Blocks	Yes	Included	0
26	Rosewood Hotel Georgia 801 West Georgia Street	\$285	4.5 Blocks	Yes	Included	2
27	Sandman Suites Vancouver On Davie 1160 Davie Street	\$190	10 Blocks	Yes	Included	1
28	Shangri-La Hotel 1128 West Georgia Street	\$355	6 Blocks	Yes	Included	1

	Hotel Name and Address	Rate (Canadian \$)	Distance to VCC	Walkable	Internet Cost/Day	Number of Restaurants
29	Sheraton Vancouver Wall Centre Hotel 1088 Burrard Street	\$182	8 Blocks	Yes	Included	1
30	St. Regis Hotel 602 Dunsmuir Street	\$209	6 Blocks	Yes	Included	2
31	Sutton Place Hotel 845 Burrard Street	\$219	6 Blocks	Yes	\$14.68	1
32	Vancouver Marriott Downtown Hotel—Headquarter Hotel 1128 West Hastings Street	\$285	2 Blocks	Yes	\$7.95	1
33	Vancouver Pinnacle Harbourfront Hotel—Headquarter Hotel 1133 West Hastings Street	\$285	2 Blocks	Yes	Included	1
34	Westin Bayshore Vancouver 1601 Bayshore Drive	\$189	6 Blocks	Yes	\$14.95	1



Travel Information

Save with Annual Meeting Travel Reservations

Through Travel Agency

The official travel agency for the Annual Meeting is Association Travel Pros. For 2%–10% discounted airline tickets to the Annual Meeting, contact them at:

Phone: (877) 309-4330

Email: mytravelagent@innovativetvl.com

Hours: Monday–Friday, 8:30 a.m.–5:30 p.m. CT

Closed weekends and holidays

A \$25 service fee will be assessed per ticket for reservations made via phone. You may also book online with all airline meeting discounts applied at www.aantvlmeetings.com. A \$10 service fee will apply to online bookings.

Direct Through Airlines

You may also contact your preferred airline directly. You must reference the AAN Annual Meeting and provide the appropriate airline discount codes listed below.

Airline	Discount Codes	Phone Number	Website
Delta	NMMBY	(800) 328-1111	Delta.com
United	ZVM8 820754	(800) 521-4041	United.com

Discounts are subject to availability, so book well in advance. Normal mileage and status upgrades apply for all airline programs. A service fee will be charged for reservations made via phone.

Travel Website

For travel forms and information updates, visit the AAN Annual Meeting website at AAN.com/view/AM16.

Travel Tips



Travel Documents/Passports and Entry Requirements

Visitors must have valid travel documents/passports to enter Canada to provide proof of their citizenship. Document requirements vary depending from which country you are traveling, the reason for your visit, and the length of your stay, and may include passport or a birth certificate, photo ID, and/or a visa. Learn more about travel documents and requirements at Cic.gc.ca/english/visit.

NOTE: *Special No-Fee*

Passports for US Federal Government Employees

In order to attend the Annual Meeting on business, it may be necessary for US government employees to obtain an official United States government no-fee passport from their appropriate agency office. Government employees should contact the appropriate office within their agency to discuss proposed dates of attendance and to confirm whether or not they will need this official passport.

For more information, or to request a Letter of Announcement for the 2016 Annual Meeting, visit AAN.com/view/AMInfo.

Vancouver, BC, Canada Airport

The Vancouver, BC, Canada, area is served by the Vancouver International Airport. The airport is approximately nine miles from the Vancouver Convention Centre.

Currency

Vancouver, BC, Canada's currency is the Canadian Dollar; currency exchange is available at banks and kiosks throughout the city and at the airport.

- For denominations under five dollars, the currency is coins
- US dollars are accepted in most Vancouver establishments; however you will receive change in Canadian funds and exchange rates will differ from merchant to merchant
- Cash machines/ATMs are available in most banks, hotels, and shopping centers; please note that ATMs at the airport only accept ATM cards with the MasterCard logo on them

IMPORTANT NOTE: *Don't forget to call your bank and credit card companies to let them know you will be traveling to Canada.*

Customs and Immigration

Upon entering Canada, you will be required to go through customs and immigration. Before you land, your flight crew will distribute a Travelers' Customs Declaration Card for you to complete; Declaration Cards are also available at the airport upon your arrival. For more information, visit Travel.gc.ca/returning/customs.

Health Insurance

Be sure to check with your health insurance provider about policy coverage away from home—particularly if you're insured by an HMO and/or Medicare/Medicaid.

Luggage

Restrictions for carry-on baggage and weight and size limits for checked baggage are different for international flights than for domestic flights. Be sure to check with your individual carrier as to weight and measurement restrictions and associated costs for overages.

Measurements

Canada uses the metric system for weights and measures. If you choose to drive in Canada, be aware the speed limits are posted in kilometers per hour instead of miles per hour.

Medication

If you are entering Canada with prescription drugs and syringes: keep the medication in its original, labeled container; include medical certificate with syringes showing they are for medical use and have them declared to Canadian Customs officials; bring an extra prescription in case your medication is lost and/or to attest to your need to take such prescriptions; and carry the generic name of prescription medicines.

Mobile Phone Service

Contact your service provider directly to inquire if service is available and/or the applicable rates. Wifi is available in the convention center for all attendees.

Time Zone

Vancouver, BC, Canada, is in the Pacific Time Zone. In April it will be the same time zone as Los Angeles, two hours behind Chicago, three hours behind New York, eight hours behind London, and 16 hours behind Tokyo.

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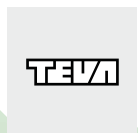
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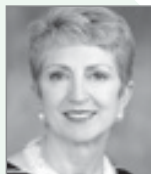
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AAN Leadership University courses at the 2016 Annual Meeting are your ticket to cultivating the skills you need to be an effective leader. Choose the course that's right for you! Space is limited and pre-registration is required.

C5 Women in Leadership

Supported in part by Allergan, Inc.

Friday, April 15, 2016, 9:00 a.m.–5:00 p.m.

Women who are mid-career and currently in a leadership role looking to grow their current leadership capacity will learn from successful female members in the field of neurology about how to lead at senior levels.

Directors: Cynthia L. Comella, MD, FAAN | Barbara L. Hoese

C82 Between Mars and Venus: How Great Leadership Adopts Traits from the Best of Both Genders

Supported in part by Novartis Pharmaceuticals Corporation

Sunday, April 17, 2016, 1:00 p.m.–5:00 p.m.

Participants will look to understand differences in style, mindset, and communication between men and women, and learn practical ideas and approaches to lead in "gender-neutral" workplaces.

Directors: Orly Avitzur, MD, MBA, FAAN | Stefan M. Pulst, MD, FAAN | Barbara L. Hoese

C115 Improving Your Leadership Skills: A Practical Approach

Monday, April 18, 2016, 1:00 p.m.–5:00 p.m.

Leadership has been defined as having a sound vision and convincing others to follow you. This course will assist you in implementing the vision and offer practical tips and case examples on how to persuade others to follow.

Directors: Terrence L. Cascino, MD, FAAN | Ralph L. Sacco, MD, MS, FAHA, FAAN

C233 & C234 The Most Important Tool in Your Black Bag: Gallup StrengthsFinder™ Assessment

Tuesday, April 19, 2016, and Wednesday, April 20, 2016, 1:00 p.m.–5:00 p.m.

A leader needs to know his strengths as a carpenter knows his tools, or a physician knows the instruments at her disposal. In this customized half-day workshop, two Gallup Certified consultants will share a language for understanding your unique strengths, which has powerful application for well-being and happiness.

Directors: Keri Bischoff | Julie Anderson

Register at AAN.com/view/AM16Leader



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Register Today for the 68th AAN Annual Meeting

NEW DATES Friday, April 15–Thursday, April 21, 2016

Vancouver, BC, Canada

- ▶ Hotel Reservation Deadline: February 24, 2016
- ▶ Early Registration Deadline: March 24, 2016

AAN.com/view/AM16

Future Annual Meeting Dates and Locations

69th AAN Annual Meeting

Boston, MA
April 22–29, 2017

70th AAN Annual Meeting

Los Angeles, CA
April 21–28, 2018

71st AAN Annual Meeting

Philadelphia, PA
May 4–11, 2019

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