UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MARINUS PHARMACEUTICALS, INC.,
Petitioner

v.

OVID THERAPEUTICS, INC.,
Patent Owner

Case PGR2023-00020
Patent 11,395,817

DECLARATION OF DR. MICHAEL SAPORITO

I, Michael Saporito, declare as follows:

1. I worked a consultant for Marinus from 2015-2020 and have been an employee of Marinus since 2020. My current title is Vice President of Research and Non-clinical Development.

2. As part of my duties both as a Marinus consultant and employee, I have worked on evaluating drugs for the treatment of neurological disorders such as status epilepticus ("SE"). Much of that evaluation of drugs is done through a model known as the Rat Lithium-Pilocarpine Model ("Rat Pilocarpine Model"), which is a well-recognized model for evaluating the potential efficacy of a drug to treat SE in humans.

3. Starting in around 2015, while I was a consultant for Marinus, I, along with several Marinus employees and other outside collaborators, did a substantial amount of work using the Rat Pilocarpine Model to evaluate the potential use of ganaxolone to treat SE.

4. In April 2016, two posters with results from that research were selected to be presented at the American Academy of Neurology ("AAN") Annual Meeting. The meeting was held from April 15-21, 2016 in Vancouver, Canada. The Scientific Abstract Listing and Meeting Information Brochure ("AAN Meeting Brochure") for this 2016 AAN Annual Meeting is attached as Exhibit 1012. It is my understanding

that the AAN Meeting Brochure was available online before the 2016 Annual Meeting and is still available online today.

5. The AAN Annual Meeting is an annual gathering of several thousand clinicians and researchers with an interest in current topics and research on various subjects in neurology. It is attended by both clinicians practicing in neurology and researchers interested in looking for potential new treatments for neurological disorders. I would consider it to be an important and influential gathering in the neurology field, and I attend it regularly. The AAN Meeting Brochure describes the Annual Meeting as "the place to discover the very latest, groundbreaking research across a wide variety of neurology topics." (AAN Meeting Brochure at 7.) As someone who has attended these meetings, I agree with that description.

6. The AAN Meeting Brochure includes approximately 20 descriptions of posters to be shown at the meeting that are specifically directed to topics related to SE, including the two with results from Marinus's research.

7. One of the Marinus posters, entitled "Ganaxolone Administered Intravenously Prevents Behavioral Seizures and Promotes Survival in the Rat Lithium-Pilocarpine Model of Status Epilepticus" was part of Poster Session II at the meeting on Sunday, April 17. The listing of this Poster (referred to hereafter as "Saporito Poster 1") in the AAN Meeting Brochure appears under the heading

"Epilepsy/Clinical Neurophysiology: AEDs" and is shown below (AAN Meeting Brochure at 46):

P2.020 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*

8. Saporito Poster 1 itself is attached as Exhibit 1013. I am one of the listed authors on Poster 1, along with Donna Henry, Melissa Barker Haliski, Cameron Metcalf, Julia Tsai, Albena Patroneva, and Steve White. Saporito Poster 1 was shown as a large poster board as part of Poster Session II. It was on a large poster board on an easel, and attendees were free to walk by, look at it, and ask questions about it. Because the poster was shown and presented at the meeting, I understood that the information on the poster would no longer be considered confidential.

9. As part of Poster Session II, I stood by Saporito Poster 1 to answer questions from meeting attendees. Poster Session II was held from 8:30am to 5:50pm on the 17th, with presenters, including myself, standing by the posters from 4pm to 5:30pm to interact with the Annual Meeting attendees who chose to stop and view the poster.

10. Poster Session II was well attended, and I interacted with many meeting attendees while standing by Saporito Poster 1. Many asked questions about the study described on the poster, which I answered. I recall that people also took pictures of the poster and took notes as they were viewing it.

11. It is also my understanding that Poster Session II, as well as the other poster sessions, were open to any person attending the Annual Meeting, which, as set forth in the AAN Meeting Brochure, was open to any interested person who paid the registration fee.

12. The second Marinus poster (referred to hereafter as "Saporito Poster 2"), entitled "Intravenous Administration of Ganaxolone Attenuates Electroencephalgraphic Seizures in a Diazepem Resistant Model of Status Epilepticus," was part of Poster Session IV at the meeting on Tuesday, April 19. On the AAN Meeting Brochure, Saporito Poster 2 appears under the heading "Epilepsy and Clinical Neurophysiology: Psychogenic Non-epileptic Seizures, Quality of Life, and Emotions," and is designated as poster number P4.212. The description of the poster from the AAN Meeting Brochure is shown below (AAN Meeting Brochure at 99):

P4.212 Intravenous Administration of Ganaxolone Attenuates Electroencephalographic Seizures in a Diazepam Resistant Model of Status Epilepticus —*Michael Saporito, Julia Tsai, Albena Patroneva*

13. Saporito Poster 2 itself is attached as Exhibit 1014. It was shown on a large poster board placed on an easel during Poster Session IV, and attendees of that session were free to walk by, look at it, and ask questions about it. As with Saporito Poster 1, because Saporito Poster 2 was shown and presented at the meeting, I understood that the information on the poster would no longer be considered confidential.

14. As with Saporito Poster 1, I stood by Saporito Poster 2 at Poster Session IV to answer questions from meeting attendees. Poster Session IV was held from 8:30am to 7pm on April 19th, with presenters, including myself, standing by the posters from 5:30pm to 7pm to interact with the Annual Meeting attendees who chose to stop and view their posters.

15. As with the previous poster session discussed above, I interacted with a number of meeting attendees as part of this poster session, with many stopping to ask questions while viewing the poster. Just as they did for Saporito Poster 1 from Poster Session II, I recall that attendees took notes and photographs while looking at Saporito Poster 2 during Poster Session IV.

16. In addition to Poster Sessions II and IV, I also presented some data from the studies on the posters as part of an Integrated Neuroscience Session entitled "Neurocritical Care and Neuroscience Crossroads: From Bench To Bedside" on Wednesday, April 20. During Part I of this session, which was held from 1pm to 3pm on the 20th, I presented data from Marinus's studies as part of a "Data Blitz" from 2:40pm to 2:45pm. The description of this Data Blitz from the AAN Meeting Brochure is shown below (AAN Meeting Brochure at 128):



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. **I11.001 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. **I11.002 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. **I11.003 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. **I11.004 Data Blitz**
Frequency and Time-Course of Epileptiform Abnormalities in Subarachnoid Hemorrhage —*Jennifer Kim, Sydney Cash, Eric Rosenthal, M. Westover*

17. During this short presentation, I presented data from our studies to the meeting attendees who chose to attend this session. I recall that the session was well attended, with at least a hundred people listening to the various presentations.

18. The slides that I used in presenting the data for the "Data Blitz" are attached as Exhibit 1016.

19. After the "Data Blitz," as part of the same Integrated Neuroscience Session, Saporito Poster 1 discussed above, entitled "Ganaxolone Administered Intravenously Prevents Behavioral Seizures and Promotes Survival in the Rat Lithium-Pilocarpine Model of Status Epilepticus," was also part of the "Guided Poster Rounds" that lasted from 3pm to 3:30pm.

20. The Guided Poster Rounds were a session that included only a select few posters rather than the larger number at the other poster sessions. A description of the seven posters that were included as part of these Guided Poster Rounds is shown below (AAN Meeting Brochure at 128):

Guided Poster Rounds

3:00 p.m.–3:30 p.m.

I11.001 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*

I11.002 Dynamics of Quantitative EEG Changes During Cerebral Hypoperfusion—*Babak Razavi, Kimford Meador*

I11.003 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*

I11.004 Frequency and Time-Course of Epileptiform Abnormalities in Subarachnoid Hemorrhage—*Jennifer Kim, Sydney Cash, Eric Rosenthal, M. Westover*

I11.005 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*

I11.006 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*

I11.007 Extended Clinical Spectrum of Anti-NMDA Receptor Encephalitis in Children—*Ajay Goenka, Hiroki Nariai, Mitchell Steinschneider, Alfred Spiro, Vimal Jain*

21. As with the other poster sessions, I stood by the poster for the Guided Poster Rounds and discussed the data on the poster with the meeting attendees who came to that session. As I recall, both the Data Blitz and the Guided Poster Rounds sessions were well attended.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on March 7, 2023.

Michael Saporito

EXHIBIT 1012

NEW!
Dates • Format • Value

AMERICAN ACADEMY OF NEUROLOGY®

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

EX1012

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
- $245* Junior Member
- $395* Non-neurologist Member
- $695* Neurologist Member
- $1,195* Nonmember



* 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*.

egistration 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

AAN 2016 Annual Meeting



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

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

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

**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.





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.cmrushelp.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

Note: All prices in US dollars, on-site rates will be in Canadian dollars	**Early Registration** (Before March 24, 2016)	**Late Registration** (After March 24, 2016)
Students	$0	$0
Senior/Honorary	$0	$0
Junior	$245	$335
Non-neurologist Member[1]	$395	$545
Neurologist Member[2]	$695	$955
Nonmember	$1,195	$1,635

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

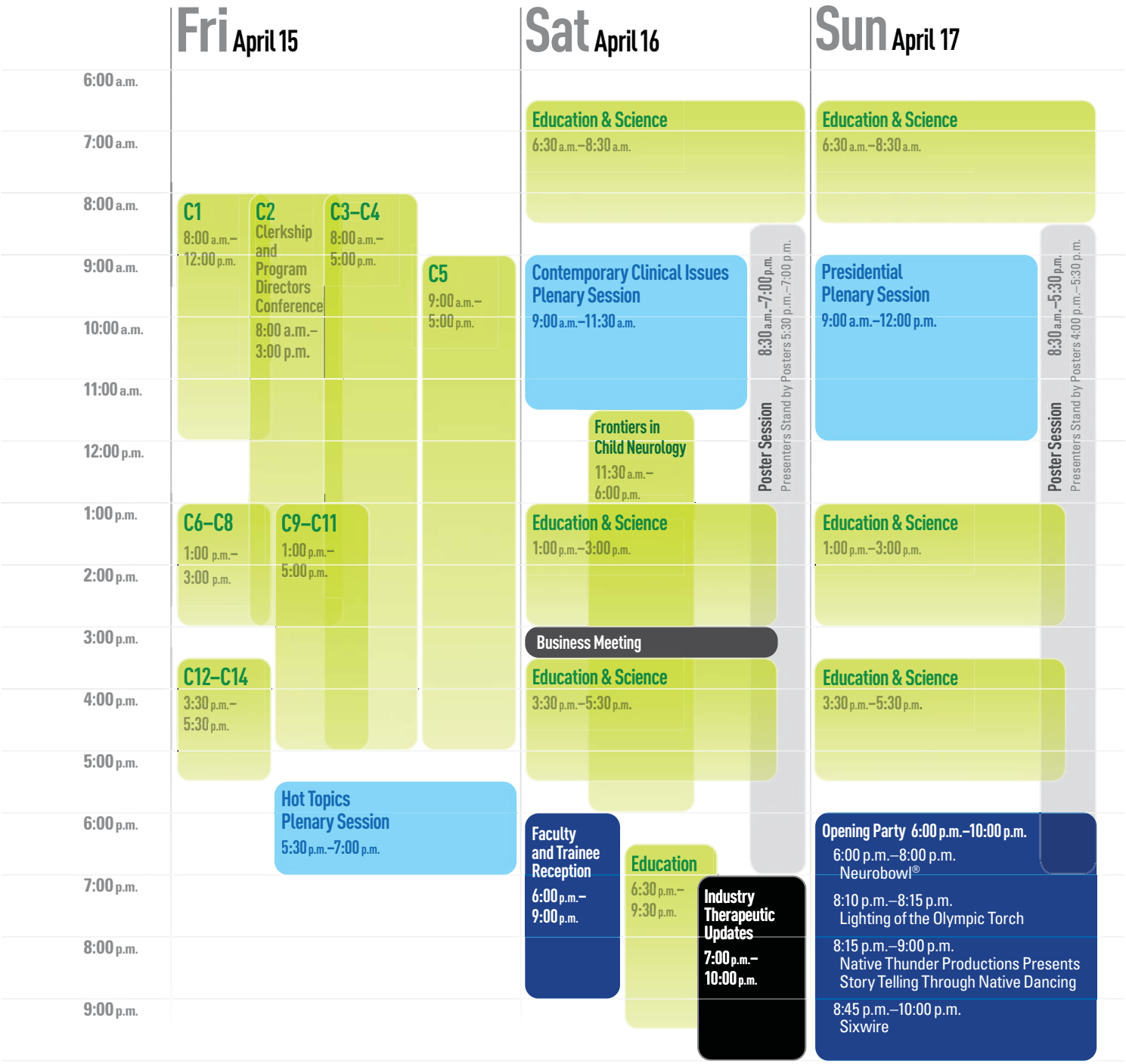
While the new all-inclusive registration rate provides an exceptional value, a few programs are not included, require a separate registration fee, and are subject to closure due to reaching maximum capacity. View the list at *AAN.com/view/SpecialPrograms.*

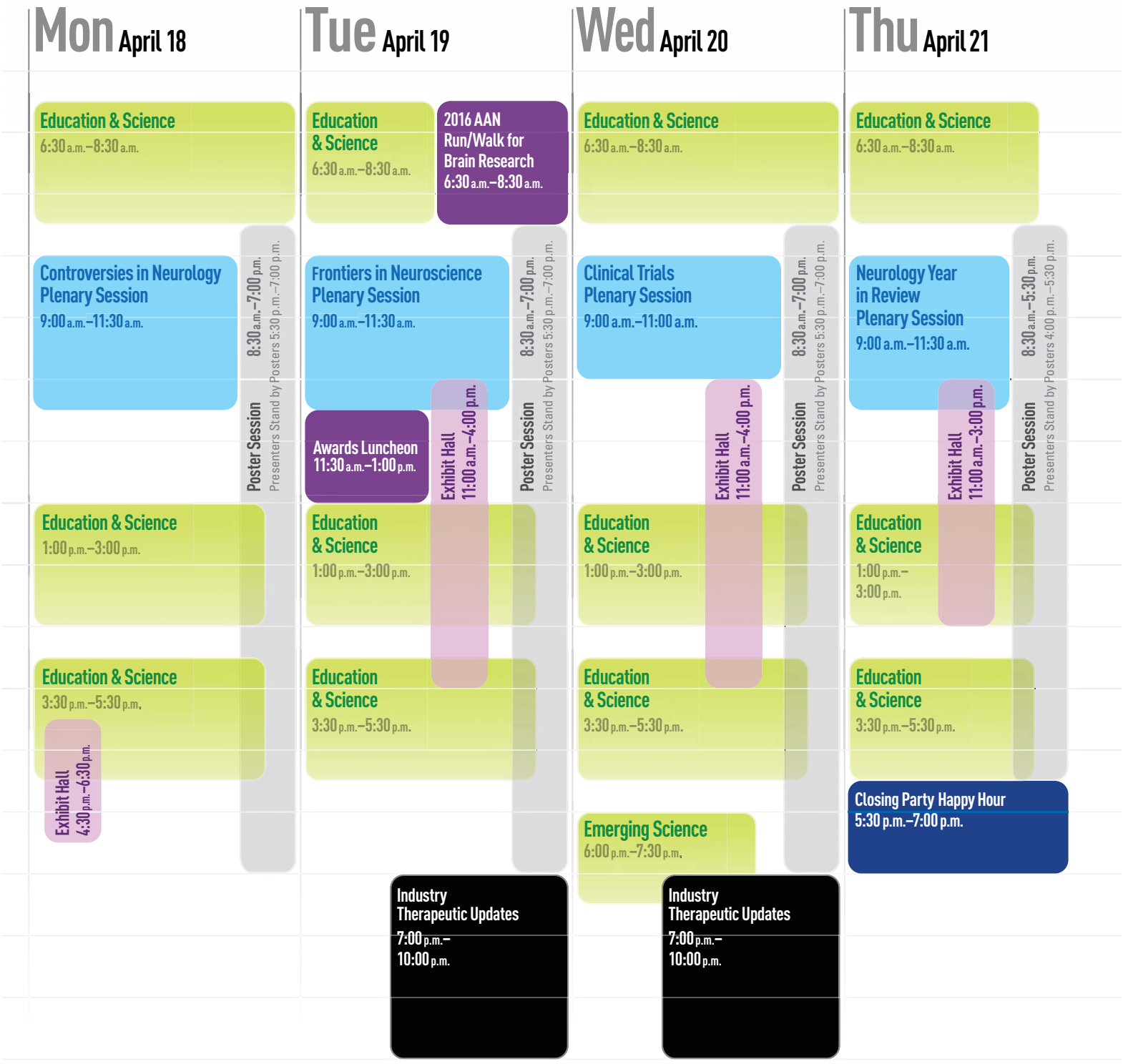
Early Gold Registration (Before March 24, 2016)	Late Gold Registration (After March 24, 2016)
$199	$199
$399	$399
$444	$534
$594	$744
$1,094	$1,354
$1,794	$2,234

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!




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.
8:30 a.m.–7:00 p.m.
Poster Session
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.
8:30 a.m.–7:00 p.m.
Poster Session
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.
Exhibit Hall
11:00 a.m.–4:00 p.m.
8:30 a.m.–7:00 p.m.
Poster Session
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.
Exhibit Hall
11:00 a.m.–3:00 p.m.
8:30 a.m.–5:30 p.m.
Poster Session
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

SIF 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 SIF Redefining Parkinson's Disease: Challenging the Past and Preparing For the Future 19

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

Subspecialty in Focus—Headache

C59 SIF Interventional Treatment of Migraine and Other Headache Disorders 45

I3 SIF New and Emerging Therapeutic Options in Migraine and Other Headache Disorders 58

Subspecialty in Focus—Cerebrovascular Disease

C95 SIF Stroke Team Action Therapy (STAT): Current State of the Art 66

I6 SIF Future Directions and Challenges in Stroke Team Action Therapy (STAT). 82

Subspecialty in Focus—Sleep

C127 SIF Sleep Across the Lifecycle: What Neurologists Need to Know. 91

I9 SIF Sleep, Clocks, and Alzheimer's Disease 104

Subspecialty in Focus—Neuro Critical Care

C166 SIF Acute Neurological Emergencies 111

I11 SIF Neurocritical Care and Neuroscience Crossroads: From Bench To Bedside 126

Subspecialty in Focus—Alzheimer's Disease

C167 SIF Current State of Alzheimer's Disease Imaging Biomarkers and the Road Ahead 111

I12 SIF Amyloid and Beyond: From Bench to Bedside . . 128

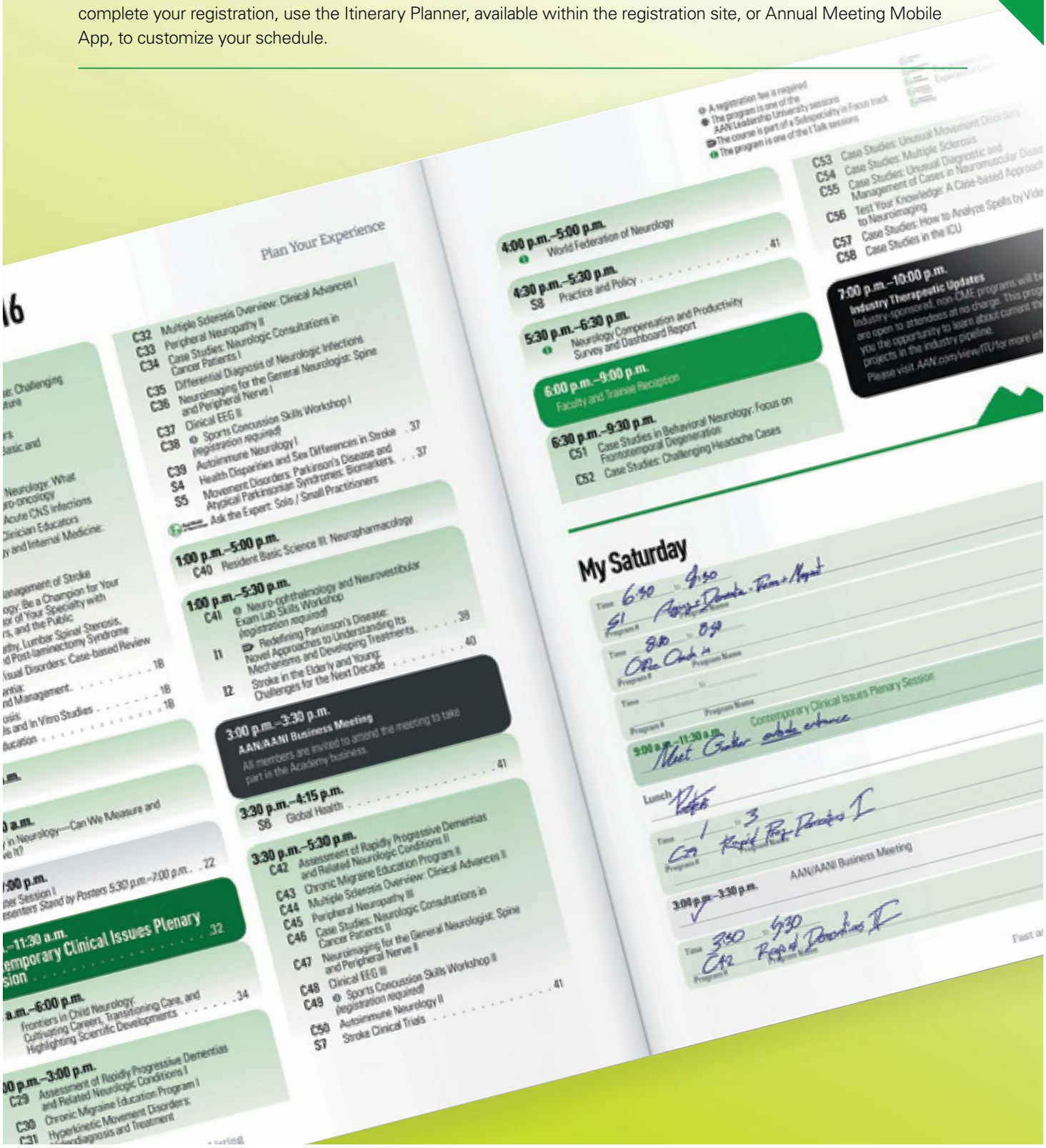
Subspecialty in Focus—Neuro-ophthalmology/Neuro-otology

C202 SIF The Eyes and The Ears of Traumatic Brain Injury . 133

I13 SIF 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.



Friday, April 15

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

Ex Health & Wellness 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

Ex Real World of Neurology 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
SIP The course is part of a Subspecialty in Focus track
1 The program is one of the I Talk sessions

Ex Learning Lab
Ex Excitement of Discovery
Ex Health & Wellness
Ex Navigating Your Career
Ex Real World of Neurology
The program is part of the Experiential Learning Area sessions

My Friday

Fri. April 15

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

_____

AMERICAN BRAIN FOUNDATION®

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.

- $ A registration fee is required
- The program is one of the AAN Leadership University sessions
- SIF The course is part of a Subspecialty in Focus track
- I The program is one of the I Talk sessions
- Ex Learning Lab / Ex Excitement of Discovery / Ex Health & Wellness / Ex Navigating Your Career: #Allowed / Ex Real 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 $ **Maintenance of Certification Exam Preparation Course** *(registration required)*
Director: *Ericka P. Simpson, MD, Houston, TX*

C4 $ **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 $ **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.

I **How to Avoid Death by PowerPoint**
Director: *Joseph E. Safdieh, MD, FAAN, New York, NY*

Ex 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.

Ex Real 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 $ **Neurophysiologic Intraoperative Monitoring Skills Workshop** *(registration required)*
Director: *Gloria Galloway, MD, FAAN, Columbus, OH*

3:30 p.m.–4:30 p.m.

I **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.

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

6:30 a.m.–8:30 a.m.

- C15 SIP 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.

Ex Health & Wellness Yoga

8:00 a.m.–9:00 a.m.

I 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

Ex Real World of Neurology 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 SIP 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
SIP The course is part of a Subspecialty in Focus track
I The program is one of the I Talk sessions
Ex The program is part of the Experiential Learning Area sessions

4:00 p.m.–5:00 p.m.
I 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.
I 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.

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

19
29

Saturday, April 16

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 (BIIB037) in Patients with Early Alzheimer's Disease: Phase 3 Study Design —*Vissia Viglietta, John O'Gorman, Leslie Williams, Ying Tian, Alfred Sandrock, Rachelle Doody, Stephen Salloway, Frederik Barkhof, Bruno Vellas, 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 Boeve*

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, Serggio 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
Oligodendrogliopathy in Multiple Sclerosis: Relation to Low Glycolytic Metabolic Rate of Oligodendrocytes —*Qiao Ling Cui, Malena Rone, Damla Khan, Melissa Bedard, Guillermina Almazan, Samuel Ludwin, Timophy 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 Riethmueller, 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 Lefeuvre, Steven Jacobson, Afonso Silva, Daniel Reich*

7:45 a.m. S2.006
Modeling Leptomeningeal 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-Jordon 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 SIF **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.

Ex Health & Wellness **Yoga**
Instructor: *Sarah Bird Nelson, JD, RYT 200, Minneapolis, MN*

8:00 a.m.–9:00 a.m.

I **Quality in Neurology—Can We Measure and Improve It?**
Director: *Anup D. Patel, MD, Columbus, OH*



AMERICAN ACADEMY OF NEUROLOGY®

NeuroSAE®

Annual Meeting Edition

Planning for the 2016 AAN Annual Meeting—and earning 10 FREE self-assessment CME credits—has never been easier:

1. Take the online pre-test by April 14, 2016. Upon completion, you'll receive course suggestions to help you build your Annual Meeting itinerary.
2. Register and attend the 2016 Annual Meeting in Vancouver, BC, Canada, April 15–21.
3. After attending the meeting, gauge your improvement by completing the online post-test. Earn a score of 70% or higher and receive a detailed score report and 10 FREE self-assessment CME credits.

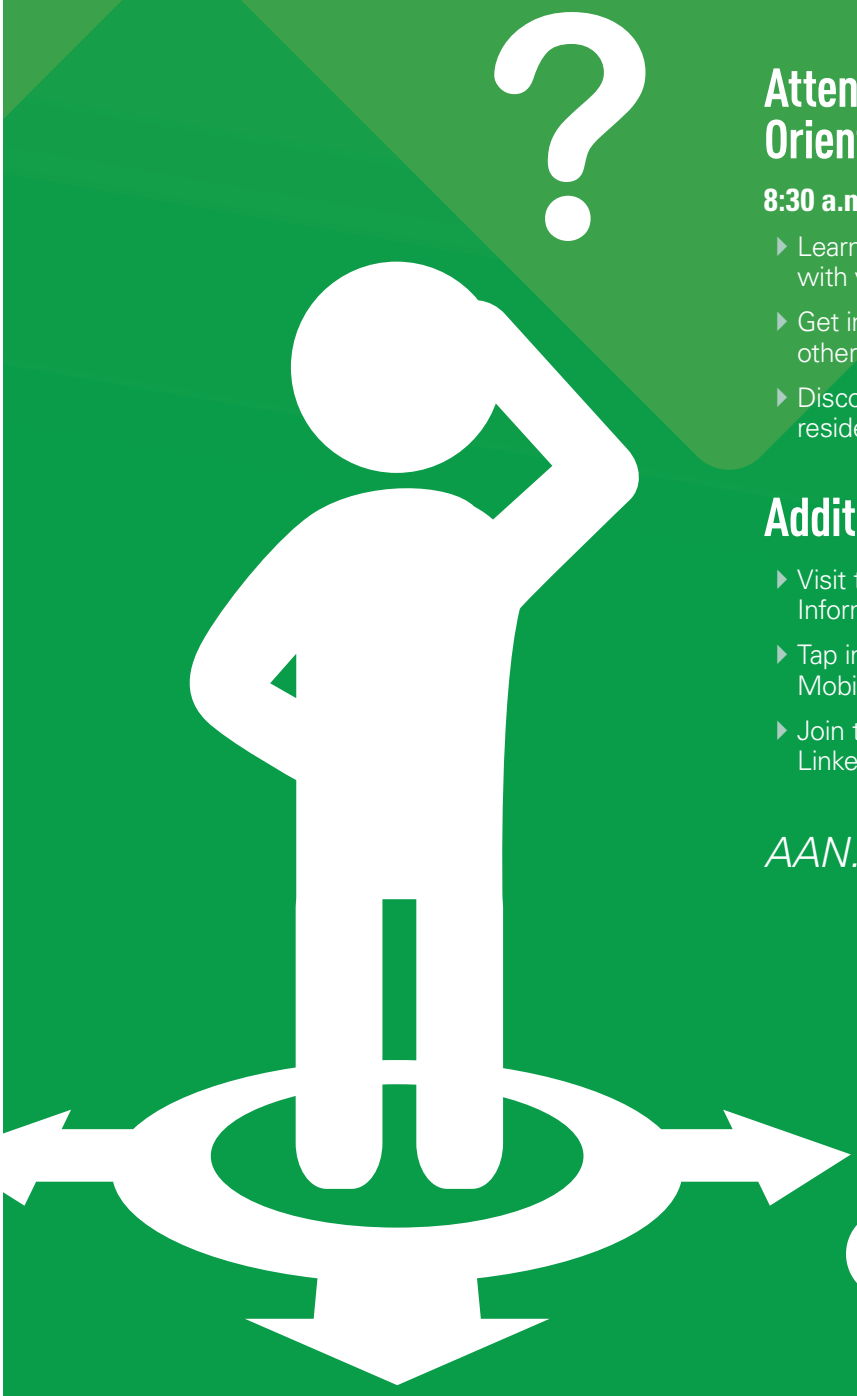
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AAN.com/view/NeuroSAEAM

AAN 2016 Annual Meeting

Are You a First-Time Attendee?

Get the Most Out of Your First Annual Meeting Experience



Attend One of the Annual Meeting Orientation Sessions

8:30 a.m.–8:50 a.m. daily in the Learning Lab

- Learn about programs and events included with your badge
- Get information about social events and other networking opportunities
- Discover valuable resources for medical students, residents, and fellows

Additional Resources

- 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

AAN 2016 Annual Meeting

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.

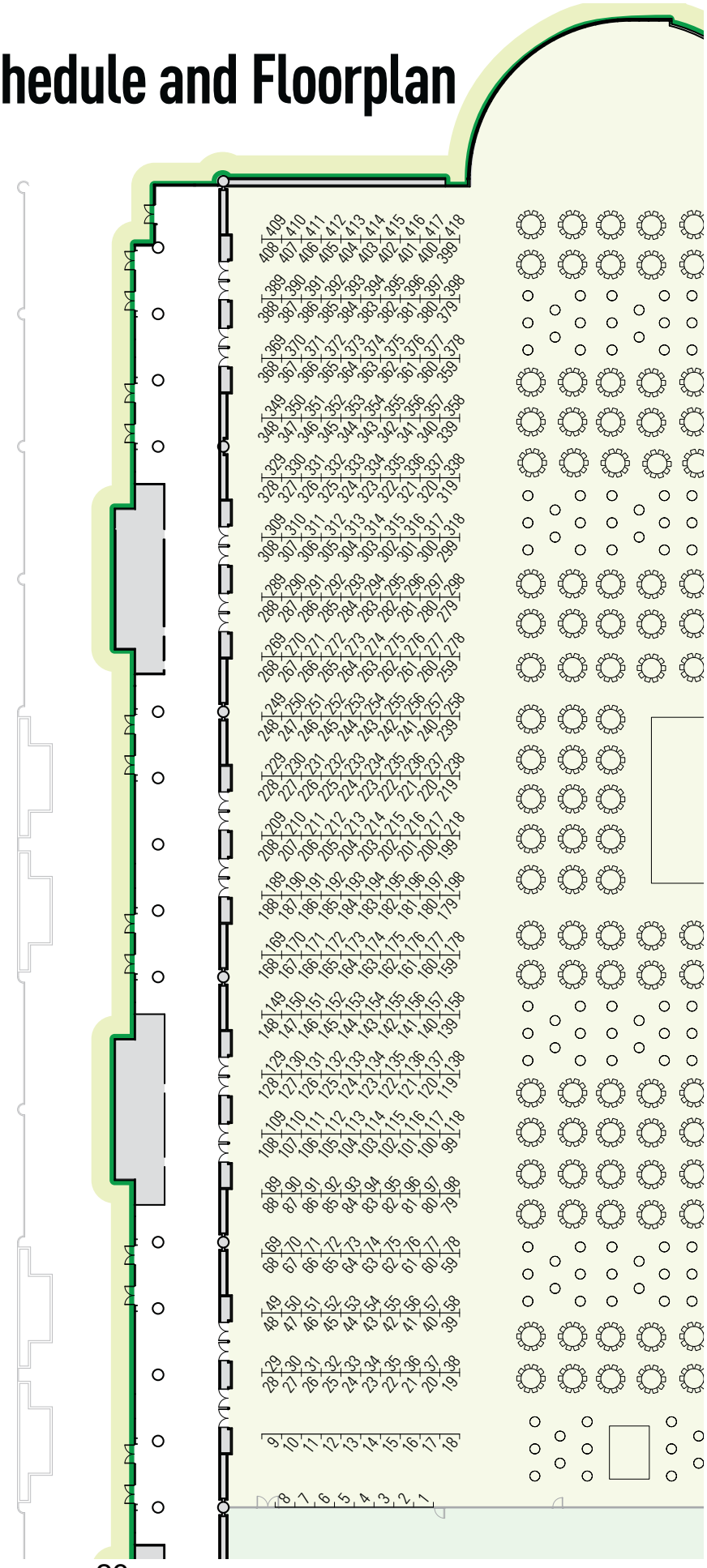
Sunday, April 17
8:30 a.m.–5:30 p.m.
Poster Session II
Presenters Stand by Posters 4:00 p.m.–5:30 p.m.

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.



Saturday, April 16

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 Wylie, 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, Etty 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 Depsoition 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 Poologaindran, 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 Ellias, Samuel Frank, Anna Hohler*

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 Nevrly, 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 Trosch, Peter Misra, Pascal Maisonobe, 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 Trosch, 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 Trosch, Peter Misra, Savary Om, Pascal Maisonobe*

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 Tomić, 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 Stamler*

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

- $ A registration fee is required
- The program is one of the AAN Leadership University sessions
- SIP The course is part of a Subspecialty in Focus track
- The program is one of the I Talk sessions
- Ex Learning Lab / Ex Excitement of Discovery / Ex Health & Wellness / Ex Navigating Your Career: At School / Ex Real World of Neurology — The program is part of the Experiential Learning Area sessions

Saturday, April 16

Poster Session 8:30 a.m.–7:00 p.m.

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 Huntington 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 Stamler, 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 Piccinin, 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 Wheless*

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, Weiyi 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 Wheless*

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 Horovitz*

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 —*Omar Ahmad, Carine Maurer, Monica Anne Faye Villegas, Codrin Lungu, Mark Hallett*

P1.073 A Survey of Functional Movement Disorders at the National Institutes of Health —*Omar Ahmad, Carine Maurer, Monica Anne Faye 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 Shiau 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 Petrilla, 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, Phillippe 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 Faught, 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 Faught, 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, Jenifer 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 Takanashi, 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 Carbunaru, 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 —*Julieta 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 Magahlaes, 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 Looti, 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 Shoamanesh*

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, Eibhlin 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 Lavrnic, 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 Luebbe, 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, Changgeng 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 Govaarts, Emma Beeldman, Michael Kampelmacher, Marie-Jose van Tol, Leonard Van den Berg, Anneke Van Der Kooi, 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 Gastrostomyinpatients 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,*

Saturday, April 16

Poster Session 8:30 a.m.–7:00 p.m.

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 Aperghis, 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 Altiokka Uzun, Esme Ekizoglu, Sema Icoz, Erdi Sahin, Cem Ismail Kucukali, Betul 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*

P1.161 Pharmacogenomics in Headache Practice —*Martin Bringham, Monika Kumar, Suresh Kumar*

Headache: Other

P1.162 Headache Education in Adult Neurology Residency: A Survey of Program Directors and Chief Residents —*Zubair Ahmed, Larry Faulkner*

P1.163 Transcranial Doppler Bubble Detection of Paradoxical Emboli and the Presence of Brain Atrophy in People with Migraine: A Cause for Alarm? —*Patricia Dunham, Karl Wissemann, Danielle Salomone, Marijean Buhse, Lori Fafard, Myassar Zarif, Mark Gudesblatt*

P1.164 Understanding Patient Adherence to Prophylactic Migraine Medications —*Magdalena Vanya, Pooja Desai, Sarah Clifford, Kellee Howard, Trisha Corey Lisle, Sandhya Sapra*

P1.165 An Interactive Simulation Based Curriculum for the Use of Peripheral Nerve Blocks in Headache Management —*Fermina Pirmohamed, Scott Vota*

P1.166 Idiopathic Stabbing Headache Can Occur in Children with Chronic Daily Headache: Frequency, Characteristics and Treatment —*Leah Grengs, Kenneth Mack*

P1.167 A Comparison of the Chronic Migraine Epidemiology & Outcomes (CaMEO) Study and American Migraine Prevalence and Prevention (AMPP) Study: Demographics and Headache-Related Disability —*Dawn Buse, Richard Lipton, Aubrey Manack Adams, Kristina Fanning, Michael Reed*

P1.168 Impact of Headache in the Staff of the Kaia's Military Field Hospital, Studied 18-24 Months After Their Return from External Operations in Conflict Zones in Afghanistan —*Laurent Guilloton, Pierre Antoine Blanc, Ondine Bruneau, Marion Trousselard, Thierry De Greslan, Alain Drouet, Fabien Zagnoli*

P1.169 Prevalence of Primary Headache Disorders in Fayoum Governorate, Egypt —*Hatem Shehata, Nevin Shalaby, Naglaa El-Sherbiny, Mohamed Masoud*

P1.170 Potential Risk Factors for Migraine: Data from a Population-based Incidence Study —*Betül Baykan, Mustafa Ertas, Esme Ekizoglu, Necdet Karli, Derya Uludüz, Uğur Uygunoğlu, Elif Kocasoy Orhan, Sabahattin Saip, Mehmet Zarifoğlu, Aksel Siva*

P1.171 Cerebrospinal Fluid Hypotension Headache: Report of a Series of 48 Cases —*Patricio Millar Vernetti, Jose Pastor, Francisco Varela, Lucas Bonamico*

P1.172 Family Impact of Migraine: Development of the Impact of Migraine on Partners and Children Scale (IMPACS) —*Richard Lipton, Dawn Buse, Aubrey Manack Adams, Sepideh Varon, Kristina Fanning, Michael Reed*

P1.173 Emotional and Behavioral Influences of Headache in Pediatric Rheumatic Diseases —*Mustafa Tavsanli, Derya Uluduz, Ezgi Sen, Erdal Yanardoner, Ozgur Kasapcopur, Melis Sohtaoglu, Ugur Uygunoglu, Burak Dogangun*

Cerebrovascular Disease: Risk Factors and Prevention

P1.174 Aggressive Medical Management for ICAD: A Comparison to the SAMMPRIS Trial —*Rajbeer Sangha, Sameer Ansari, Richard Bernstein, Carlos Corado, Yvonne Curran, Ilana Ruff, Shyam Prabhakaran*

P1.175 Early OralAnticoagulation After Acute Ischemic Stroke in Patients with AtrialFibrillation —*Andrew Buletko, Rejo Cherian, Ken Uchino, Andrew Russman*

P1.176 Is There a "Smoker's Paradox" in Acute Reperfusion Therapies? —*Kanika Arora, Reza Sharipour, John Donnelly, Harn Shiue, Alissa Gadpaille, April Sisson, Michael Lyerly, Toby Gropen*

P1.177 Increasing Skeletal Muscle Mass Could Prevent Stroke —*Yang Ki Minn, Seung Han Suk, Im Suk Koh, Seung-Hee Hwang, Jae Hyeon Park, Jun Hong Lee, Hong Song*

P1.178 Mobile Applications for Stroke Prevention: A Survey of Primary Care Physicians' Perspectives: The DOC-MAPPS Study —*Douglas Halket, Dimitre Stefanov, Jonathan Singer, Clotilde Balucani, Steven Levine*

P1.179 Prevalence of Obstructive Sleep Apnea-Hypopnea Syndrome in Patients with Acute Cerebral Infarction —*Julieta Quiroga, Cecilia Berrozpe, Anibal Chertcoff, Fatima Pantiu, Sol Pacha, Luciana Leon Cejas, Martinez Oscar, Pablo Bonardo, Marcela Uribe Roca, Manuel Fernandez Pardal, Ricardo Reisin, Stella Valiensi*

P1.180 Why Delay the Control of Modifiable Vascular Risk Factors (MVRF) Until the Occurrence of an Ischemic Stroke (iStroke)? —*Santiago Pagano Ajolfi, Pablo Sanz, Alejandra Alfonso, María Seijas, Marisa Arrébola, Rolando Giannaula*

P1.181 Photoplythesmographic Signal to Screen Sleep-Disordered Breathing in Acute Stroke Patients: Feasibility of a Prospective Clinical Pathway —*Krista Lim-Hing, Richard Byrne, Sridhara Yaddanapudi, Carissa Pineda, Sunil Sharma*

P1.182 Natural History of Extracranial Carotid Stenosis in Asian Stroke Patients-A Retrospective Study —*Bharatendu Chandra, Jia Wei Woo, Ren Wei Woo, Ren Jie Liu, Amit Kulkarni, Vijay Sharma*

Ischemic Stroke Outcomes

P1.183 Long Term Impact of ACGME Duty Hour Restrictions on Mortality Rate for Acute Ischemic Stroke —*Katherine Berry, Ali Seifi*

P1.184 Antecedent Aspirin Use Is Associated with Less Severe Symptoms on Admission for Ischemic Stroke —*Sarah Nelson, Lisa Cloonan, Allison Kanakis, Kaitlin Fitzpatrick, Kelsey Shideler, Karen Furie, Natalia Rost*

P1.185 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*

P1.186 Aphasia Is an Independent Risk Factor Affecting Acute Stroke Outcomes —*Ronald Lazar, Amelia Boehme, Randolph Marshall, Sheryl Martin-Schild*

P1.187 Association of Hemoglobin A1c and Baseline Ischemic Stroke Severity: A Population-Based Study —*Yunpeng Yang, Jane Khoury, Kathleen Alwell, Charles Moomaw, Samrat Yeramaneni, Daniel Woo, Matthew Flaherty, Opeolu Adeoye, Simona Ferioli, Felipe De Los Rios La Rosa, Brett Kissela, Dawn Kleindorfer*

P1.188 HIAT2 Predicts Poor Functional Outcome, Palliative Care Involvement, and In-hospital Mortality in TPA Treated and Untreated Ischemic Stroke Patients —*Manmeet Kaur, Amelia Boehme, Karen Albright, April Sisson, Michael Lyerly, Toby Gropen*

P1.189 Provoked Re-Emergence of Ischemic Cerebral Events (PRICE) Syndrome: Getting Concrete About a Common Clinical Belief —*Joel Shenker, Venkataditya Dugyala*

P1.190 Detecting Cognitive Impairment in Acute Stroke Using the Oxford Cognitive Screen: Characteristics of Left and Right Hemisphere Strokes, with More Severe Impairment in AF Strokes —*David Collas*

P1.191 Glycemic Variability and Functional Outcome After Acute Ischemic Stroke —*Carlos Camara-Lemarroy, Emmanuel González-Moreno, Eduardo Garza-Villarreal, Alan Treviño-Herrera, RENE Tena-Montiel, Walter Muruet, Juan Gongora Rivera*

P1.192 Admission Volume Depletion is Associated with Poor Outcome in Acute Ischemic Stroke —*Harn Shiue, Karen Albright, Kara Sands, April Sisson, Reza Bavarsad Shahripour, Michael Lyerly, Kanika Arora, Alissa Gadpaille, Ayaz Khawaja, Benjamin Jones, Toby Gropen*

Acute Endovascular Therapy: Outcomes and Safety

P1.193 Outcome of Stent-Retriever Mechanical Thrombectomy in Nonagenarians: How Well Are We Pushing the Limits? —*Kevin Ramdas, Priyank Khandelwal, Luis Guada, Pankaj Sharma, Amer Malik, Dileep Yavagal*

P1.194 Mechanical Thrombectomy for Distal Occlusions Only Makes Sense for Left-Sided Ischemic Strokes —*Daniel Korya, Siddhart Mehta, Jaskiran Brar, Harina Chahal, Mena Samaan, Yong-Bum Song, Briana DeCarvalho, Jawad Kirmani*

P1.195 Outcome Predictors After Successful Intra-Arterial Therapy for Acute Ischemic Stroke —*Mazen Noufal, Jigar Mankad, Amrita Amanda Lakraj, John-Andrew Cox, David Shirilla, Ahsan Sattar, Wled Wazni, Yamin Sallowm, John Lynch, Osama Zaidat*

P1.196 Safety of Mechanical Thrombectomy for Acute Ischemic Stroke in Patients on Novel Oral Anticoagulants —*Pankaj Sharma, Kunakorn Atchaneeyasakul, Habibullah Ziayee, Amer Malik, Luis Guada, Priyank Khandelwal, Kevin Ramdas, Dileep Yavagal*

P1.197 Single Centre Experience of Endovascular Intervention in Extra and Intracranial Vertebro-Basilar Stenosis at a Tertiary Care Centre —*Gurmeen Kaur, Sameer Sharma, Julius Latorre*

P1.198 Prospective Late Endovascular Treatment in Acute Ischemic Stroke Evaluating Non-Contrast Head CT Versus CT Perfusion (PLEASE No CTP) —*Ameer Hassan, Saqib Chaudhry, Christina Christina Sanchez, Mohammad Rauf Afzal, Wondwossen Tekle, Olive Sanchez, Erlinda Abantao, Ahmed Riaz, Adnan Qureshi*

P1.199 Endovascular Treatment Rates Among Acute Ischemic Stroke Patients Admitted to Hospitals on Weekends As Compared with Weekdays —*Fadar Otite, Priyank Khandelwal, Pokomeng See, Melissa Fellman, Anita Tipirneni, Amer Malik, Mohammad Aziz-Sultan, Seemant Chaturvedi, Dileep Yavagal*

P1.200 Reliability of Detection of Intracranial Hemorrhage After Endovascular Intervention for Acute Stroke —*Laura Stein, Natalie Wilson, J Mocco, Johanna Fifi, Bradley Delman, Stanley Tuhrim*

P1.201 When Non-Revascularized Transfer Patients Come A-Knocking at a Stroke Center —*Kara Sands, Karen Albright, John Donnelly, Benjamin Jones, Manmeet Kaur, April Sisson, Harn Shiue, Michael Lyerly, Toby Gropen*

P1.202 Faster Door to Needle Time Leads to Better Outcomes- Experience at a Tertiary Care Center in Qatar —*faisal Ibrahim, Naveed Akhtar, Dirk Deleu, Saadat Kamran, Atlantic D'Souza, Ashfaq Shuaib*

Clinical ICH and ICH Outcomes

P1.203 Predictors and Associated Outcomes of Subarachnoid Hemorrhage Following Endovascular Treatment for Acute Ischemic Stroke —*Muhammad Saleem, Alexandros Georgiadis, Adnan Qureshi*

P1.204 On Admission Lymphopenia in ICH Patients Is Associated with Increased Mortality and Poor Functional Outcome —*Antje Giede-Jeppe, Tobias Bobinger, Stefan Gerner, Hannes Luecking, Stephan Kloska, Joji Kuramatsu, Stefan Schwab, Hagen Huttner*

P1.205 Predictors of Functional Outcomes and Use of Antiepileptic Drugs in Patients with Primary Acute Intracerebral Hemorrhage —*Breyanna Grays, Meagan Wettengel, Bichum Ouyang, Thomas Bleck, Adriana Bermeo Ovalle, Shawna Cutting*

P1.206 Evaluation of the Glasgow Coma Score As a Surrogate to the Intracerebral Haemorrhage Score in Predicting Outcome of Intracerabral Haemorrhage in Nigerians —*Olubunmi Omojowolo, Mustapha Danesi, Njide Okubadejo, Francis Ojini, Oluwadamilola Ojo, Osigwe Agabi*

P1.207 The Relationship of Admission Hyperglycemia to Severity and Outcome in Intracerebral Hemorrhage in Nigeria —*Osigwe Agabi, Mustapha Danesi, Njideka Okubadejo, Omolara Ojo, Olubunmi Omojowolo*

P1.208 Comparison of Hematoma Volume Estimates in Intracerebral Hemorrhage —*Roderick Elias, Grayson Baird, Joshua Rodriguez-Srednicki, Sandra Yan, Shadi Yaghi, Brian Silver, Scott Collins, Muhib Khan*

P1.209 Atypical Brainstem Hemorrhage Clinical Presentation and Managed by Outpatient Clinic Follow-Up —*Nawaz Hack*

P1.210 Intracranial Hemorrhage and Cerebral Infarction: Impact of Teaching Institutions on NeuroSurgonomics —*Ali Seifi, Ross-Jordon Elliott*

P1.211 Symptomatic Cerebral Ischemia Associated with Intensive Blood Pressure Lowering Following Acute Intracerebral Hemorrhage —*Natalie Organek, Megan Donohue, Lauren Gotterer, Ken Uchino*

Re-admission and Stroke Outcomes

P1.212 Palliative Care Consultation Did Not Reduce Length of Stay in a Comprehensive Stroke Center —*Steven Tversky, Derek Cheng, Sidrah Mahmud, Evan Schloss, Paul Wright*

P1.213 Analysis of Risk Factors for In-Hospital Stroke Mortality and Stroke Readmission in Hospital Risoleta Tolentino Neves (HRTN) - Belo Horizonte, Brazil —*Fidel Meira, Diego Dorim, Ana Cláudia Andrade, Thiago Santos, Daiane Magalhães, Laura Ladeia, Rafael Tavares, Rodrigo Xavier, Marco Tanure, Romeu Santanna*

P1.214 Reduction in 30 Day Readmission of Stroke Patients from Acute Care Centers with the Involvement of Medical Hospitalists —*Amy Hua, Tanya Kapoor, Margarita Mikhaylova, Robert Grabher, Paul Wright*

P1.215 Thirty-Day Readmission Is Higher in Patients with Brainstem Vs. Non-Brainstem Lacunar Infarctions —*Saba Rammal, Alaa Hijji, Mohammed Almekhlafi*

P1.216 A Retrospective Study of Stroke in Women Compared to Men in Outcome and Readmission Causes —*Dareen AlShaer, Abeer Khoja, Saba Rammal, Mohammed Almekhlafi*

P1.217 Women Had Worse Stroke Outcome —*Maria Zurru, Pedro Colla Machado, Claudia Alonzo, Laura Brescacin, Ariel Luzzi, Santiago Pigretti, Natalia Balian, Gabriel Waisman, Edgardo Cristiano*

P1.218 Clinical Stroke Outcomes Are Worse for Patients with Greater Quantities of Cerebral White Matter Hyperintensity, and Differ by Stroke Subtype —*Wi-Sun Ryu, Min Oh Lee*

P1.219 Early Decompressive Hemicraniectomy Optimizes Highest Rehabilitation Potential in Patients with Acute Malignant Middle Cerebral Artery (MCA) Syndromes —*Lila Sheikhi, Dhimant Dani*

P1.220 Physical Consequences of Depression Predominate in the Early Post Stroke Period —*Pratik Bhattacharya, Advait Mahulikar, Phillip Kucab, Ramesh Madhavan*

Cardiac Mechanisms and Complications of Stroke

P1.221 Vascular Territories of Ischemic Stroke in Associated Takotsubo Cardiomyopathy —*Adil Zia, Scott Silliman*

P1.222 Epidemiology and Outcomes of In-Hospital Cardiac Arrest After Stroke in the United States —*Oladimeji Akinboro, Odunayo Olorunfemi, Stephen Jesmajian, Bruce Ovbiagele*

P1.223 Comparison of Ventricular Assist Device (VAD)-Related Stroke to the General Stroke Population: Associations with In-Hospital Mortality —*Steven Peters, Tarvinder Singh, David Tirschwell*

P1.224 Site of Intracerebral Hemorrhage (ICH) Is a Predictor of Cardiovascular Autonomic Dysfunction in Patients with Acute Primary ICH —*Leenu Gupta, Aman Pannu, Jeyaraj Pandian*

P1.225 Cardiac MRI Has Limited Additional Yield in Cryptogenic Stroke Evaluation —*Ava Liberman, Rizwan Kalani, Jessie Aw-Zoretic, Matthew Sondag, Vistasp Daruwalla, Nicholas Furiasse, James Carr, Jeremy Collins, Shyam Prabhakaran*

P1.226 Association Between Anthropometric Measurements and Stroke in Patients with Low CHADS2 Score —*Abdalla Hassan, Dana Villines*

P1.227 Factors Influencing Oral Anticoagulant Prescribing Practices for Atrial Fibrillation Among Cardiologists, Internists, and Vascular Neurologists —*Lester Leung, Mark Mcallister, Magdy Selim, Marc Fisher*

P1.228 Mismanagement of Atrial Fibrillation (AF) As a Modifiable Risk Factor (MRF) for Ischemic Stroke (iStroke) —*Rolando Giannaula, Pablo Sanz, María Huerta, Santiago Pagano Ajolfi, Ana Malmierca, Alejandra Alfonso*

P1.229 Diagnostic and Management Challenges in Patients with Left Atrial Myxoma —*Karen Orjuela, Marisa McGinley, Rochelle Sweis, Vikram Prabhu, Mamdouh Bakhos, Jose Biller*

Carotid Disease

P1.230 Systematic Review of Radiographic and Symptomatic Brain Infarcts in Carotid Artery Interventions and Cerebral Angiography —*Sung Cho, Abhishek Deshpande, Vinay Pasupuleti, Adrian Diaz, Ken Uchino*

P1.231 Achieving LDL <70 Mg/dL May Be Associated with Reduced Progression of Carotid Artery Atherosclerosis in Ischemic Stroke Patients —*Qian Zhang, Shimeng Liu, Yang Hua, Haiqing Song, Xunming Ji, Yi Ren, Yang Song, Ran Liu, Wayne Feng, Bruce Ovbiagele, Jianping Ding*

P1.232 Positive Association of ADAMTS1 Gene Polymorphism with Vulnerable Carotid Plaque Formation in a Chinese Han Population —*Chen Ling Lv, Xiao Ping Jin, Xin Wei He, Wei Qing Chen, Min Zhu, Zhou Zheng, Cai Li, Peng Liu*

P1.233 Plaque Inflammation in Recently Symptomatic Carotid Stenosis Predicts Recurrent Cerebral Ischemia —*Jia Wei Woo, Chandra Bharatendu, Arvind Sinha, Eric Ting, Prakash Paliwal, Amit Kulkarni, Hock Luen Teoh, Bernard Chan, Chiew Hong, Chee Young Heng, Jin Tao Chen, Zhengdao Du, Lily Wong, Seow Asp, Vijay Sharma*

P1.234 Frequency of Microemboli in Symptomatic Carotid Stenosis Compared to Carotid Occlusion —*Ali Zandieh, Ava Liberman, Caitlin Loomis, Jonathan Raser-Schramm, Christina Wilson, Jose Torres, Koto Ishida, Swaroop Pawar, Nichole Gallatti, Melissa Yates, Rebecca Davis, Brett Cucchiara*

Saturday, April 16

Poster Session 8:30 a.m.–7:00 p.m.

P1.235 LDL and Systolic Blood Pressure Are Associated with Coated-Platelet Levels in Patients with Asymptomatic Carotid Atherosclerosis—*Angelia Kirkpatrick, Nhan Nguyen, Andrea Vincent, Leslie Guthery, Eleanor Mathews, George Malatinszky, Fabiola Donna-Ferreira, George Dale, Calin Prodan*

P1.236 Degree of Stenosis by Angiography Does Not Influence Risk of Endarterectomy or Stenting in Patients with Severe Asymptomatic Carotid Stenosis—*Thomas Brott, Brajesh Lal, Jenifer Voeks, Donald Heck, William Brooks, Hormozd Bozorgchami, Gary Roubin*

P1.237 Duration of Asymptomatic Status and Outcomes Following Endarterectomy and Stenting in the Carotid Revascularization Endarterectomy Versus Stenting Trial (CREST)—*Thomas Brott, Jenifer Voeks, Gary Roubin, Wayne Clark, Virginia Howard, Michael Jones, Wesley Moore*

P1.238 Carotid Endarterectomy in Patients with Thrombocytopenia; Analysis of National Surgical Quality Improvement Program (NSQIP) Registry—*Aiman Zafar, Vishal Jani, Muhammad Shah Miran, Mohammad Afzal, Adnan Qureshi*

P1.239 American Indian Participation in Clinical Research: A Cultural Perspective Survey from a CREST-2 Site—*Alicia Bennett, Kinga Aitken, Mary Longbottom, Robert Brown, Adam De Havenon, Jennifer Majersik, Delilah Robb*

Cerebral Venous Sinus Thrombosis

P1.240 WITHDRAWN

P1.241 Extreme Calisthenics: The Hard Way to Provoke Cerebral Venous Sinus Thrombosis—*Kunal Desai, Lenore Ocava*

P1.242 Cerebral Venous Thrombosis: Epidemiology, Clinical and Diagnostic. 10 Years of Experience in the South Central Hospital of High Specialty from PEMEX in Mexico—*Maria Elena Cordoba Mosqueda, Clotilde Garcia Benitez, Juan de Dios Del Castillo Calcaneo, Rodrigo Efrain Hernandez, Isabel Alicia Loya Aguilar*

P1.243 Predictors and Prognoses of Hospitalization for Cerebral Venous Sinus Thrombosis in the United States—*Chirantan Banerjee, Oladimeji Akinboro, Odunayo Olorunfemi, Stephen Jesmaijan, Bruce Ovbiagele*

P1.244 Effect of Hyperosmolar Therapy on Cerebrovascular Circulation and Dynamics in Patient with Cerebral Venous Sinus Thrombosis—*Ravinder Singh, Girish Kulkarni, Jitender Saini, Shriram Varadharajan*

P1.245 Transverse Sinus Hypoplasia As a Predisposing Factor for Cerebral Venous Thrombosis—*Monica Chavarria, Miguel Barboza, Elizabeth Varela, Hernan M. Patiño-Hernandez, Mayra Becerril, Antonio Arauz*

P1.246 Complete Bilateral Ophthalmoplegia in the Setting of Elevated Intracranial Pressure That Improved with Transverse Venous Sinus Stenting—*Dinesh Jillella, Damian Berezovsky, Muhammad-Atif Zubari, Timothy Winter*

P1.247 Hypereosinophilia-Induced Encephalopathy with Cerebral Thrombosis and Hemorrhage: A Case Report and Review of Literature—*Hussam Shaker, Howard Feit, Vivek Rai*

P1.248 Postraumatic Cerebral Venous Thrombosis in Children. Analysis of 57 Reported Cases—*Fernando Barinagarrementeria, Omar Gonzalez, Gonzalez Ulises*

Aneurysms and Subarachnoid Hemorrhage

P1.249 Treatment Patterns and Outcomes for Ruptured and Unruptured Intracranial Aneurysms in Patients with Polycystic Kidney Disease—*Fahad Saeed, Ahmed Riaz, Mohammad Afzal, Saqib Chaudhry, Adnan Qureshi*

P1.250 Phase I Experience of Safety of Eptifibatide in Select Patients with Elective Cerebral Aneurysm Embolization—*Joshua Daniel, Jaskiran Brar, Mohammad Moussavi, Siddhart Mehta, Daniel Korya, Harina Chahal, Mena Samaan, Yong-Bum Song, Mohammad Hussain, Jawad Kirmani*

P1.251 Unruptured Intracranial Aneurysms: Results of a Multidisciplinary Therapeutic Approach—*Mariana Santos, Carla Reizinho, Miguel Casimiro, Gabriel Branco, José Cabral*

P1.252 Effectiveness of Intra-Arterial Vasodilator Therapy in Vasospasm Following Aneurysmal Subarachnoid Hemorrhage: A Meta-Analysis of Observational Studies—*Anand Venkatraman, Ayaz Khawaja, John Deveikis, Mark Harrigan, Gyanendra Kumar*

P1.253 Rates of In-Hospital Procedures and Outcomes Among Subarachnoid Hemorrhage Patients Admitted to Joint Commission Primary Stroke Centers in United States—*Ali Saeed, Saqib Chaudhry, Mohammad Afzal, Burhan Chaudhry, Ahmed Riaz, Gautam Sachdeva, Adnan Safdar, Abdulkader Yassin-Kassab, Adnan Qureshi*

P1.254 Radiographic Vasospasm and Functional Outcome in Subarachnoid Hemorrhage—*Kathryn Ess, Bichun Ouyang, Shawna Cutting*

P1.255 A Blood and CSF Biomarker of Aneurysmal Subarachnoid Hemorrhage Outcome and Progression—*Cui Yang, Michael Waters, Gerry Shaw*

P1.256 Atrial Fibrillation's Effect on the Rate of Ischemic Stroke, Death and Disability in Subarachnoid Hemorrhage—*Ameer Hassan, Mohammad Rauf Afzal, Saqib Chaudhry, Christina Sanchez, Christina Sanchez, Wondwossen Tekle, Adnan Qureshi, Ahmed Riaz*

P1.257 Novel Application of Reversible Parental Anti-platelets in Patients with Aneurysmal Subarachnoid Hemorrhage—*Siddhart Mehta, Mohammad Moussavi, Daniel Korya, Jaskiran Brar, Harina Chahal, Mena Samaan, Joshua Daniel, Yong-Bum Song, Jawad Kirmani*

P1.258 Mass Effect in the Setting of Symptomatic Basilar Artery Dolichoectasia: A Case Series & Systematic Review of the Literature Regarding Reported Mass Effects & The Available Treatment Options to Date—*Pirouz Piran, Alex Linn, Dennys Reyes, Subin Mathew, James Gleason, Tarannum Khan*

Cerebrovascular Disease: Health Disparities

P1.259 A Comparative Analysis of Stroke in Haitian and Non-Haitian Populations of South Florida—*Diana Barratt, Chistopher Brown, Juan Lopez, Benjamin Sirutis, Juan Lozano, Amy Starosciak*

P1.260 A Survey on Knowledge of Stroke Subtypes and Etiology at Moi Teaching and Referral Hospital—*Chen Lin, Mary Guhwe, Ravi Vakani, Peter Kussin, Carmelo Graffagnino*

P1.261 Gender Difference in Stroke: Are They Different in India?—*Paramdeep Kaur, Jeyaraj Pandian, Gagandeep Singh, Rajinder Bansal, Birinder Paul, Monika Singla, Shavinder Singh, Clarence Samuel*

P1.262 Cross Border Ambulance Operations in the El Paso-Ciudad Juarez Border Region. Is There a Need for a Protocol to Expedite Medical Transportation of Patients with Acute Neurological Illness?—*David Salgado Manzano, Ihtesham Qureshi, Rafael Aldrete, Oscar Jr. Salazar, Alberto Maud, Salvador Cruz-Flores, Gustavo Rodriguez*

P1.263 Alcoholism and In-Hospital Mortality Among Hemorrhagic Stroke Patients in Puerto Rico—*Liza Smirnoff, Andrew Moses, Juan Carlos Zevallos*

P1.264 Population-Based Study of Cost-Efficient Screening and Process Improvement Pathways for Improved Outcomes in Stroke Patients: An Option for Both Large and Small Stroke Centers—*John Cochran, Peter DeRosa, Lewis Eberly, Barbara Mancini, Maurie Whitson, Karen Kovach, Suzanne Feast, Cindy Manaoat*

P1.265 Female Stroke Patients Are Not Less Likely to Get Diagnostic Tests or Receive Thrombolytic Treatment Than Male Patients—*Lewis Eberly, Jalil Bentaleb, Larisa Golding, Robin Jackson, John Cochran*

P1.266 The Effect of Language Barriers on Door-to-Needle Times for IV Thrombolysis Administration in Acute Stroke Patients—*Shefali Dujari, Helena Lau, Judith Clark, Thanh Nguyen, Viken Babikian, Carlos Kase, Jose Romero, Hugo Javier Aparicio*

P1.267 Outcomes After Thrombolysis for Acute Ischemic Stroke for Adults 65 and Older: A Nationwide Inpatient Sample Analysis—*Sarah Song, Bichum Ouyang, Laurel Cherian, Shawna Cutting, Vivien Lee, James Conners*

P1.268 Outcomes of Intravenous Tissue Plasminogen Activator Use in Octogenarians with Ischemic Stroke—*Yesica Campos, Sebastian Sanchez, Maureen Deprince, Matthew Vibbert, Jacqueline Urtecho, M. Kamran Athar, Barak Bar, Diana Tzeng, Lori Sheehan, Carissa Pineda, Rodney Bell, Stavropoula Tjoumakaris, Pascal Jabbour, Robert Rosenwasser, Fred Rincon*

Global Health: Non-communicable Disease

P1.269 A Global Meta-Synthesis of Quality of Life in Epilepsy Inventory-31 (QOLIE-31) Scores—*Altaf Saadi, Bryan Patenaude, Emma Wolper, Farrah Mateen*

P1.270 Decreasing the Epilepsy Treatment Gap in the Developing World: The Epilepsy Medical Mission to the Amazon Rain Forest in Tena, Ecuador Report 2009-2015—*Patricio Espinosa, Dominic Fee, Karin Swartz, Esteban Ortiz-Prado, Holly Pobolish, Kevin Shapiro, Robert Baumann, Blanca Vasquez, Patricio Espinosa Del Pozo, Barbara Dworetzky*

P1.271 The Underreported Challenge of Disabling Psychogenic Neurological Disorders in Sub-Saharan Africa: a Case Series of Patients Presenting to a Regional Hospital in Tanzania—*Marissa Kellogg, William Howlett, Marieke C. J. Dekker*

P1.272 Epilepsy Prevalence, Treatment Gap, and Stigma in Western Kenya—*Dilraj Sokhi, Monica Diaz, Anthony Ngugi, Tom Solomon, Eric Fevre, Ana-Claire Meyer*

P1.273 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*

P1.274 Utility of the APGAR Score for Timing of Injury in Cerebral Palsy—*Claudia Gambrah-Sampaney, James Baier, Esha Khurana, Esther Baranov, Allison Johnson, Baphaleng Monokwane, David Bearden*

P1.275 Range of Structural Brain Abnormalities on MRI Among People with Epilepsy in Bhutan—*Veronica Bruno, Joshua Klein, Janice Wong, Damber Nirola, Sonam Deki, Lhab Tshering, Andrew Cole, Sarah Clark, Dechen Nidup, Farrah Mateen*

P1.276 Risk Factors for Malnutrition Among Children with Cerebral Palsy in Botswana—*Allison Johnson, Esther Baranov, James Baier, Baphaleng Monokwane, Esha Khurana, David Bearden*

P1.277 Can Enteral Levetiracetam Offer a New Treatment Option to Patients with Acute Provoked Seizures in Resource-Limited Settings? —*Gretchen Birbeck, Karl Seydel, Edmund Capperelli, Fraction Dzinjalamala, Susan Herman, Samah Abdel Baki, Macpherson Mallewa, Khalid Ibrahim, Francis Muwalo, Neema Toto, Douglas Postels, Joseph Gardiner, Terrie Taylor*

P1.278 The Montreal Cognitive Assessment May Not Be an Effective Screening Tool in Low Income Countries with Education Inequality —*Laura Santoso, Emily Erkkinen, Carlos Adon*

P1.279 Incidence, Short Term Outcome and Spatial Distribution of Stroke Patients in Ludhiana, India —*Jeyaraj Pandian, Gagandeep Singh, Paramdeep Kaur, Rajinder Bansal, Birinder Paul, Monika Singla, Shavinder Singh, Clarence Samuel, Pradeep Litoria*

Global Health: Infectious Disease, Capacity Building, and Other

P1.280 A Survey of Epilepsy Awareness and Care at Moi Teaching and Referral Hospital —*Ravi Vakani, Carmelo Graffagnino*

P1.281 Teaching a Neurology Continuing Medical Education Course to Ghanaian Physician Assistants —*Steve O'Donnell, David Renner, Peter Hannon*

P1.282 Non-Medical Explanations of Neurological Illnesses Among Healthcare Professionals —*Alaa Khayat, Haneen Milyani, Haythum Tayeb*

P1.283 Accounts from Liberia: Reports of Neurological Manifestations During the Acute Phase of Ebola Virus Disease —*Bridgette Billioux, Lauren Bowen, Bryan Smith, Sally Steinbach, Shila Azodi, Linda Xie, J. Oseefeos Bainda, J. Soka Moses, Avindra Nath*

P1.284 How Implementation Science Improves Access to Care —*Donna Bergen*

P1.285 Neurology Education in Africa: Survey of People in Training in 18 Countries —*Farrah Mateen, Osheik Seidi*

P1.286 Adding Malaria Insult to HIV Injury - A Neuroimaging Study —*Michael Potchen, Sam Kampondeni, Karl Seydel, Cowles Chilingulo, Peggy Auinger, Terrie Taylor, Gretchen Birbeck*

P1.287 Tuberculous Radiculomyelitis Due to Immune Reconstitution Inflammatory Syndrome in a HIV-Infected Individual —*Alexandra Lloyd-Smith, Maxime Cuylits, Jerome Chin*

P1.288 Rheumatic Valve Disease and Stroke. A Public Health Problem in Countries in Way of Develop —*Aurelio Mendez-Dominguez, Juan Arias-Fernandez, Miguel Aguirre-Delfin*

P1.289 Optimizing CSF Diagnostics of Tuberculous Meningitis in Zambia —*Shawn Love, Eugene Mubanga, Stembiso Munkondya, Masharip Atadzhanov, Barry Kosloff, Helen Ayles, Gretchen Birbeck, Igor Koralnik, Omar Siddiqi*

P1.290 Outcomes of New-Onset Seizure in HIV-Infected Zambian Adults —*Omar Siddiqi, Melissa Elafros, Brent Johnson, Jason Okulicz, Izukanji Sikazwe, Christopher Bositis, Michael Potchen, Igor Koralnik, William Theodore, Lisa Kalungwana, Gretchen Birbeck*

Herpes Virus Infections

P1.291 Predictors of Outcome in HSV Encephalitis —*Tarun Singh, Jennifer Fugate, Sara Hocker, Eelco Wijdicks, Allen Aksamit, Alejandro Rabinstein*

P1.292 Post-Herpes Simplex Virus (HSV) Autoimmune Encephalitis: A Case Series and Novel Immunological Findings —*Harry Alexopoulos, Evangelos Kouremenos, Sofia Akrivou, Dimitrios Naoumis, Maria Antonopoulou, Panagiotis Vlachoyiannopoulos, Marinos Dalakas*

P1.293 Epstein Barr Virus Encephalitis in Adults: A Case Series —*Deependra Khanal, Tarun Singh, Alejandro Rabinstein*

P1.294 Atypical EBV Encephalitis and Extensive Hemophagocytic Lymphohistiocytic Infiltrate in Nervous System: A Case Report —*Christopher DeGiorgio, Samra Vazirian, Shri Mishra, Sara Chalifoux, Ramin Ansari*

P1.295 Simultaneous Occurrence of Leptomeningitis, Basilar Meningitis and Cauda Equina Syndrome Due to Varicella Zoster Virus in an HIV Patient —*Nidhiben Anadani, Mohammad El-Ghanem, Rolla Nuoman, Andrea Hidalgo, Machteld Hillen*

P1.296 Hemidiaphragmatic Paralysis: A Rare Complication of VZV —*Jillianne Grayson, Supreet Kaur, Irene Malaty*

P1.297 Oculomotor Nerve Palsy After Herpes Zoster Opthalmicus: A Case Report and Review of Literature —*Hussam Shaker, Vivek Rai*

P1.298 HSV-2 Transverse Myelitis After Spinal Cord Contusion: A Case Report —*Muhammad Ahmed Chauhan, Vijeta Shukla, L Greenfield*

P1.299 Prolonged, Unilateral HSV-2 Encephalitis in an Immunocompetent Man —*Ilena George, Shivani Ghoshal, Duarte Machado*

CNS Tuberculosis and Cryptococcal Meningitis

P1.300 WITHDRAWN

P1.301 Longterm Magnetic Resonance Imaging Surveillance in Central Nervous System Tuberculosis in Patients with Anti-Tuberculosis Treatment Success —*Minerva Lopez Ruiz, Laura Escobedo-Jaimes, Carmen Amezcua-Herrera, Lidia Velazquez-Fonseca, Fabian Zea-Arevalo, Areana Rosas-Rendon, Amaia Iñarra-Hiriart, Juan Chávez-López, Ernestina Ramírez- Casanova, Juan Montes-Ramirez*

P1.302 Mean Platelet Volume in the Differential Diagnosis of Tuberculous and Bacterial Meningitis —*Carlos Camara-Lemarroy, Guillermo Delgado-Garcia, Juan De La Cruz-Gonzalez, Hector Villareal-Velazquez, Juan Gongora Rivera*

P1.303 Meningo-Encephalitis Associated to Secondary Cerebral Vasculitis in a Patient with Disseminated Mycobacterium Avium Complex Infection and AIDS —*Diego Ballesteros, Eliana Garino, Damian Consalvo, Gaston Imhoff-Jullier, Alejandro Giacchino, Marcos Fernandez Suarez, Griselda Russo, Raul Gomez, Ramon Leiguarda*

P1.304 Tuberculous Spondylitis (Pott's Disease) a Common Cause of Paraparesia in Young Mexicans, Its Association with Other Forms of Tuberculosis and the Use of MRI As a Diagnotic Tool —*Minerva Lopez Ruiz, Laura Escobedo-Jaimes, Alejandro Mendez-Viveros, Carmen Amezcua-Herrera, Karene Velazquez, Fabian Zea-Arevalo, Rosas Areana, Amaia Iñarra-Hiriart, Juan Chávez-López, Ernestina Ramírez- Casanova, Juan Montes-Ramirez*

P1.305 Multiple Intramedullary and Extramedullary Intradural Tuberculomas in a Pediatric Patient —*Elizabeth Ng, Shefali Karkare, Joseph Maytal, Rose Marrie Sy-Kho*

P1.306 Tuberculous Meningitis in an Immunocompetent Patient - Secondary to Pulmonary and Tertiary to Urogenital Tuberculosis: A Case Report —*Joshua Lukas, Amartyadeb Goswami*

P1.307 Unusual Manifestation of Cerebral Infarctions in Tuberculous Meningitis: A Biopsy-Proven Case Report —*Hyun-soon Jang, Sook Young Roh, Dae Yoon Kim, Eun Mee Han*

P1.308 Guillain-Barre Syndrome After Legionella Pneumonia: Case Report and Literature Review —*Daniel Landau, Jessica Kiarashi, Matthew Robbins, Constantine Farmakidis*

Other Bacterial Infections

P1.309 Clinical Profile and Outcome of Adult Tetanus in Oghara, Delta State, Nigeria —*Yahaya Obiabo*

P1.310 Pyridostigmine for Symptomatic Treatment of Weakness from Botulinum Toxin Ingestion —*Alicia Zha, Sushil Lakhani, Stanley Iyadurai*

P1.311 Iatrogenic Pneumococcal Ascending Meningitis —*Nuttawan Vongveeranonchai, Mark Cohen, Bashar Katirji*

P1.312 Understanding the Pathophysiology of Brain Failure in Sepsis Using EEG and NIRS —*Adeolu Morawo, Shahrin Pereira, Margaret Pisani, Hal Blumenfeld, Lawrence Hirsch, Kevin Sheth, Emily Gilmore*

P1.313 Neuro-Psychiatry Diseases Predisposing to Mental Status Changes in Patients with Community-acquired Pneumonia —*Murali Kolikonda, Timothy Wiemken, Forest Arnold, Raul Nakamatsu, Anupama Raghuram, Julio Ramirez, Paula Peyrani*

P1.314 An Unusual Presentation of Isolated Brain Abscess in Non-Traumatic Convexal Subarachnoid Hemorrhage: A Case Report —*Amandeep Dolla, Alan Wang, Muhammad Athar*

P1.315 Neurosyphilis Presenting As Myelopathy and a Spinal Cord Mass —*Karyna Neyra, Isaac Soliman, Nilaya Bhawsar, Vinit Gupta, Sunya Ashraf*

P1.316 Embolic Strokes and Relapsing Infective Endocarditis Due to Neisseria Subflava —*Milena Rodriguez Alvarez, Anjana Pillai, Rajan Khanna*

P1.317 Central Nervous System Tuberculosis in Patients with Systemic Rheumatic Disease That Were Receiving Immunosuppresive Therapy —*Laura Escobedo, López Minerva, Amezcua Carmen, Zea Fabián, Velázquez Karene, Inarra Amaia, Rosas Areana, Chávez Valentin, Montes Juan, Ramírez Ernestina*

HIV/AIDS

P1.318 Measuring Neurocognitive Function Associated with White Matter Hyperintensities (WMH) in HIV Positive Patients: Method and Study Design —*Shervin Mortazavi, Sean Ling, Marianne Harris, Silvia Guillemi, Aiko Yamamoto, Ging-Yuek Hsiung*

P1.319 Lipid Profiles and APOE4 Allele Impact Midlife Cognitive Decline in HIV+ Men on ART —*Shibani Mukerji, Joseph Locascio, Vikas Misra, David Lorenz, Alex Holman, Anupriya Dutta, Sudhir Penugonda, Steven Wolinsky, Dana Gabuzda*

P1.320 Effects of Cigarette Smoke and Nicotine on Proinflammatory Cytokine and Mitochondrial Gene Expression in an Animal Model of HIV-1 Infection —*Walter Royal, Joseph Bryant, Adem Can, Ming Guo, Harry Davis, Jabre Ross*

P1.321 Risk Factors for HIV-Associated Neurocognitive Disorders (HAND) in a Canadian Cohort —*Esther Fujiwara, Noshin Koenig, John Gill, Christopher Power*

P1.322 White Matter Hyperintensity in the Corpus Callosum in an Acute HIV Infection —*Shaista Alam, Scott Mintzer, Lori Sheehan*

P1.323 Uncommon Neurological Presentations of Leprosy —*Venkatraman Karthikeayan, Chandramouleeswaran Venkatraman, Kesavamurthy Bhanu, Shankar Balakrishnan, Ramakrishnan Venugopal*

P1.324 High Triglyceride Serum Level As One of Risk Factors of HIV Associated Sensory Neuropathy —*Hadi Widjaja, AA Raka Sudewi, Thomas Eko Purwata, AABN Nuartha, Putu Eka Widyadharma, IGN Purna Putra*

P1.325 Cerebrovascular Disease and HIV in Singapore: A Single-Centre Study —*Eugene Gan, Monica Saini, Cheng-Chuan Lee, Oon-Tek Ng, Kevin Tan*

P1.326 Serum Brain Derived Neurotrophic Factor (BDNF) in Patients with HIV Cognitive Impairment —*Anupama Kumar, Donald Franklin, Jr, Igor Grant, Scott Letendre, Thomas Marcotte, Justin McArthur, Norman Haughey, Carlos Pardo-Villamizar*

P1.327 Human Immunodeficiency Virus Seroconversion Syndrome Presenting As Facial Diplegia and Aseptic Meningitis: A Case Report —*Hisham Aldhukair, Robert Altman, Anne Damian*

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Fungal and Other Infectious Disorders

P1.328 Hydrocephalus Secondary to Coccidioidal Meningitis(CM) Resolved by Medical Anti-Fungal (Azoles) Therapy Alone: Case Report and Review of Literature —*Kolar Murthy, Mark Tramo, Sujay Dutta*

P1.329 Pediatric Primary Amoebic Meningoencephalitis: A Case Report —*Robert Stowe, Katie Friederich, Shannon DiCarlo*

P1.330 An Outbreak of Group B Streptococcal CNS Infection in Singapore: Unusual Clinical and MRI Findings —*Kevin Tan, Limin Wijaya, Hui-Jin Chiew, Yih Yian Sitoh, Humaira Shafi, Robert Chen, Chin-Kong Goh, Tchoyoson Lim*

P1.331 Young-Onset Rapidly Progressive Dementia —*Daniel Wallman, Chantale Branson, Brian McGeeney*

P1.332 Idiopathic CD4+ T Cell Lymphocytopenia Presenting As Cryptococcus Neoformans Meningoencephalitis —*Robert Mannel*

P1.333 Sporadic Creutzfeldt-Jakob Disease Presenting As Non-Convulsive Status Epilepticus: A Case Report —*Ammar Alobaidy, Alicia Parker, Eric Bershad*

PML, WNV, Rabies, and Other Viral Infections

P1.334 Unique Examination, Imaging, and Electrodiagnostic Findings in a Patient with Non-Classic Rabies —*DonRaphael Wynn, Angela Peters, Kelsey Juster-Switlyk, Donald McCorquodale, Safdar Ansari*

P1.335 Progressive Multifocal Leukoencephalothy in HAART Era: Retrospective Study in a Single Brazilian Center —*Livia Afonso, Marco Antonio Lima, Marcus Tulius Silva*

P1.336 JC Virus Induced Cerebellar Granular Cell Neuronopathy in a Natalizumab-Treated Multiple Sclerosis Patient —*Laurent Kremer, Mériam Koob, Maher Abu Eid, Jean-Louis Dietemann, Jerome De Seze*

P1.337 Delayed Seropositivity for West Nile Virus in Post-transplant Patients: a Case Series. —*Jason Massa, Prasanth Manthena*

P1.338 Successful Treatment of Progressive Multifocal Leukoencephalopathy (PML) with Recombinant Interleukin-7 (IL-7) and Maraviroc in a Patient with Idiopathic CD4 Lymphocytopenia —*Asaff Harel, Sam Horng, Tarah Gustafson, Anil Ramineni, Rebecca Straus Farber, Michelle Fabian*

P1.339 Encephalitic Syndrome, a 18 Months of Surveillance in a Tertiary Care Center: The Autoimmune Tip the Iceberg —*Jose Renan-Perez, Beatriz Méndez-González, Daniel Rubio-Ordoñez, Hugo Morales-Briceño, Luis Amaya-Sánchez, Raul Pineda-Carrera*

Practice, Policy, and Ethics

P1.340 Time Matters in Multiple Sclerosis - International Consensus Recommendations on Diagnosis, Management and Treatment Access —*Gavin Giovannoni, Helmut Butzkueven, Suhayl Dhib-Jalbut, Jeremy Hobart, Gisela Kobelt, George Pepper, Maria Pia Sormani, Christoph Thalheim, Anthony Traboulsee, Timothy Vollmer*

P1.341 The Australian and New Zealand Regional Neurology Training Survey —*Christopher McAulay-Powell, Anna Ranta*

P1.342 Efficiency of Medical Oversight on an MS Web Community: A Factorial Analysis —*Luigi Lavorgna, De Stefano Manuela, Patrizia Montella, Daniela Buonanno, Moshtari Fatemeh, Giorgia Teresa Maniscalco, Rullani Francesco, Piscopo Kyrie, Roberta Lanzillo, Vincenzo Brescia Morra, Gioacchino Tedeschi, Simona Bonavita*

P1.343 Gender Pay Gap Exists for Female Physicians in Neurology —*Nassim Zecavati, Temitayo Oyegbile, Caryn Peeples, Cesar Santos*

P1.344 Intravenous Immunoglobulin Versus Plasma Exchange in the Management of Patients with Myasthenia Gravis: A Cost-Minimization Analysis —*Julio Furlan, David Barth, Carolina Barnett Tapia, Vera Bril*

P1.345 Reversing Deficiencies in Thiamine Prescribing Using the Electronic Medical Record —*Gregory Day, Safiya Ladak, C. del Campo*

P1.346 A Compiling Analytic Software Program for the ACGME Milestones Is an Efficient, Flexible and Timely Monitor of Resident Performance and Progress —*David Urion*

P1.347 Needle Electromyography Practice Pattern in Patients Taking Novel Oral Anticoagulants: A Survey-based Study —*Ikjae Lee, Hani Kushlaf*

P1.348 Diffusion of Innovations and Sports Concussion Return to Play: A Mixed Methods Investigation of Decision-Makers, Policy, Protocols, and Evidence Based Best Practices —*Cole Youngner, Nancy Thompson, Kirk Elifson*

P1.349 Can Appointing a Stroke Champion Lower 1-Month Readmissions? —*Benjamin Jones, Karen Albright, Manmeet Kaur, Terri Hunter, Michael Lyerly*

Practice

P1.350 Impact of Clonidine on Patient and Family Experiences with Difficult EEGs —*Heidi Currier, Tatiana Filina, Rinat Jonas, Laurie Douglass, Maura Powers, Mary Russo, Claire Timbie*

P1.351 Medical Interpreter Services Use at an Academic Neurology Outpatient Clinic —*Jessica Tran, Nicte Mejia*

P1.352 Post-Hospitalization Follow-Up Appointments for Neurologic Inpatients —*Steven Bondi, Jori Fleisher, Laura Balcer, Alexandra Kvernland, Marissa Lanoff, Peter Benedict, George Harrold, Natali Baner*

P1.353 Two Prior Authorization Methods for FDG PET Scans for the Diagnosis of Alzheimer Disease —*Orest Boyko, Adam Powell, Laryssa Boyko, Mark Tankersley, Terry Rogstad, James Long, Amit Gupta*

P1.354 Impact of Personal Health Records on Stroke Readmission and Outpatient Follow Up Rates —*Rejo Cherian, Sung Cho, Stacy Erney, Nicole Smith, Zeshaun Khawaja*

Practice, Policy, and Ethics: Patient Safety and Quality

P1.355 Ethical Dilemma: A National Perspective on Utilization of Do-Not-Resuscitate Orders in Status Epilepticus —*Abhishek Lunagariya, Achint Patel, Jillianne Grayson, Kenneth Heilman*

P1.356 Changing the Treatment Paradigm in Multiple Sclerosis: Are the Attitudes of Patients and Physicians Aligned? —*Jean Mossman, Panos Kanavos, Michela Tinelli*

P1.357 Do Quality Improvement Measures Improve Quality of Outcomes? —*Justin Martello, Melissa Armstrong, Lisa Shulman, Eric Barr, Ann Gruber-Baldini*

P1.358 Conceptual Model of Shared Decision Making and Patient Engagement in Neurology —*Melissa Armstrong, Joseph Vandigo, C. Daniel Mullins, Lisa Shulman*

P1.359 The Value of a Custom Transfer Order Set and Discharge Instructions for Patients with Neurological Disorders —*Muhammad-Atif Zubairi, Damian Berezovsky, Dinesh Jillella, Amanda Deligtisch*

P1.360 Medication Reconciliation in a Neuro-Ophthalmology Clinic —*John Pula, Mira Shiloach, Carol Heunisch*

P1.361 A Quality Improvement Project on Resident Hand-Offs Using Structured Templates —*Janki Lavingia, Diane Book, Chad Carlson*

P1.362 Impact of Using a Template to Improve Quality Measures in the Longitudinal Follow Up of Parkinson Disease Patients —*Noel Vargas Perez, Carmen Serrano*

Ethics and Policy

P1.363 Public Service Loan Forgiveness Participation Among US Medical Graduates Pursuing a Career in Neurology —*Benjamin George, E. Ray Dorsey, Justin Grishkan*

P1.364 Global Council on Brain Health: Advancing Understanding of Aging and Cognitive Health —*Lindsay Chura, Laura Skufca, Sarah Lock*

P1.365 The Changing Landscape of Ethical Issues in Neurology Practice and Research —*Patrick Bergquist, Michael Theriault, Mill Etienne*

P1.366 Evaluation of the Impact of Managed Care Restrictions on Clinical Outcomes, Adherence/Persistence, Financial Outcomes, and Healthcare Resource Utilization in Neurological Conditions: A Systematic Literature Review —*Yujin Park, John Ko, Syed Raza, Vivian Herrera*

P1.367 Inpatient Ethics Consults in Patients with Neurologic Diseases —*Kim Yen Thi Vu, Arline Worsham, Jenna Snow, Angela Lauritano, Christina Luther, Wamda Ahmed, Caroline Ha, Huimahn Choi*

MS and CNS Inflammatory Disease: Risk Factors for Disease Progression and Treatment Response

P1.368 Elevated Levels of the Furan Fatty Acid Metabolite, 3-carboxy-4-methyl-5-propyl-2-furanpropanoic Acid (CMPF) in the Serum of Multiple Sclerosis Patients. —*Danielle Blemur, Fozia Mir, Saud Sadiq*

P1.369 Fibrinogen Deposition in the Multiple Sclerosis Motor Cortex —*Richard Yates, Margaret Esiri, Jacqueline Palace, Gabriele De Luca*

P1.370 Oligoclonal Immunoglobulin Gamma Bands in the Cerebrospinal Fluid and Risk of Conversion to Secondary Progress in Multiple Sclerosis —*Virginija Karrenbauer, Jan Hillert, Ali Manouchehrinia*

P1.371 Body Mass Index Is Modestly Correlated with Disease Severity in Multiple Sclerosis —*Benjamin Richter, Gary Cutter, Jillian Mohn, Krupa Pandey, Rachel Ford, Tamar Bacon, Ilya Kister*

P1.372 Multiple Sclerosis and Obesity. Insulin Impairs IL-10-Mediated Regulatory T Cell Function —*Jorge Correale, Laura Negrotto, Mauricio Farez*

P1.373 Lipoic Acid for Neuroprotection in Secondary Progressive Multiple Sclerosis —*Rebecca Spain, Charles Murchison, Fay Horak, Jack Simon, Dennis Bourdette*

P1.374 Role of Fatty Acids in Multipe Sclerosis: Therapeutic Potential of Propionic Acid —*Aiden Haghikia, Alexander Duscha, Johannes Berg, Stefanie Jörg, Nicola Wilck, Dominik Müller, Ralf Linker, Ralf Gold*

P1.375 Increased Body Mass Index is Causally Associated with Pediatric MS Onset: A Mendelian Randomization Study —*Milena Gianfrancesco, Xiaorong Shao, Brooke Rhead, 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, Emmanuelle Waubant, Lisa Barcellos*

P1.376 Obesity and Disease Activity in Pediatric-Onset Multiple Sclerosis —*Kristen Krysko, E. Ann Yeh, Heather Hanwell, Ashley Cohen, Dalia Rotstein*

P1.377 Prolonged Breastfeeding As an Infant Reduces Future Risk of Pediatric-Onset Multiple Sclerosis: A Case-Control Study —*James Brenton, Myla Goldman*

P1.378 Cognitive Function in Pediatric Onset MS Is Largely Independent from Routine Clinical Parameters —*Janet Elgallab, Colleen Schwarz, Michael Shaw, Michael Porter, Lauren Krupp, Leigh Charvet*

P1.379 Olfactory Identification Deficits Predict Cognitive Impairment in Pediatric Onset Multiple Sclerosis (MS) —*Colleen Schwarz, Michael Shaw, Roxane Javadi, Lauren Krupp, Leigh Charvet*

P1.380 Allergies in Pediatric Multiple Sclerosis: A Case-Control Study —*Theresa Neiderer, Michael Waltz, Charlie Casper, Katelyn Kavak, Gregory Aaen, Anita Belman, Leslie Benson, Meghan Candee, Tanuja Chitnis, Jennifer Graves, Benjamin Greenberg, Mark Gorman, Yolanda Harris, Janace Hart, Ilana Kahn, Lauren Krupp, Timothy Lotze, Soe Mar, Jayne Ness, Cody Olsen, Shelly Roalstad, Moses Rodriguez, John Rose, Jennifer Rubin, Teri Schreiner, Timothy Simmons, Jan-Mendelt Tillema, Adeline Vanderver, Amy Waldman, Emmanuelle Waubant, Bianca Weinstock-Guttman*

P1.381 Puberty Does Not Affect Clinical Presentation of Multiple Sclerosis in Adolescent —*Samar Ahmed, Raed Alroughani, Jasem Al-Hashel*

P1.382 Offspring of Parents with Multiple Sclerosis Achieve Higher Grades and Choose Health-Related Educations —*Julie Moberg, Melinda Magyari, Nils Koch-Henriksen, Lau Thygesen, Bjarne Laursen, Per Solberg Sorensen*

P1.383 Small Worlds in Neurodegeneration - Multiple Sclerosis (SWiNd-MS) —*Luke Canham, David Western, Alzbeta Klicnikova, Matthew Harland, Peter Walsh, Nick Kane, Laura Hanley, Tania Burge, Kirsty Inglis, David Cottrell*

P1.384 The Low Frequency of Antibodies to Myelin Oligodendrocyte Glycoprotein in Japanese Opticospinal Multiple Sclerosis —*Sudarshini Ramanathan, Shinya Sato, Takuya Matsushita, Katsuhisa Masaki, Ryo Yamasaki, Russell Dale, Jun-ichi Kira, Fabienne Brilot*

P1.385 Immunomodulatory Therapy Slows Accumulation of Disability in Advanced Multiple Sclerosis: A Global Observational Cohort Study —*Tomas Kalincik, Nathaniel Lizak*

P1.386 Incidence and Prevalence of Multiple Sclerosis in Puerto Rico: A Multi-Center and Population-Based Initiative —*Angel Chinea, Cristina Rubi, Carlos Rios-Bedoya, Ivonne Vicente*

P1.387 The Effect of Modifiable Risk Factors on Multiple Sclerosis Progression —*Aliza Ben-Zacharia*

P1.388 Characteristics of a Hispanic Multiple Sclerosis Population Cohort at a Large Academic Center —*Daniel Smith, Gracey Mounsey, Valdez Brooke, Fadzai Masawi, Brittany Wedeman, Augusto Miravalle*

P1.389 Changes in Neurologic Disability and Health-Related Quality of Life Utility Over 8 Years in Patients with Multiple Sclerosis —*John Fisk, Joshua Armstrong, Virender Bhan, Trudy Campbell, Karen Stadnyk, Ruth-Ann Marrie*

P1.390 A Comprehensive Evaluation of Serum MicroRNAs As Potential Biomarkers in Multiple Sclerosis —*Keren Regev, Brian Healy, Anu Paul, Felipe Von Glehn Silva, Camilo Diaz-Cruz, Maria Antonietta Mazzola, Radhika Raheja, Taha Gholipour, Parham Nejad, Svetlana Egorova, Bonny Patel, Pia Kivisakk, Tanuja Chitnis, Howard Weiner, Roopali Gandhi*

P1.391 Radiologically Isolated Syndrome: Pathologically Defined As Demyelinating Disease —*Mark Keegan, Yong Guo, Darin Okuda, Aksel Siva, Daniel Pelletier, Orhun Kantarci, Claudia Lucchinetti, Christine Lebrun Frenay*

P1.392 Baseline Results of the Prospective Nationwide Cohort Study in Clinically Isolated Syndromes and Early Multiple Sclerosis of the German Competence Network Multiple Sclerosis and Monocentric Subgroup Analysis of Neuropsychological Findings —*Olga von Bismarck, Antony Gisela, Andreas Ziegler, Frauke Zipp, Bjorn Tackenberg, Florian Then Bergh, Hayrettin Tumani, Tania Kuempfel, Martin Stangel, Christoph Heesen, Brigitte Wildemann, Friedemann Paul, Antonios Bayas, Clemens Warnke, Frank Weber, Ralf Linker, Ulf Ziemann, Uwe Zettl, Volker Limmroth, Andrew Chan, Heinz Wiendl, Bernhard Hemmer, Ralf Gold, Anke Salmen*

P1.393 Vitamin D Metabolic Pathway Alterations and Risk of Multiple Sclerosis in Patients with Clinically Isolated Syndromes —*Gloria Dalla Costa, Maria Josè Messina, Antonio Farina, Lucia Moiola, Mariaemma Rodegher, Bruno Colombo, Roberto Furlan, Alessandro Rubinacci, María Dolores Luque de Castro, Giancarlo Comi, Vittorio Martinelli*

P1.394 Total Ovulatory Years and Multiple Sclerosis Susceptibility in a Multi-Ethnic Cohort —*Jessica Smith, Kerstin Hellwig, Edlin Gonzales, Samantha Haraszti, Christopher Schroeder, Lisa Barcellos, Annette Langer-Gould*

P1.395 Predicting Disease Activity for Patients with Relapsing Remitting Multiple Sclerosis Using Electronic Medical Records —*Jennie Medin, Alexandre Joyeux, Stefan Braune, Arnfin Bergmann, John Rigg, Lichao Wang*

P1.396 Association of Serum Neurofilament Light Chain with Cognitive and Disability Measures in Patients with Very Early MS: A Longitudinal Study —*Bardia Nourbakhsh, Sharmilee Gnanapavan, Gavin Giovannoni, Laura Julian, Rebecca Spain, Jens Kuhle, Emmanuelle Waubant*

P1.397 Estrogen Receptor-α (ERα) 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*

P1.398 Twenty-Year Clinical Profile of Idiopathic Transverse Myelitis in Children in Oman, a Gulf Country —*Roshan I. Koul, Amna Alfutaisi, Dilip Sankhla*

P1.399 New Zealand Nationwide Population- Based Multiple Sclerosis Incidence Study Shows Increasing North-South Latitude Gradient —*Deborah Mason, John Pearson, Ann Richardson, Sridhar Alla*

P1.400 Conversion from Clinically Isolated Syndrome to Multiple Sclerosis - A Study Among Asian Indians —*Tapas Banerjee, Asish Das, Epsita Ghosh, Asish Dutta, Amit Haldar, Debasish Chowdhury, Sabyasachi Ojha, Manas Saha, Sukalyan Purakayastha*

P1.401 Predictive Value of 6-Month T2 and Enhancing Lesions Among Patients with RRMS Receiving Interferon β-1a Subcutaneously Thrice Weekly or Placebo: Post Hoc Analyses of PRISMS Data —*David Li, Regina Berkovich, Eric Williamson, Juanzhi Fang, Fernando Dangond, Anthony Traboulsee*

P1.402 Clinical Evolution of Relapsing Remitting Late Onset Multiple Sclerosis: A Nine Year Follow-Up Study —*Emanuele d'Amico, Silvia Messina, Claudio Longhitano, Carmela Leone, Mario Zappia, Francesco Patti*

P1.403 Tumefactive Multiple Sclerosis: A Case Series —*Cecilia Pita, Ricardo Alonso, Victoria Fernandez, Berenice Silva, Orlando Garcea*

P1.404 Effects of Red Meat Diet Restriction on Multiple Sclerosis Severity —*Neda Sattarnezhad, Kyle Caron, Alicia Chua, Brian Healy, Sandra Cook, Stephanie Tankou, Tamara Kaplan, Camilo Diaz-Cruz, Bonnie Glanz, Howard Weiner, Tanuja Chitnis*

P1.405 Coagulation Factors Polymorphisms in Modulating Multiple Sclerosis Onset and Progression —*Domenico Ippolito, Luigi Lavorgna, Maddalena Sparaco, Sabrina Esposito, Mariolina Scalona, Gioacchino Tedeschi, Simona Bonavita*

P1.406 WITHDRAWN

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.

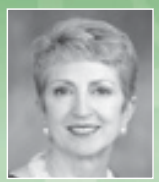
AAN 2016 Annual Meeting

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



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

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

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



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

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

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



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

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

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

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.

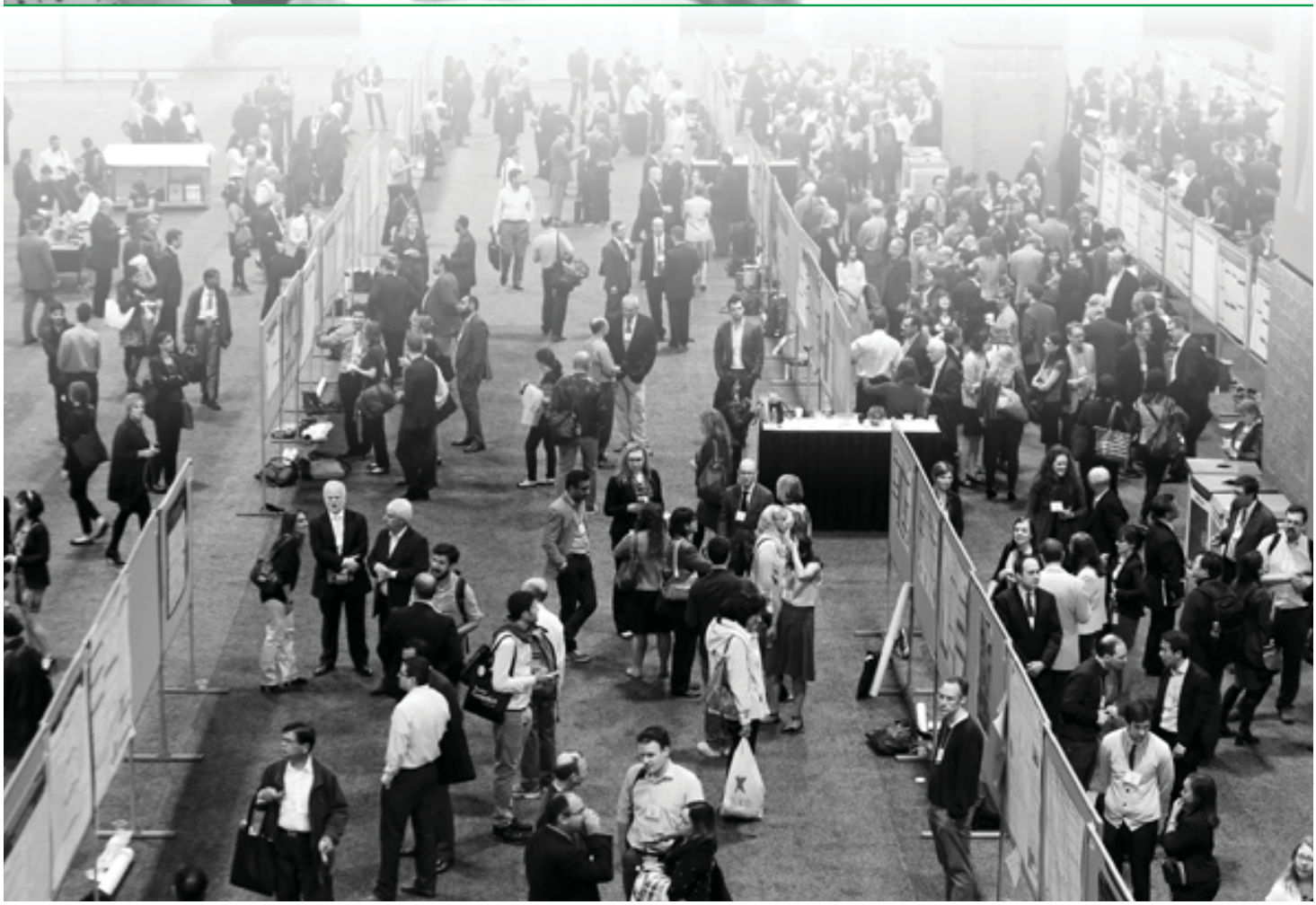


Experience a unique place for undergraduate and graduate attendees to:

- 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-Jordon 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

11:30 a.m.–6:30 p.m.

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

009 Placental Pathology in Neonatal Stroke: A Retrospective Case-Control Study
Miya Bernson-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.

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

4:00 p.m.–4:15 p.m.

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
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007 Quantification of Risks of Seizure in Autism
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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.

AAN 2016 Annual Meeting

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 Rodríguez 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 Conners, 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 Lyerly, Karen Albright, Toby Gropen, 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 Sadovsky, 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 Lukić-Ječmenica, Igor Petrović, 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 Cysteinyl-Dopamine: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*

Saturday, April 16

1:00 p.m.–5:30 p.m. Integrated Neuroscience Session

I1 SIP 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

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, FRCPC, 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, Síle 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, Evelyne Gozal, Shinying Jin, rekha Jagadapillai1, Andrew Roberts, Ruolan Liu, Eliezer Masliah, Vilius Stribinskis*

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 Cysteinyl-Dopamine: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, Síle 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, Evelyne Gozal, Shinying Jin, rekha Jagadapillai1, Andrew Roberts, Ruolan Liu, Eliezer Masliah, Vilius Stribinskis*

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 Cysteinyl-Dopamine: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, Xhaoxia 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 Pakrinson'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 SIP **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



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AAN 2016 Annual Meeting

Saturday, April 16

1:00 p.m.–5:30 p.m. Integrated Neuroscience Session

I2 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. **I2.001 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. **I2.002 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. **I2.003 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. **I2.004 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.

I2.001 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*

I2.002 Neuroimaging Markers of Cognitive Outcome in Children with Perinatal Stroke —*Kara Murias, Adam Kirton, Sana Tariq, Andrea Moir, Giuseppe Iaria*

I2.003 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*

I2.004 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*

I2.005 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*

I2.006 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*

I2.007 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*

I2.008 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*

I2.009 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*

I2.010 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*

I2.011 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*

I2.012 Argentinean Initiative of Stroke in the Young and Fabry Disease (FD): Final Results —*Ricardo Reisin, Julieta Mazziotti, Luciana Leon Cejas, Alberto Zinnerman, 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, Analia Sanchez Luceros*

I2.013 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. **I2.005 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. **I2.006 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. **I2.007 Data Blitz**
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*

5:05 p.m.–5:10 p.m. **I2.008 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**

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

Ex 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 Atadzhanov, 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 Steverson*

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 Vicaut, 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 Leshnower, 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 Compliancewith the AAN Guidelines for Neurological Prognosis After Cardiac Arrest — *Proleta Datta, Jennifer Padilla Martinez, Omotola 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.
I **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 Kaufer, 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. Drazkowski, MD, FAAN, Phoenix, AZ*

C58 **Case Studies in the ICU**
Director: *Nicholas Joseph Silvestri, MD, Buffalo, NY*

Sat · April 16

Sunday, April 17

6:30 a.m.–7:15 a.m.

S9 Neurorehabilitation: New Targets and Therapies. . 44

6:30 a.m.–8:30 a.m.

C59 SIF 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.

Ex Health & Wellness Yoga

7:30 a.m.–8:30 a.m.

S11 Neuro Trauma and Sports Neurology 44

8:00 a.m.–9:00 a.m.

I 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.

I Navigating the World of Mobile Health

Ex Health & Wellness 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 Encephalities*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

Ex Real World of Neurology 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 SIF 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.

Ex Health & Wellness Integrative Approach to the Management of Chronic Pain Syndromes

3:30 p.m.–4:30 p.m.

I 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

$ A registration fee is required
The program is one of the AAN Leadership University sessions
SIP The course is part of a Subspecialty in Focus track
The program is one of the I Talk sessions
Ex Learning Lab
Ex Excitement of Discovery
Ex Health & Wellness
Ex Navigating Your Career
Ex Real World of Neurology
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

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

45
55

Sunday, April 17

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-Bassett, 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*

$ A registration fee is required
The program is one of the AAN Leadership University sessions
SIF The course is part of a Subspecialty in Focus track
The program is one of the I Talk sessions
Ex 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 SIP **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.

Ex Health & Wellness **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.

AAN's Axon Registry: Data Powering Neurology's Future
Director: *Bruce Sigsbee, 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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AAN 2016 Annual Meeting

Sunday, April 17

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 Knoth*

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 Autcomes 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 Austermuehle, 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 Martínez-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 Superfical 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, Bárabara Braga, Priscila Paulin, Nathalie Uski, Cristina Jaques, Flávia Alcantara, Alessandro Sousa, Tauana Leoni, Marcio Balthazar, 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, Albena 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 Passarell, 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 Faught, 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 Olhaye, 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 Therriault*

P2.051 Update from the Georgia Intermediate Expanded Access Study —*Yong Park, Robert Flamini, 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, Analia 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-Wolkowiez*

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) —*Mohanned Alhamrani, Fawzi Babtain, 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 Cordioli, 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 Berchialla, 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 Marrie*

Sunday, April 17

Poster Session 8:30 a.m.–5:30 p.m.

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, Rocío Hernández-Clares, Ester Carreón-Guarnizo, María Cerdan-Sanchez, Cristina Sánchez-Vizcaíno Buendía, 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, Ippei 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 Marcilla, 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, Albornoz 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, Chrstoph Lassek, Stephan Schmidt, Bjorn Tackenberg, Christian Cornelissen*

P2.078 Dimethyl Fumarate (DMF)-Induced Necrotizing Myopathy: A Case Report —*Charlotte Zisman, Emiliya 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, Kasra Shakeri-Nejad, Eric Legangneux*

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

P2.082 Longterm Fingolimod Treatment of Multiple Sclerosis Induces Phenotypical Immunsenescence —*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 McCroskery*

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/HZV 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 Immunosenescence 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 Cravets, 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 —*Tirisham 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, Jasem 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, Roopali 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 (WWMS) 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

P2.108 Predicting Treatment Response to Teriflunomide in the TEMSO Study Using the Modified Rio Score —*Maria Pia Sormani, Philippe Truffinet, Karthinathan Thangavelu, Pascal Rufi, Nicola De Stefano*

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

P2.110 The Impact of Very Short Transition Times on Switching from Tysabri to Gilenya on Imaging and Clinical Effectiveness Outcomes —*Enrique Alvarez, Brandi Vollmer, Stefan Sillau, Kavita Nair, John Corboy, Timothy Vollmer, Justin Honce*

P2.111 Analysis of Relapse Events in the DECIDE Study Using a Novel Weighted Hurdle Model —*John Rose, Mark Freedman, Keith Edwards, Ping Wang, Xiaojun You, Sami Fam*

P2.112 Neurostatus E-Scoring Increases Quality of the Expanded Disability Status Scale (EDSS) Assessments: First Experience in a Phase 3 Clinical Trial with Siponimod in Secondary Progressive Multiple Sclerosis —*Marcus DSouza, Roland John, Heiko Rust, Kristina Micicunaite, Michaela Andelova, Johannes Lorscheider, Shauna Gysin, Brian Hunter, Erik Wallstroem, Franz Schnyder, Ludwig Kappos*

P2.113 Brief Computerized Measures of Information Processing Speed Are Sensitive to Multiple Sclerosis Across the Lifespan —*Michael Shaw, Colleen Schwarz, Jeffrey Lewine, Adrian Schembri, Brian Harel, Leigh Charvet*

P2.114 Magnetic Resonance Imaging (MRI) Outcomes in Patients with Relapsing-Remitting Multiple Sclerosis (RRMS) Treated with Cladribine Tablets: Results from the 120-Week Phase IIIb Extension of the CLARITY Study —*Comi Giancarlo, Gavin Giovannoni, Stuart Cook, Kottil Rammohan, Per Soelberg-Soerensenn, Patrick Vermersch, Emily Martin, Fernando Dangond, Peter Rieckmann*

P2.115 Tentative and Confirmed Disability Progression in MS Clinical Trials —*Jacob Elkins, Ludwig Kappos, Krzysztof Selmaj, Wei Ma, Katherine Riester*

P2.116 OPTIMISE - A Web-Based Solution for Recording and Analyzing Longitudinal Multiple Sclerosis Data —*Yong May, Yang Li, Joel Raffel, Matt Craner, Cheryl Hemingway, Gavin Giovannoni, James Overell, Robert Hyde, Johan Van Beek, Fiona Thomas, Yike Guo, Paul Matthews*

P2.117 Practicability of the Brief International Cognitive Assessment in MS (BICAMS) in Daily Clinical Routine: First Results of the German Feasibility Study —*Iris-Katharina Penner, Melanie Filser, Daniel Mingers, Christoph Lassek*

P2.118 Neuro Performance Testing As an Alternative to EDSS for Measuring Multiple Sclerosis Disability Progression in Clinical Practice —*Bernd Kieseier, Kartik Raghupathi, Richard Rudick*

P2.119 MS Patients Do Not Accurately Self-Predict Their Maximum Walking Distance: Effect on the EDSS —*Berger Warren, Michael Payne, Sarah Morrow*

P2.120 MRI Lesion Length in Acute Optic Neuritis Correlates with Degree of Inner Retinal Thinning in Multiple Sclerosis —*Maureen Mealy, Julia Button, Omar Al-Louzi, Gunes Orman, Noushin Jazebi, Izlem Izbudak, Peter Calabresi, Shiv Saidha, Michael Levy*

P2.121 Baseline Predictors of Disease Activity in Patients with CIS Treated with Interferon Beta-1b in the BENEFIT 11 Trial —*Mark Freedman, Ludwig Kappos, Gilles Edan, Xavier Montalban, Hans Hartung, Bernhard Hemmer, Edward Fox, Frederik Barkhof, Sven Schippling, Ralf Koelbach, Dirk Pleimes, Gustavo Suarez, Eva-Maria Wicklein*

P2.122 Remotely-Supervised Home Delivery of TDCS Is Feasible and Well-Tolerated in Adults with Multiple Sclerosis (MS) —*Margaret Kasschau, Jesse Reisner, Kathleen Sherman, Ariana Frontario, Marom Bikson, Abhishek Datta, Leigh Charvet*

P2.123 Multiple Sclerosis App Development: A Study on App Features Using Patient Feedback —*Fletcher Hartsell, Katherine Heller*

P2.124 Is Health-Related Quality of Life an Important Evaluation Criterion in Drug Development of Multiple Sclerosis (MS) Products? A Review of Labels of MS Products Approved the FDA and the EMA —*Catherine Acquadro, Cécile Perret, Antoine Regnault*

P2.125 Establishing a Normative Data Set for the MS-COG —*Michelle Mellion, John DeLuca, Ralph Benedict, Tanya Kaushik, Bruno Brochet, Ugo Nocentini, Frederick Foley, Jeffrey Wilken, Glenn Phillips, Yiwei Zhang, Lei Xu, Diego Cadavid*

P2.126 Multiple Sclerosis, EDSS and Gait: Putting Legs That Work on a Walking Scale —*Lisa Muratori, Erin Martin, Lori Fafard, Barbara Bumstead, Myassar Zarif, Mark Gudesblatt*

P2.127 The Multiple Sclerosis Surveillance Registry: A Novel Interactive Database Within the VA Health Care System —*Mitchell Wallin, William Culpepper, Ruth Whitham, Heidi Maloni, Akimyo Russell, Jodie Haselkorn, Judy McConnachie, Jonathan Duckart, John Kurtzke*

P2.128 NEDA in Pediatric MS, Is It Attainable? —*Mary Rensel, Ian Rossman, Manikum Moodley*

P2.129 Obtaining Patient and Family Views in Pediatric MS Research Needs, Outcomes and Methods: Study Design —*Tanuja Chitnis, David Rintell, Ellen O'Donnell, Timothy Lotze, Bianca Weinstock-Guttman, Emmanuelle Waubant, Anita Belman, Gregory Aaen, Leslie Benson, Mark Gorman, Jennifer Graves, Soe Mar, Manikum Moodley, Jayne Ness, Mary Rensel, Moses Rodriguez, Teri Schreiner, Jan-Mendelt Tillema, John Rose, Charlie Casper*

P2.130 Does a Risk Aversion Calculator Facilitate Multiple Sclerosis Immunomodulator Selection Within a Patient-Centered Approach —*Fletcher Hartsell, Katherine Heller, Bryan Walker*

P2.131 Predicting Falls in Multiple Sclerosis: Utility of Visual Perceptive Computing —*Anuschka Grobelny, Janina Behrens, Sebastian Mertens, Theresa Krüger, Karen Otte, Bastian Kayser, Sebastian Mansow-Model, Friedemann Paul, Alexander Brandt, Tanja Schmitz-Hübsch*

P2.132 Multiple Sclerosis: Population Analysis of Predicted Medication Adherence Behavior by Morisky Medication Adherence Scale (MMAS-8) —*Karl Wissemann, Mark Gudesblatt, Barbara Bumstead, Myassar Zarif, Lori Fafard, Smitha Thotam, Marijean Buhse, Daniel Golan, Shenira Becker, Cynthia Sullivan, Jeffrey Wilken, Donald Morisky*

P2.133 Modified EDSS for Use in Multiple Sclerosis Clinical Practice —*Laura Baldassari, Erin Longbrake, Anne Cross, Amber Salter, Robert Naismith*

P2.134 Patient Reported Outcomes in Multiple Sclerosis: A Review of Literature —*Vivek Khurana, Aoife Callan, Jennie Medin*

P2.135 Relationship Between the Theory of Mind and the Ability to Change of Perspective in Patients with Relapsing-Remitting Multiple Sclerosis —*Diana Bruno, Fatima Pagani Cassara, Vladimiro Sinay, Maria Roca*

P2.136 Contributions for the Validation of BICAMS in Argentine Population: Its Relationship with Clinical and Sociodemographic Variables —*Sandra Vanotti, Ralph Benedict, Barbara Eizaguirre, Maria Saladino, Fernando Caceres*

P2.137 Prolonged Timed Up and Go Is Associated with Falls and Patient Self-Reported Mobility Limitations —*Channa Kolb, Shaik Sanai, Katelyn Kavak, Sirin Gandhi, Barbara Teter, Robert Zivadinov, Bianca Weinstock-Guttman*

P2.138 Ganglion Cell Analysis in Acute Optic Neuritis —*Raed Behbehani, Asharf Al-Moosa, Raed Alroughani, Devarajan Sriraman*

P2.139 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 Kontschieder, Cecily Morrison, Jonas Dorn, Samuel Rota Bulò, Prejaas Tewarie, Kristina Miciunaite, Abigail Sellen, Antonio Criminisi, Frank Dahlke, Christian Kamm, Bernard Uitdehaag, Ludwig Kappos*

P2.140 Clinical Utility of Screening Executive Test in the Detection of Executive Dysfunction in Patients with Relapsing-Remitting Multiple Sclerosis —*Fatima Pagani Cassara, Diana Bruno, Victoria Marenco, S Baez, Teresa Torralva, Vladimiro Sinay, Maria Roca*

P2.141 Lack of Magnetic Resonance Imaging Lesion Activity As a Treatment Target in Multiple Sclerosis: An Evaluation Using Electronically Collected Outcomes —*Devon Conway, Nicolas Thompson, Jeffrey Cohen*

P2.142 Assessment of Current Clinical Practices in the Diagnosis and Management of MS —*Thomas Finnegan, John Maeglin, Stephen Krieger*

P2.143 The Timed 25-foot Walk Test As an Alternative to EDSS Score for Evaluating 'No Evidence of Disease of Activity' (NEDA-4) Status in Patients with RRMS —*Jeffrey Cohen, Fred Lublin, Tanuja Chitnis, Daniela Piani Meier, Shannon Ritter, Davorka Tomic, Ludwig Kappos*

P2.144 Efficacy of Delayed-Release Dimethyl Fumarate in Newly Diagnosed Patients with Relapsing-Remitting Multiple Sclerosis Using a Composite Measure of Disability: Integrated Analysis of the Phase 3 DEFINE and CONFIRM Studies —*J. Theodore Phillips, Amit Bar-Or, Ralf Gold, Gavin Giovannoni, Robert Fox, James Potts, Teesta Soman, Jing Marantz*

P2.145 Incidence Trends of Multiple Sclerosis Disability Milestones: A Nationwide Population-Based Cohort Study in Sweden —*Omid Beiki, Ali Manouchehrinia, Jan Hillert*

P2.146 Combining Optical Coeherence Tomography, Full-Field and Multifocal Visual Evoked Potentials to Assess Multiple Sclerosis Patients —*Simone Guerrieri, Giovanni Di Maggio, Marco Pisa, Francesco Vitali, Roberto Santangelo, Stefania Medaglini, Lucia Moiola, Ubaldo Del Carro, Vittorio Martinelli, Giancarlo Comi, Letizia Leocani*

P2.147 TRUST - A Study to Evaluate an Integrated Approach for Optimized Patient Management in Multiple Sclerosis Patients Treated with Natalizumab - First Analysis of Baseline Data —*Hans-Peter Hartung, Achim Gass, Volker Limmroth, Antonios Bayas, Judith Haas, Ralf Linker, Mathias Maurer, Martin Stangel, Bjorn Tackenberg, Jens Wuerfel, Matthias Meergans, Olof Harlin, Tjalf Ziemssen*

MS and CNS Inflammatory Disease: Treatment Outcome Measures and Clinical Research

P2.148 Cognitive Impairment and P300 Changes in Patients with Multiple Sclerosis —*Marija Bosnjak Pasic, Ivan Mikula, Tea Mikula, Hanna Pasic, Marina Mioc*

P2.149 Study of Subclinical Oculomotor Disturbances by Video Oculography in Patients with Clinically Isolated Syndromes —*Giovanni Castelnovo, Adelaide Ferraro, Dimitri Renard, Marie De Verdal, Xavier Ayrignac, Clarisse Carra-Dalliere, Pierre Labauge, Eric Thouvenot*

P2.150 Fingolimod Effects on PASAT Score and Baseline Determinants of PASAT in a Large Cohort of RRMS Patients —*Dawn Langdon, Iris-Katharina Penner, Pasquale Calabrese, Gary Cutter, Dieter Häring, Frank Dahlke, Davorka Tomic, Ludwig Kappos*

P2.151 Can Medical Professionals with Minimal-to-No Neuroradiology Training Monitor MS Disease Progression Using Semiautomated Imaging Software? —*Ariel Dahan, Wayland Wang, Mark Tacey, Frank Gaillard*

P2.152 From the Ewing Classic Battery to the New Methods of Assessment of Autonomic Function: Revisiting Dysautonomia in Multiple Sclerosis Patients —*Castro Pedro, Videira Gonçalo, Filipe João Pedro, Vieira Bitia, Santos Rosa, Reis Carina, Azevedo Elsa, Sá Maria José, Pedro Abreu*

Sunday, April 17

Poster Session 8:30 a.m.–5:30 p.m.

P2.153 Multiple Sclerosis, EDSS and Walking: Computerized Objective Gait Analysis of the Impact of a 6-Minute Timed Walk on Selected Gait Characteristics in People with Multiple Sclerosis - Putting Long Legs on a Walking Scale —*Christina Burke, Mark Gudesblatt, Karl Wissemann, Myassar Zarif, Barbara Bumstead, Lori Fafard, Smitha Thotam, John Magel, Marijean Buhse, Lisa Muratori*

P2.154 Improving MS Care with an International Videoconference-Based Provider Education and Case Consultation Program —*Kevin Alschuler, Annette Wundes, Dennis Dietrich, Boskovski Bojan, Igor Kuzmanovski, Gloria Von Geldern, Katharine Alexander, Gary Stobbe*

P2.155 Does MRZ Reaction Have a Real Significance in the Diagnosis of Multiple Sclerosis? —*Pavel Hradilek, David Zeman, Barbora Kurkova, Olga Zapletalova, Ivana Woznicova, Katarina Reguliova, Radim Piza*

P2.156 A Qualitative Assessment of Key Symptoms Associated with the Progression from RRMS to SPMS by Physicians and Patients —*Bryan Bennett, Chloe Tolley, Sarah Kilgariff, Deniz Simsek, Raquel Lahoz, Elisabetta Verdun Di Cantogno, Tjalf Ziemssen*

P2.157 The Relationship Between the Clinical Condition of MS Patients and the Nutritional Status, Mitochondrial Activity and Oxidative Stress —*Radi Shahien, Chen Waldman, Ayelet Omer Armon*

MS and CNS Inflammatory Disease: Treatment of NMO and Other CNS Diseases

P2.158 Does Rituximab Cause Depletion of T-Cells in Multiple Sclerosis and Neuromyelitis Optica? —*Paula Hardeman, Martha Mann, Samuel Hughes, Benjamin Greenberg*

P2.159 A Phase 1b Clinical Trial with Tolerogenic Dendritic Cells for Multiple Sclerosis and Neuromyelitis Óptica —*Irati Zubizarreta, Daniel Benitez, Varea Sara, Joan Albert Arnaiz, Albert Saiz, Pablo Villoslada*

P2.160 Long-term Effect of Cyclosporine A in the Prophylaxis of Neuromyelitis Optica Spectrum Disorders —*Takashi Kageyama, Katsuichi Miyamoto, Akihiko Ozaki, Mika Komori, Taro Okunomiya, Daisuke Kambe, Toshihiko Suenaga, Susumu Kusunoki, Sadayuki Matsumoto, Ryosuke Takahashi, Takayuki Kondo*

P2.161 Infliximab for Treatment Refractory Neuro-Behçet Syndrome — *Burcu Zeydan, Ugur Uygunoglu, Sabahattin Saip, Onat Demirci, Emire Seyahi, Serdal Ugurlu, Vedat Hamuryudan, Aksel Siva, Orhun Kantarci*

P2.162 Induction of Autoimmune Encephalitis by Treatment with Ipilimumab and Nivolumab —*David Benavides, Tanya Williams, Kelly-Ann Patrice, Dung Le, Evan Lipson, Ellen Mowry, John Probasco*

P2.163 Treatment of Anti-DPPX-Encephalitis Refractory to Corticosteroids, Plasma Exchange and Rituximab — *Andrew Smith, Andrew Goodman, Andrew McKeon, Lawrence Samkoff*

P2.164 Infliximab for the Treatment of Neurosarcoidosis: The Mayo Clinic Experience —*Derek Stitt, Allen Aksamit, James Utz*

P2.165 Rituximab for Refractory Myasthenia Gravis in a Pregnant Patient —*Tarun Girotra, Nour Baki, Kavita Grover*

P2.166 Case Report: Improvement of GAD65-Associated Autoimmune Epilepsy with Testosterone Replacement Therapy —*Melissa Heiry, Pegah Afra, Fumisuke Matsuo, John Greenlee, Stacey Clardy*

P2.167 A Case of Sarcoidosis with Improvement After Initiation of Natalizumab Therapy —*Josef Gutman, Jerome Graber, David Dickoff*

MS and CNS Inflammatory Disease: MS Symptoms, Specific Symptoms Treatments, Co-morbidities, and Cost

P2.168 Cognitive Impairment in Newly Diagnosed Multiple Sclerosis: Does It Differ Between Racial/Ethnic Groups? — *Christopher Schroeder, Edlin Gonzales, Samantha Haraszti, Annette Langer-Gould*

P2.169 Clinical Response to Nabiximols (Sativex®) on Spasticity and Pain Is Paralleled by a Down-Regulation of Immune-Related Pathways in Multiple Sclerosis Patients —*Filippo Martinelli Boneschi, Melissa Sorosina, laura ferre', Ferdinando Clarelli, Vittorio Martinelli, Federica Esposito, Giancarlo Comi*

P2.170 An Adaptive Computer-Based Cognitive Training Program Improves Cognitive Functioning in Adults with Multiple Sclerosis (MS): Results of a Double-Blind Randomized Active-Placebo-Controlled 12-Week Trial —*Leigh Charvet, Jie Yang, Michael Shaw, Kathleen Sherman, Jianjin Xu, Lamia Haider, Lauren Krupp*

P2.171 Dialectical Behaviour Therapy Is an Effective Treatment for Depression and Anxiety in Multiple Sclerosis — *Mervin Blair, Sascha Gill, Denise Deluca, Grace Ferreria, Rebecca King, Andrew Ekblad, Denise Bowman, Joshua Hanna, Kathy Smolewska, Erin Warriner, Sarah Morrow*

P2.172 Elevated Brain Temperature Is Associated with Worse Fatigue in Relapsing Remitting Multiple Sclerosis Patients —*Victoria Leavitt, Alayar Kangarlu, Feng Liu, Claire Riley, James Sumowski*

P2.173 Multiple Sclerosis, Fatigue and Discordant Patient Reported Outcomes: Sleep Quality (Sleep-NeuroQoL), Neurological Disability and Depression — *Mark Gudesblatt, Karl Wissemann, Myassar Zarif, Barbara Bumstead, Lori Fafard, Cynthia Sullivan, Jeffrey Wilken, Marijean Buhse, Daniel Golan*

P2.174 Aerobic Exercise Improves Fitness and Cognition in Relapsing Remitting Multiple Sclerosis —*Rebecca Spain, Manoj Sammi, Bharti Garg, Rebecca Kingsland, Kerry Kuehl, William Rooney*

P2.175 Which Symptoms Correlate the Most to Health-Related Quality of Life (HRQoL) in MS? —*Rivka Green, Ilya Kister*

P2.176 The Association of Pathological Laughing and Crying and Cognitive Impairment in Multiple Sclerosis —*Joshua Hanna, Anthony Feinstein, Sarah Morrow*

P2.177 Successful Treatment of Paroxysmal Ataxia and Dysarthria in MS with Levitracetam —*Shikha Goodwin, Adam Carpenter*

P2.178 Gender Identity Disorders and Multiple Sclerosis Risk: A National Record-Linkage Study —*Julia Pakpoor, Clare Wotton, Klaus Schmierer, Gavin Giovannoni, Michael Goldacre*

P2.179 Assessment of Olfaction and Gustation in Multiple Sclerosis: Correlation with Cognition —*Ozgul Ekmekci, Naila Alakbarova, Ayse Nur Yuceyar*

P2.180 Antidepressant Use in Association with Multiple Sclerosis Disease Modifying Therapy —*Matthew Mirsky, Alexander Rae-Grant*

P2.181 Association of Disability Progression and Affective Disorders over Time in a Prospective 9 Year Follow Up Cohort of Patients with Multiple Sclerosis —*Matthias Knop, Sandra Nischwitz, Marcus Ising, Hans Faber, Frank Weber*

P2.182 Improvement of the Spatiotemporal Parameters in Walking in Primary Progressive Patients Treated with Fampridine —*Ines Gonzalez, Irene Pulido-Valdeolivas, David Gomez-Andres, Aida Orviz-Garcia, Andrea Montero-Atalaya, Juan Andres Martin-Gonzalo, Irene Rodriguez-Andonaegui, Estrella Rausell, Celia Oreja-Guevara*

P2.183 Sexual Dysfunction in Male Patients with Multiple Sclerosis —*lorena garcia, Alba Velazquez, Elena Bellosta Diago, Sonia Santos, Cristina Iniguez*

P2.184 Psychological Growth and Benefit Finding in Multiple Sclerosis (MS) and Their Relationship to Symptom Burden —*Allison Marziliano, Kathleen Sherman, Michael Shaw, Ariana Frontario, Leigh Charvet*

P2.185 Examining the Effects of Comorbidities on Disease-Modifying Therapy Use in Multiple Sclerosis — *Tingting Zhang, Helen Tremlett, Stella Leung, Feng Zhu, Elaine Kingwell, John Fisk, Virender Bhan, Trudy Campbell, Nancy Yu, Ruth-Ann Marrie*

P2.186 Parkinson's Disease in Multiple Sclerosis - A Population-Based, Nationwide Study in Denmark —*Anja Thormann, Melinda Magyari, Nils Koch-Henriksen, Bjarne Laursen, Per Soelberg-Sorensen*

P2.187 Allergies Are Associated with Increased Disease Activity in Multiple Sclerosis —*Camilo Diaz-Cruz, Alicia Chua, Brian Healy, Neda Sattarnezhad, Bonnie Glanz, Howard Weiner, Tanuja Chitnis*

P2.188 Persistent Use of Dalfampridine Extended Release on Healthcare Resource Utilization and Cost in Multiple Slerosis: A Claims Database Analysis —*Stephen Krieger, Alexander Niyazov, Dendy Macaulay, Emi Terasawa, Eric Wu, Peter Aupperle, Amy Guo*

P2.189 Hereditary Neuropathy with Liability to Pressure Palsies (HNPP) and Multiple Sclerosis (MS) in the Same Patient: Coincidence or Link? —*Nassima Baba-Ahmed, Aram Zabeti, Hani Kushlaf*

P2.190 Age-, Sex-, and Geographic Region-Specific Comorbidity in Patients with Multiple Sclerosis —*Natalie Edwards, Amy Phillips, Julie Locklear*

P2.191 Suicide Ideation in Multiple Sclerosis —*Aliza Ben-Zacharia*

P2.192 Sick Leave and Disability Pension in Patients with Multiple Sclerosis: A Longitudinal, Observational Study —*Erik Landfeldt, Anna Castelo-Branco, Axel Svedbom, Emil Lofroth, Andrius Kavaliunas, Jan Hillert*

P2.193 Cost Effectiveness of Multiple Sclerosis Therapeutic Strategies for Achieving No Evidence of Disease Activity —*Daniel Ontaneda, Olaisen Henry*

P2.194 Dynamic Hand Grip Objectively Measures Fatigue in Multiple Sclerosis (MS) and Improves with Transcranial Direct Current Stimulation (tDCS) — *Raghav Malik, Margaret Kasschau, Michael Shaw, Michael Porter, Colleen Schwarz, Leigh Charvet*

P2.195 Effects of a Program Designed to Improve Self-Efficacy and Subsequent Effects on Decreasing Loneliness and Depression Among People with Multiple Sclerosis —*Jennifer Kalina*

P2.196 Concepts Important for Multiple Sclerosis Patient Caregivers: Systematic Literature Review of Qualitative Studies —*Sarah Naoshy, Jie Ting, Crystal Watson, Delphine Jurado, Catherine Acquadro, Isabelle Savre*

P2.197 Lower Socioeconomic Status Is Linked to Worse Disability in Persons with Multiple Sclerosis —*James Sumowski, Maria Rocca, Victoria Leavitt, Alessandro Meani, Sarlota Mesaros, Jelena Drulovic, Paolo Preziosa, Giancarlo Comi, Massimo Filippi*

Headache: Therapeutics

P2.198 Cost-Effectiveness of Initial Prophylactic Treatment of Chronic Migraine: Oral Medications Versus OnabotulinumtoxinA —*Kristin Kelley, Anna Schoenbrunner, James Murphy*

P2.199 Short-Term Non-Invasive Vagus Nerve Stimulation (nVNS) for the Prevention of Menstrual Migraine —*Licia Grazzi, Gabriella Egeo, Anna Padovan, Eric Liebler, Piero Barbanti*

P2.200 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*

P2.201 IV Dihydroergotamine for Treatment of Status Migrainosus in Children - Efficacy and Tolerability — *Shannon Liang, Soe Mar*

P2.202 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*

P2.203 Treatment of Medication-Overuse Headache: A Systematic Review —*Chia-Chun Chiang, Todd Schwedt, Shuu-Jiun Wang, David Dodick*

P2.204 Mindfulness Versus Pharmacological Preventative Treatment for Chronic Migraine (CM) with Medication Overuse (MO): Preliminary Findings —*Licia Grazzi, Emanuela Sansone, Alberto Raggi, Matilde Leonardi, Domenico D'Amico, Frank Andrasik*

P2.205 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*

P2.206 Prophylaxis and Acute Medication Treatment Patterns in Migraine Patients Initiating Migraine Prophylactic Therapy —*Robert Lenz, Machaon Bonafede, Brett Maiese, J. Michael Woolley*

P2.207 Exploring the Effect of Childhood Abuse on Migraine, Depression and Anxiety Using Structural Equation Modeling —*Gretchen Tietjen, Monita Karmakar, Jon Elhai, Aliaksander Amialchuk*

P2.208 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*

P2.209 Real-World Utilization and Safety of OnabotulinumtoxinA for Chronic Migraine Headache Prophylaxis: Interim Analysis from an Observational Study in the European Union —*Manjit Matharu, Julio Pascual, Ingela Nilsson Remahl, Andreas Straube, Catherine Johannes, Dawn Odom, Lia Gutierrez, Elizabeth Andrews, Arlene Lum*

P2.210 A Randomized, Open-Label, Parallel Two-Arm Study Evaluating the Efficacy of H.P. Acthar Injection Gel in the Treatment of Adults with Treatment Resistant Chronic Migraine —*Roger Cady, Laszlo Mechtler, Peter McAllister, John Rothrock, Heather Manley, Ryan Cady*

P2.211 Glyburide As Treatment Option in Decreasing Intracranial Pressure Associated with Idiopathic Intracranial Hypertension. —*Roomana Ahad, Shawn Khosla, Iftekhar Ahmed*

P2.212 Importance of Documentation in the Primary Care Setting for Migraine Prevention —*Andrew Buletko, Jessica Winslow, Mark Stillman, Cynthia Bamford*

P2.213 To PREEMPT or Not to PREEMPT: Is There an Ideal Botulinum Toxin Injection Strategy for Migraine Prevention? —*Patrick Grogan, Maria Alvarez, Matthew Brock, Andrew Bursaw, Wendy Chao, Daniel Simmons, John Sladky, Jon Williams, Adam Willis*

P2.214 Treatment of Dopplerable Nummular Headache with Minimally Invasive Arterectomy Under Local Anaesthesia. Experience from the First 50 Cases —*Deborah Reed, Bahman Guyuron*

P2.215 Reduced Treatment-Emergent Nausea Using AVP-825 Vs. Sumatriptan Tablets: A Comparative Effectiveness Study —*Kenneth Shulman, James McGinley, Dawn Buse, Stephen Silberstein, RJ Wirth, Joao Siffert, Richard Lipton*

P2.216 Atorvastatin Versus Propranolol in Prevention of Episodic Migraine. A Randomized Clinical Trial — *Alejandro Marfil-Rivera, Hazael Flores*

P2.217 AVP-825 Reduces Nausea Faster Than Sumatriptan Tablets: A Comparative Effectiveness Study —*James McGinley, Kenneth Shulman, RJ Wirth, Stephen Silberstein, Dawn Buse, Joao Siffert, Richard Lipton*

Aging and Dementia: Therapeutics

P2.218 Daily Functioning Benefits of Adding Memantine to Stable Cholinesterase Treatment in Patients with Moderate to Severe Alzheimer's Disease: A Post Hoc Pooled Factor Analysis — *Gustavo Alva, Noel Ellison, Biplob Dass, Suzanne Hendrix*

P2.219 Caregiver Distress Related to Neuropsychiatric Symptoms is Reduced with Extended-Release Memantine - Cholinesterase Inhibitor Combination in Patients with Moderate to Severe Alzheimer's Disease —*Alireza Atri, Suzanne Hendrix, Noel Ellison, Victor Otcheretko, John Edwards*

P2.220 The Effect of Statins on Rate of Cognitive Decline in Mild Cognitive Impairment —*Kyle Smith, Paul Kang, Marwan Sabbagh*

P2.221 Memantine-Induced Chorea and Dystonia —*Letizia Borges, Borna Bonakdarpour*

P2.222 Deep Brain Stimulation of Frontal Lobe Networks to Treat Alzheimer's Disease —*Douglas Scharre, Emily Weichart, Dylan Nielson, Jun Zhang, Punit Agrawal, Per Sederberg, Michael Knopp, Ali Rezai*

P2.223 The Montefiore-Einstein Center for the Aging Brain: A New Model to Care for Those with Cognitive Impairment and Their Caregivers —*Jason Cohen, Joe Verghese, Jessica Zwerling*

P2.224 The Nuedexta ALS Treatment Trial —*Richard Smith, Erik Pioro, David Schoenfeld, Gary Pattee*

P2.225 PRISM II: Effectiveness of Dextromethorphan 20 Mg/Quinidine 10 Mg (NUEDEXTA®) for Treatment of Pseudobulbar Affect Secondary to Dementia, Stroke, or Traumatic Brain Injury: Combined Results of a Multicenter Open-Label Study —*Joao Siffert, Flora Hammond, David Alexander, Andrew Cutler, Stephen D'Amico, Rachelle Doody, William Sauve, Richard Zorowitz, Charles Davis, Paul Shin, Fred Ledon, Charles Yonan, Andrea Formella*

P2.226 Participant-Informant Relationship Affects Quality of Life Ratings in Incipient and Clinical Alzheimer's Disease —*Amy Lin, Jenny Brook, Joshua Grill, Edmond Teng*

P2.227 Optimizing Effect Sizes in Mild Alzheimer's Disease Clinical Trials — *Timothy Chang, Edmond Teng, Joshua Grill*

Alzheimer's Disease and Mild Cognitive Impairment

P2.228 Amyloid-β and Hyperphosphorylated Tau Synergy Drives Clinical Progression in Individuals with Mild Cognitive Impairment —*Tharick Pascoal, Andrea Benedet, Sulantha Mathotaarachchi, Jean-Paul Soucy, Tom Beaudry, Serge Gauthier, Pedro Rosa Neto*

P2.229 From Subjective Cognitive Impairment (PRE-MCI) to Alzheimer's Disease: A Two Year Follow UP Study of 143 Subjects —*Bernard Michel, Nathalie Sambuchi, Yonas Geda, Isabelle Muraccioli, Ronald Petersen*

P2.230 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*

P2.231 Quantitative Gait Parameters from MCI to Moderate Dementia: Results from the GOOD Initiative —*Allali Gilles, Joe Verghese, Olivier Beauchet*

P2.232 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*

P2.233 Visual Ratings of Medial Temporal Lobe Atrophy Correlate with CSF Tau Indices in Early-Onset Alzheimer's Disease. —*Elias Granadillo, Pongsatorn Paholpak, Mario Mendez, Edmond Teng*

P2.234 Cognitive and Functional Differences Between Delusions and Hallucinations in Alzheimer's Disease — *Winnie Qian, Corinne Fischer, Tom Schweizer, David Munoz*

P2.235 Prevalence of Amyloid Pathology in Primary Progressive Aphasia Variants: A Systematic Review and Meta-Analysis —*David Bergeron, Robert Laforce, Rik Ossenkoppele*

P2.236 Characterization of Olfactory Identification Deficit in Aging Vs. Alzheimer's Disease —*Matthew Woodward, Muhammad Ubaid Hafeez, Umar Hayyat, Awais Ahmed, Jesper Hagemeier, Li Yan, Qianya Qi, Ralph Benedict, Robert Zivadinov, Kinga Szigeti*

P2.237 The Clinical Phenotype of Late-onset Autosomal Dominant Alzheimer Disease Due to a *PSEN1* Mutation Resembles Sporadic Alzheimer Disease: A Single-family Case-control Study —*Gregory Day, Erik Musiek, Catherine Roe, Joanne Norton, Alison Goate, Carlos Cruchaga, John Morris*

Aging and Dementia: Other

P2.238 Proposed Diagnostic Criteria for Adult-onset Leukoencephalopathy with Axonal Spheroids and Pigmented Glia —*Takuya Konno, Kunihiro Yoshida, Toshiki Mizuno, Toshitaka Kawarai, Masayoshi Tada, Hiroaki Nozaki, Shu-Ichi Ikeda, Masatoyo Nishizawa, Osamu Onodera, Zbigniew Wszolek, Takeshi Ikeuchi*

P2.239 Spinocerebellar Ataxia Associated Psychosis and Tyrosine Hydroxylase Staining of the Midbrain — *Katherine Turk, Margaret Flannagan, Suman Jayadev, Dirk Keene, Thomas Bird*

P2.240 Clinical Manifestations of Adult Onset Neuronal Intranuclear Inclusion Disease Cases Presenting Leukoencephalopathy —*Jun Sone, Tomonori Inagaki, Keiko Mori, Kunihiko Araki, Michihito Masuda, Mari Yoshida, Yasushi Iwasaki, Fumiaki Tanaka, Masahisa Katsuno, Gen Sobue*

P2.241 WITHDRAWN

P2.242 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*

P2.243 Disproportionately Enlarged Subarachnoid Space Hydrocephalus (DESH) Associated with Acoustic Schwannoma with Exquisite Response to Ventriculoperitoneal Shunting: A Case Report —*Gabriel Pagani-Estevez, David Jones*

P2.244 Does Poor Gait Performance Predict Risk of Developing Dementia? Results From a Meta-analysis —*Beauchet Olivier, Joe Verghese, Gilles Allali*

P2.245 Risk Factors for Blood-Brain Barrier Disruption in Patients with Chronic Cerebrovascular Disease Presenting with Acute Stroke —*Nidhi Gupta, Marie Luby, Zurab Nadareishvili, Richard Benson, Amie Hsia, John Lynch, Richard Leigh*

Sunday, April 17

Poster Session 8:30 a.m.–5:30 p.m.

P2.246 Brain Arterial Diameters As Biomarkers of Cognitive Performance: Results from the Northern Manhattan Study —*Jose Gutierrez, Ken Cheung, Ahmet Bagci, Tatjana Rundek, Noam Alperin, Ralph Sacco, Mitchell Elkind, Clinton Wright*

General Neurology: Diagnostics and Therapeutics

P2.247 Elevated Levels of MIP1β in CSF of Patients with Amyotrophic Lateral Sclerosis —*Cesar Escamilla Ocanas, Hector Martinez, María González-Garza, Jorge Moreno-Cuevas, Juan Miguel Tenorio-Pedraza*

P2.248 GABAa - Receptor and LGI1 Antibody Encephalitis in a Patient with Thymoma —*Mateus Simabukuro, Mar Petit-Pedrol, Leandro Lucato, Luiz Castro, Ricardo Nitrini*

P2.249 Profiles of Growth Factors and Neurotrophins in Normal and Neuroinflammatory Cerebrospinal Fluid —*Andrew Breithaupt, Anupama Kumar, Carlos Pardo-Villamizar*

P2.250 Visual Hallucinations and Myoclonus: Previously Unreported Neurotoxic Effects of Blinatumomab —*Anisha Bhangav, William Schmalstieg*

P2.251 VGKC-Complex Antibody Encephalitis: Clinical Manifestations and Response to Immunotherapy —*Galeno Rojas, Ignacio Demey, Julieta Quiroga, Luciana Leon Cejas, Pablo Bonardo, Claudia Uribe Roca, Virginia Laura Parisi, Emilia Gatto, Carlos Rugilo, Juan Ollari, Manuel Fernandez Pardal, Ricardo Reisin*

P2.252 Impairments in Finger Tapping the Distal Thumb Crease on the Non-Dominant Side Are Highly Sensitive for Identifying Upper Motor Neuron Lesions —*Afsaneh Shirani, Braeden Newton, Darin Okuda*

P2.253 An Association of Reversible Splenial Lesion Syndrome (RESLES) and Anti-VGKC Autoantibody Syndrome: A Case Report —*Thomas Gilder, Jason Hawley, Brett Theeler*

P2.254 A New Method of Eliciting Pyramidal Tract Impairment in Adults —*Ferdnand Osuagwu*

P2.255 Efectiveness of Pregabalin Compared with Amytriptilin in Acute Herpetic Neuralgia —*Arjola Gabrani, Drini Dobi, Sonila Tomori, Florida Berberi, Ariel Como, Mira Rakacolli, Kapisyzi*

P2.256 Pragmatic Assessment of Trokendi XR (Extended-Release Topiramate) Use in Clinical Practice —*Welton O'Neal, Elizabeth Hur, Tesfaye Liranso, Peri Barr*

P2.257 A Case of Hashimoto's Encephalopathy Treated with Only Oral Thyroid Medication and Symptomatic Therapy for Seizures and Psychosis, but Without Steroids —*Nidhi Kapoor, James Couch*

General Neurology

P2.258 Neurologic Presentation of K2: A City Hospital Experience —*Anne Kleiman, Abhirami Ravichandran, Claude Macaluso, John Brust*

P2.259 Metastatic Gastrointestinal Stromal Tumor(GIST) Causing Numb Chin Syndrome —*Lane Tinsley, Joon-Shik Moon, Divya Singhal, Mohammad Khalil*

P2.260 Acute Inflammatory Demyelinating Polyneuropathy Recurrence As a Pharyngeal-Cranial-Brachial Variant —*Preethy Pankaj, Traci Ryan*

P2.261 CNS Infection Precipitating Symptoms from Formerly Asymptomatic Arachnoid Cysts: Review of Two Adult Cases —*Taha Gholipour, Jesse Thon, Matthew Bevers, Galen Henderson, Steven Feske*

P2.262 Sneezing Triggered by Onabotulinum Toxin Injections —*Kristopher Kowal, Wayne Cornblath*

P2.263 Two Atypical Cases of Stiff-Person Syndrome —*Karina Pires, Caroline Amaral, Camila Pupe, Bruno Pessoa, Marco Orsini, Raquel Custódio, Ana Andorinho, Olívia Souza, Osvaldo Nascimento*

P2.264 B-Cell Lymphoma Presenting As Bilateral Facial Nerve Palsy: Case Report and Literature Review —*Jagkirat Singh*

P2.265 AMPA Receptor Antibody Encephalitis in a Young Man Associated with Atypical Findings. Case Report —*Lecio Pinto, Mateus Simabukuro, Raphael Spera, Marcelo Park, Arlindo Paquisi, Lucas Pedruci, Camila Kukita, Leandro Lucato, Luiz Castro, Ricardo Nitrini*

P2.266 A Rare Case of Severe Serotonin Syndrome Leading to Bilateral Compartment Syndrome —*Verena Haringer, Judith Warner*

P2.267 An Unusual Case of Klippel-Trenaunay-Weber Syndrome —*Rodica Bernatowicz, Rebecca Kuenzler*

Treatments of Peripheral Neuropathies and Cramps

P2.268 High Dose Intravenous Immunoglobulin is Effective in Painful Diabetic Polyneuropathy Resistant to Conventional Treatments. Results of a Double Blind, Randomized, Placebo-Controlled, Multicenter Trial. —*stefano jann, Raffaella Fazio, Dario Cocito, Giovanni Antonini, Angelo Schenone, Antonio Toscano, Gerolama Marfia, Luisa De Toni Franceschini, Anna Mazzeo, Elio Agostoni*

P2.269 Intravenous Immunoglobulin (IVIg) Treatment-Related Fluctuations in Chronic Inflammatory Demyelinating Polyneuropathy (CIDP) Patients Using Daily Grip Strength Measurements (GRIPPER): Study Design and Progress Update —*Jeffrey Allen, Mamatha Pasnoor, Ted Burns, Senda Ajroud-Driss, John Ney, Albert Cook, John Kissel, Kenneth Gorson, Richard Lewis, Melvin Berger, Patty Riley, David Schaefer, Walton Timothy*

P2.270 Trends in Outcome and Cost of Hospitalization in Chronic Inflammatory Demyelinating Polyneuropathy Patients Treated with IVIG, Versus Steroid or Other Treatments (2009-2013). A New York Statewide Planning and Research Cooperation System (SPARCS) Database Report —*Mohammad El-Ghanem, Francisco Gomez, Abu Nasar, Nizar Souayah*

P2.271 Spatiotemporal Gait Changes Following IVIG Treatment for CIDP —*Mary Vo, Russell Chin, Bridget Carey, Naomi Feuer, Caroline Miranda, Norman Latov*

P2.272 Immunoglobulin (Ig) Use for Neurological Diagnoses in the Home Setting —*Timothy Walton, Patty Riley, Kathee Kramm, David Luckey, David Schaefer, Mel Berger*

P2.273 IVIg Versus Plasmapheresis Outcomes and Costs in Patients Diagnosed with Guillian-Barre Syndrome(2009-2013). A New York Statewide Planning and Research Cooperation System (SPARCS) Database Report —*Mohammad El-Ghanem, Francisco Gomez, Abu Nasar, Nizar Souayah*

P2.274 SOM0226, a Repositioned Compound for the Treatment of TTR Amyloidosis —*Josep Gamez, Núria Reig, Salvador Ventura, Maria Maria Salvado, Raul Insa*

P2.275 Synthetic TRP Activators Demonstrate Efficacy in Preventing Human Muscle Cramping: Potential New Drug Treatment for Muscle Cramps and Spasticity —*Laura Rosen, Robin Sutherland, Eric Solberg, Angela Tornblom, Brooke Hegarty, Tom Wessel, Christoph Westphal, Jennifer Cermak*

Acute Therapy: Thrombolysis and Adjuvant Therapy

P2.276 Eptifibatide Is Safe and May Improve Outcomes in Stroke Patients Undergoing Thrombectomy After Receiving IVtPA —*Harina Chahal, Siddhart Mehta, Mohammad Moussavi, Daniel Korya, Jaskiran Brar, Swathi Kondapalli, Mena Samaan, Azka Shaikh, Rushil Kalola, Yong-Bum Song, Jawad Kirmani*

P2.277 Effect of Airway Titration Treatment on Outcomes After Acute Stroke: A Meta-Analysis of Randomized and Non Randomized Studies —*Georgios Tsivgoulis, Nitin Goyal, Muhammad Ishfaq, Abhi Pandhi, Andrei Alexandrov*

P2.278 Is Eptifibatide a Viable and Safe Option As Stand-Alone Therapy for Acute Ischemic Stroke Patients? —*Siddhart Mehta, Mohammad Moussavi, Daniel Korya, Jaskiran Brar, Harina Chahal, Joshua Daniel, Mena Samaan, Spozhmy Panezai, Jawad Kirmani*

P2.279 Main Trunk MCA and Division MCA Occlusions; Differences in Recanalization Times, Number of Stent Retriever Passes and Clinical Outcomes. A Single-Center Experience —*Ihtesham Qureshi, Alberto Maud, Salvador Cruz-Flores, Paisith Piriyawat, Gustavo Rodriguez*

P2.280 Use of Cardiac Stents to Reperfuse the Brain —*Mohammad Moussavi, Siddhart Mehta, Daniel Korya, Jaskiran Brar, Nile Khan, Shayan Nizam, Jawad Kirmani*

P2.281 A Brain Attack Protocol Reducing Length of Hospitalization in Stroke Patients at the Cleveland Clinic Florida —*Dennys Reyes, Lixandra Gonzalez, Pirouz Piran, Subin Mathew, Alex Linn, Samer Riaz, Raja Boddepalli, Efrain Salgado*

P2.282 Stroke Thrombolysis in a Tertiary Care Teaching Hospital in Saudi Arabia - A Single Center Experience —*Ismail Khatri, Ali Alkhathaami, Ahmad Abulaban, Ousaima Alhamouieh, Sarah Scriven, Maisoun Tarawneh, Deema Alrasheed, Suleiman Kojan, Naser Alotaibi, Athal Al-Khalaf, Ali Mohammed Alshehri, Ashraf El-Metwally*

P2.283 Efficacy of IV TPA in Treatment of Large Vessel Ischemic Strokes Not Amenable to Endovascular Therapy —*Jaskiran Brar, Spozhmy Panezai, Joshua Daniel, Jawad Kirmani, Siddhart Mehta, Daniel Korya, Florence Chukwuneke, Caroline Vloka, Mohammad Moussavi*

P2.284 Safety and Outcome of Thrombolysis in Acute Stroke with Prolonged Onset-to-Treatment Times and Low National Institute of Health Stroke Scale Scores. Report on Experience in China, First 1000 Patients of 3300 Treated —*Lewis Eberly, Pei-Lan Zhang, Jin-Huan Wang, Yu-Xin Wang, Yan Chen, Chen-Hao Zhang, Chen-Hua Li, Zhong Dong, Jing Liang, Zuo Wang, Patrick Oliverio, Edward Greenberg, Nilesh Vyas, John Cochran*

P2.285 Neuroprotective Effect of Progranulin Against Focal Cerebral Ischemia Via Inhibition of Proteolysis of TDP-43 by Caspase-3 —*Masato Kanazawa, Masafumi Toriyabe, Misaki Koyama, Minami Miura, Tetsuya Takahashi, Masatoyo Nishizawa, Takayoshi Shimohata*

Acute Endovascular Therapy: Other Considerations

P2.286 Intra-Arterial Treatment for Acute Ischemic Stroke: A Meta-Analysis —*Shaheen Lakhan, Walther McClellan, Truc Nguyen*

P2.287 National Trends in Use of Endovascular Stroke Treatment Among Academic Medical Centers (2009-2015) —*Zachary Threlkeld, Elan Guterman, Wade Smith, Jay Chol Choi, Anthony Kim*

P2.288 Eligibility for Revascularization in Acute Stroke: a 12 Year Single Center Statistics —*Peter Vanacker, Dimitris Lambrou, Ashraf Eskandari, Pascal Mosimann, Patrik Michel*

P2.289 Futile Recanalization Rate and Predictors in Subjects with Anterior Circulation Occlusion in IMS-III Trial —*Haitham Hussein, Muhammad Saleem, Adnan Qureshi*

P2.290 Endovascular Thrombectomy for Anterior Circulation Stroke: Systematic Review and Meta-Analysis —*Charlene Ong*

P2.291 Clinical Outcomes of Medical Vs. Endovascular Treatment in Proximal Carotid Artery Occlusions —*Yamin Shwe, Chunyan Cai, Anjail Sharrief, Amrou Sarraj*

P2.292 Radiographic and Symptomatic Brain Embolism in Cardiac Interventions: A Systematic Review and Pooled Analysis —*Sung Cho, Abhishek Deshpande, Vinay Pasupuleti, Adrian Diaz, Ken Uchino*

P2.293 Should the Decision for Mechanical Thrombectomy Be Based on Pre-Procedure CT Head Showing Early Changes in Specific Regions of the Brain? —*Mohammad Moussavi, Daniel Korya, Siddhart Mehta, Jaskiran Brar, Mena Samaan, Swathi Kondapalli, Briana DeCarvalho, Jawad Kirmani*

P2.294 Impact of Variations in Thrombolysis in Cerebral Infarction Grading Scheme Between Clinical Trials on Rates of Post Thrombectomy Partial Recanalization —*Asif Khan, Mohammad Rauf Afzal, Nauman Jahangir, Mushtaq Qureshi, Nabeel Herial, M. Fareed Suri, Adnan Qureshi*

P2.295 The Rate of Hemicraniectomy Utilization for Acute Ischemic Stroke Patients Undergoing Endovascular Treatment Is Decreasing in the United States —*Saqib Chaudhry, Ameer Hassan, Mohammad Afzal, Riaz Ahmed, Haseeb Rahman, Ahmed Malik, Vishal Jani, Anmar Razak, Adnan Qureshi*

Acute Therapy: IV tPA

P2.296 The New Alteplase (tPA) Package Insert: What Is the Potential Impact? —*Harn Shiue, Karen Albright, Kara Sands, April Sisson, Michael Lyerly, Toby Gropen*

P2.297 New Get with the Guidelines (GWTG) Target of Less Than 45 Minutes Improves Door-to-Needle Time (DNT) for Intravenous Thrombolysis —*Daniel Sacchetti, Grayson Baird, Matthew Siket, Ali Saad, Shadi Yaghi, Brian Silver, Muhib Khan*

P2.298 Apparent Diffusion Coefficient (ADC) Reversal As a Marker of Early Reperfusion in Acute Ischemic Stroke (AIS) Patients Treated with TPA —*Alexis Simpkins, Richard Benson, Amie Hsia, Marie Luby, John Lynch, Zurab Nadareishvili, Lawrence Latour, Richard Leigh*

P2.299 Computed Tomography Perfusion Imaging in Acute Ischemic Stroke: Do the Benefits Outweigh the Costs? —*Brooke Willows, John Karis*

P2.300 Inaccurate Emergency Room Body Weight Measurement Is Significantly Associated with Poor Outcomes for Thrombolysis Patients —*Thomas Kodankandath, Christine Ciaramella, Jane Shaji, Nadia Sotudeh, Sammy Pishanidar, Claire Carrazco, Rohan Arora, Richard Libman, Paul Wright*

P2.301 Variables Affecting Stroke Outcome for TPA Received Between 3 to 4.5 Hours —*Crystal Yeo, David McCane, Larry Katz, Ken Ling, Allison Capetillo, Donald Bledsoe, David Chiu*

P2.302 Should Early Identification of Stroke Patients Be Focused on Stroke Mimics or Chameleons? A Retrospective Study on the Hospital Stroke Chameleon Prevalence —*Pitcha Chompoopong, R Nassir, Darine Kassar, Ihtesham Qureshi, Alberto Maud, Gustavo Rodriguez, Salvador Cruz-Flores, Paisith Piriyawat*

P2.303 Pre-Mixing TPA: Moving Past Gestalt —*Kathryn McCarthy, Lisa Caputo, Michelle Whaley, Christopher Fanale, David Bar-Or*

P2.304 A Brain Attack Protocol Achieving Better Door to Needle Time in Stroke —*Lixandra Gonzalez, Dennys Reyes, Pirouz Piran, Subin Mathew, Alex Linn, Efrain Salgado*

P2.305 Safety and Efficacy of IV-tPA Use in Patients 80 Years and Older- A Retrospective Review —*Helena Lau, Jose Romero, Stephanie Kwan, Carlos Kase, Viken Babikian*

Stroke Systems of Care

P2.306 HMG-CoA Reductase Inhibitor (Statin) Prescribing for Ischemic Stroke Patients at Hospital Discharge —*Karen Albright, Farhaan Vahidy, Makenna Moore, Alyana Samai, Laurie Schluter, Sheryl Martin-Schild*

P2.307 Stop Stroke© Acute Care Coordination Medical Application; a Brief Report on Post Implementation Performance at a Primary Stroke Center —*Robert Dickson, Dineth Sumatipala*

P2.308 Results of Systemizing Stroke Care in Acute Endovascular Patients —*Angela Hawkins, Coleman Martin, Naveed Akhtar, William Holloway, Karin Olds, Harold Morris*

P2.309 Educational Intervention Reduces Utilization of Low-Value Testing in Cerebrovascular Inpatients: An Example of Rapidly Implementable Quality Improvement —*Eugene Scharf, Amy Jones, Jennifer Martinez-Thompson, Michael Pichler, Alexander Cohen, Sarah Clark, Kamilia Nozile-Firth, Lyell Jones*

P2.310 Delays in the Emergency Department, Medical Complications of Stroke and Predictors of Clinical Outcomes: The McGill Experience —*Bing Yu Chen, Robert Cote, Lucy Vieira, Lo Benjamin, Catherine Legault*

P2.311 Stroke Code to CT - Does Stroke Severity Affect Timing? —*Kimberly Kwei, Natalie Wilson, John Liang*

P2.312 Institution of Code Neuro-Intervention and Its Impact on Reaction and Treatment Times —*Jaskiran Brar, Daniel Korya, Siddhart Mehta, Spozhmy Panezai, Mohammad Moussavi, Ravdeep Oberoi, Jawad Kirmani*

P2.313 Does Transferring Patients to Stroke Centers Increase Length of Stay —*Tiffany Cossey, Shima Bozorgui, Amanda Jagolino, Farhaan Vahidy, Tzu Ching Wu, Sean Savitz*

P2.314 The Emergency Medical Services Impact on Stroke Patient Management Arriving at the Cleveland Clinic Florida —*Dennys Reyes, Lixandra Gonzalez, Samer Riaz, Raja Boddepalli, Subin Mathew, Pirouz Piran, Alex Linn, Efrain Salgado*

P2.315 A Comparison of Door-to-Puncture Times in Expedited Management of Acute Ischemic Stroke Patients —*Lamba Nayan, Alfred See, Priyank Khandelwal, Nirav Patel, Mohammad Aziz-Sultan*

P2.316 Evaluating Efficacy of a Stroke Code Process in Identifying Stroke Mimics Since Its Implementation in a New Primary Stroke Center —*Kendall Blair, Elizabeth Samuels, Joseph Candelore, Gus Slotman, Alka Farmer*

P2.317 Patient Selection for Intra-Arterial Therapy in Acute Ischemic Stroke: Concordance Between Prior Practice Patterns at Strong Memorial Hospital and Current Evidence from Randomized Clinical Trials —*Anthony Noto, Dushyant Damania, Nancy Kung, Justin Chandler, Jason Liew, Heather Finley, Rajiv Mangla, Babak Jahromi, Amrendra Miranpuri, Bogachan Sahin*

P2.318 Role of the Stroke Unit in Reducing the Medical and Neurological Complications Post Stroke in Patient Admitted at Royal Hospital from 2009-2015 —*Amal Al-Hashmi, Ahmed Al-Saadi, Hotchand Maheshwari, Raya Almamari, Cheska Salunga, Ria Marfil*

P2.319 Intracerebral Hemmorhage Transfers a Comprehensive Stroke Center Experience —*Osman Mir, Lindsey Snodgrass, Dion Graybeal, Anwarul Haq, Ayman Haq, Farhaan Vahidy, Mahdi Haq, Anna Brown*

P2.320 Risks and Benefits of Bypassing the Emergency Department for Ischemic Stroke Cases Transferred for Endovascular Therapy —*Manmeet Kaur, Karen Albright, Susan Deveikis, John Deveikis, Kara Sands, Harn Shuie, Benjamin Jones, April Sisson, Michael Lyerly, Mark Harrigan, Toby Gropen*

P2.321 Older Patients with Acute Ischemic Stroke Receive Fewer Neurosurgery and Cardiology Consultations —*Ayaz Khawaja, Karen Albright, Amelia Boehme, Kara Sands, Reza Bavarsad Shahripour, Harn Shiue, Toby Gropen*

P2.322 Stroke Unit Support and Certification Program of Korean Stroke Society - The First Term Report —*Joung-Ho Rha, Hee-Kwon Park, Cindy Yoon*

P2.323 Factors Associated with Follow-Up in Stroke Clinic After Hospital Discharge —*Ekaterina Bakradze, Susan Taboada, Priya Narwal, Amre Nouh*

P2.324 Does Comprehensive Stroke Center Recommended Nurse Training Result in Earlier In-Hospital Stroke Recognition? —*Trevor Gregath, Vijay Pandav, Evgeny Sidorov, Ankur Garg*

Acute Endovascular: The Need for Speed

P2.325 Improving Door to Puncture Times: Pilot Quality Improvement Project —*Priyank Khandelwal, Kevin Ramdas, Luis Guada, Fadar Otite, Nicole Beaton, Anita Tipirneni, Eric Peterson, Dileep Yavagal*

P2.326 Impact of Transfer Status into a Comprehensive Stroke Center on Outcomes Among Intra-Arterial Therapy Patients —*Donald Frei, Jan Leonard, Judd Jensen, Richard Bellon, Michelle Whaley, Kathryn McCarthy, Jeffrey Wagner, David Bar-Or*

P2.327 Improving Door to Puncture Times (Need of Hour): Pilot Quality Improvement Project —*Priyank Khandelwal, Kevin Ramdas, Fadar Otite, Nicole Beaton, Anita Tipirneni, Luis Deldago, Eric Peterson, Dileep Yavagal*

P2.328 Symptom Onset to Groin Puncture Determines Stroke Outcome: A Meta-Analysis of Recent Acute Cerebrovascular Thrombectomy-After-Infarction Trials (MR ACTION) —*Jawad Kirmani, Daniel Korya, Siddhart Mehta, Jaskiran Brar, Azka Shaikh, Rushil Kalola, Mena Samaan, Audrey Arango, Spozhmy Panezai, Mohammad Moussavi*

P2.329 Low T3 Syndrome Predicts Poor Collateral Circulation in Cerebral Infarction Patients with Large Artery Atherosclerosis —*Guan-Hui Wu, Wei-Feng Luo*

P2.330 CT-Based Collateral Scoring Can Predict Ischemic Penumbra Volume in Acute Ischemic Stroke —*Steve O'Donnell, Jennifer Majersik, Lee Chung, A. Gordon Smith, Bailey Dunleavy, Adam De Havenon*

P2.331 Non-Invasive Vascular Imaging Before Endovascular Therapy: Time Wasted or Brain Saved? —*Benjamin Jones, Karen Albright, Kara Sands, Emily Schlitz, April Sisson, Michael Lyerly, Susan Deveikis, Toby Gropen*

P2.332 Does the Presence of Pretreatment Hyperdense Middle Cerebral Artery Sign Predict the Outcomes of Intraarterial Thrombectomy Plus Intravenous TPA for Acute Stroke? —*Ashkan Mowla, Haris Kamal, Navdeep Lail, Babar Cheema, Bijal Mehta, Aurangzeb Memon, Peyman Shirani, Christopher Deline, Aaron McMurtray, Marilou Ching, Robert Sawyer*

P2.333 Time of Recanalization Since Symptoms Is a Strong Predictor of Outcome in Patients Who Underwent Stent Retriever Thrombectomy from Middle Cerebral Artery Occlusion —*Yahia Lodi, Varun Reddy*

P2.334 Recanalization of Cerebral Arterial Occlusion Just Before Emergent Angiography —*Joung-Ho Rha, Hee-Kwon Park, Cindy Yoon, Soo-Jeong Kim, Eung-Seok Lee, Dan A Oh*

Sunday, April 17

Poster Session 8:30 a.m.–5:30 p.m.

Movement Disorders: Parkinson's Disease Therapeutics

P2.335 Efficacy of Sublingual Apomorphine (APL-130277) for the Treatment of OFF Episodes in Patients with Parkinson's Disease —*Robert Hauser, Bruce Dzyngel, Thierry Bilbault, Holly Shill, Albert Argo*

P2.336 The Effects of Sublingual Apomorphine (APL-130277) by Disease Severity on the Acute Management of OFF Episodes in Parkinson's Disease — *Holly Shill, Eric Pappert, Bruce Dzyngel, Thierry Bilbault, Albert Argo*

P2.337 Safety of Sublingual Apomorphine (APL-130277) for the Treatment of OFF Episodes in Patients with Parkinson's Disease —*Stuart Isaacson, Eric Pappert, Bruce Dzyngel, Thierry BIlbault, Albert Argo*

P2.338 Dosing Patterns During Conversion to IPX066, Extended-Release Carbidopa-Levodopa, from Other Carbidopa-Levodopa Formulations in Advanced Parkinson's Disease Patients — *John Morgan, Mark Stacy, Robert Rubens, Sarita Khanna, Suneel Gupta*

P2.339 Characteristics of Advanced Parkinson's Disease Patients Who Discontinued During Conversion to IPX066, Extended-Release Carbidopa-Levodopa —*David Kreitzman, Rohit Dhall, Sherron Kell, Sarita Khanna, Suneel Gupta*

P2.340 Efficacy of IPX066, Extended-Release Carbidopa-Levodopa: Subgroup Analysis in Advanced Parkinson's Disease Patients with Troublesome Dyskinesia — *Rohit Dhall, Lynn Struck, Robert Rubens, Sarita Khanna, Suneel Gupta*

P2.341 An Update on STEADY-PD III: A Phase 3 Study of Isradipine As a Disease Modifying Agent in Patients with Early Parkinson's Disease —*Tanya Simuni, Jillian Lowell, David Oakes, Karen Hodgeman, Rebecaa Harkin, Brittany Greco, Kevin Biglan*

P2.342 A Phase 1 Clinical Study of the Retinoid X Receptor (RXR) Selective Agonist IRX4204 in Patients with Early Parkinson's Disease (PD) —*Martin Sanders, Rosh Chandraratna, Kenneth Marek, Danna Jennings*

P2.343 RECOGNISE: Rasagiline Effects on Cognition in Parkinson's Patients with Mild Cognitive Impairment —*Reversa Mills, Ishita Gambhir, Jill Farmer, Fernando Pagan*

P2.344 Effect of Levodopa-Carbidopa Intestinal Gel on Resting Tremor in Patients with Advanced Parkinson's Disease —*Hubert Fernandez, Jordan Dubow, Weining Robieson, Krai Chatamra, Susan Eaton, Janet Benesh, Per Odin*

Movement Disorders: Therapeutics

P2.345 Domperidone a Retrospective Review of Tolerability and Safety Profile —*Behrang Saminejad, Lilly fagatele, Ka-Ho Wong, Katie Budo, David Shprecher*

P2.346 ROCK Inhibition by Fasudil As Disease-Modifying Translational Approach in the Treatment of Parkinson's Disease and Amyotrophic Lateral Sclerosis —*Paul Lingor, Lars Tatenhorst, Jan Koch, Tiago Outeiro, Markus Zweckstetter, Mathias Baehr, Lars Toenges*

P2.347 A Randomized Double-Blind Placebo- and Positive-Controlled Crossover Study to Evaluate the Effects of Single Doses of SD-809 (Deutetrabenazine) and Tetrabenazine on the Corrected QT Interval —*David Stamler, Elliot Offman, Margaret Bradbury, Lisa De Boer*

P2.348 Cost Effectiveness of Droxidopa in Patients with Neurogenic Orthostatic Hypotension: Post Hoc Economic Analysis of Phase 3 Trial Data —*Lawrence Hewitt, Clement Francois, Robert Hauser, Julie Dorey, Elizaveta Kharitonova, Samuel Aballea*

P2.349 Intranasal Stem Cells for Parkinson's Disease Model in Mice — *Dina Sabry, Mohamed Salama, Mohamed Sobh, Mahmoud Emam, Mohamed El-Gamal, Ahmed Abdalla, Ahmed Lotfy, Mahmoud El-Qotb*

P2.350 The Symptomatic Effect of Gabapentin on Cerebellar Ataxia - A Double Blind Placebo-Controlled Trial — *Sarah Doss, Linda Burmester, Charlotte Wunsch, Nadja Neidel, Carsten Finke, Friedemann Paul*

P2.351 Effects of Acetyl-DL-Leucine on Cerebellar Ataxia - a Multinational, Multicenter, Randomized, Double-blind, Placebo-controlled, 2-way Crossover Phase III Trial (ALCAT): Study Protocol — *Katharina Feil, Julian Teufel, Otmar Bayer, Christine Adrion, Ulrich Mansmann, Michael Strupp*

P2.352 Haloperidol As an Abortive and Preventative Agent in Status Dystonicus —*Ilena George, Duarte Machado*

P2.353 Dystonia Treatment: A Survey of Medication Use in an International Biorepository —*Sarah Pirio Richardson, Ashley Wegele, Betty Skipper, Amanda Deligtisch*

Education Research: Graduate Medical Education

P2.354 Conference Curriculum Content and Organization in United States Neurology Residencies: A Cross-Sectional Survey —*Arthie Jeyakumar, Pravin Khemani, Ralph Józefowicz, Prasad Shirvalkar, Augusto Miravalle, Constantine Farmakidis*

P2.355 An Analysis of How Neurology Trainees Select Neurology Fellowships — *Carolyn Cahill*

P2.356 Teaching Neuroimag(ing): Lowering the Cost of Entry for Neurology Trainees to Learn and Use Cutting-Edge Neuroimaging Techniques to Ask Research Questions in the Clinical Setting —*Alexander Cohen, Daniel Kenney, Hugo Botha, Jan-Mendelt Tillema*

P2.357 Simulation of Neurological Emergencies for Milestones-Based Learning and Assessment —*Caitlin Loomis, Kimberly Robeson, Daniel DiCapua, Kelly Dodge, Leigh Evans, Tiffany Moadel, Luis Cruz, Jeremy Moeller*

P2.358 Creation and Analysis of a Comprehensive, Formalized Approach to Neurology Resident Clinical Skills Evaluation: Year 1 Feasibility Data — *Robert Thompson-Stone*

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, Farhaan Vahidy, Sean Savitz, Tzu-Ching Wu*

P2.360 Neurology Resident Comfort with Ethics and Professionalism —*Stephen Trevick, 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 Fheodoroff*

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 Vásquez-Cedeño, Rocío García-Santibáñez, Rocío Santibáñez-Vásquez*

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 Doerrler, 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 Hohler*

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

AAN GivesBack & UBC Science

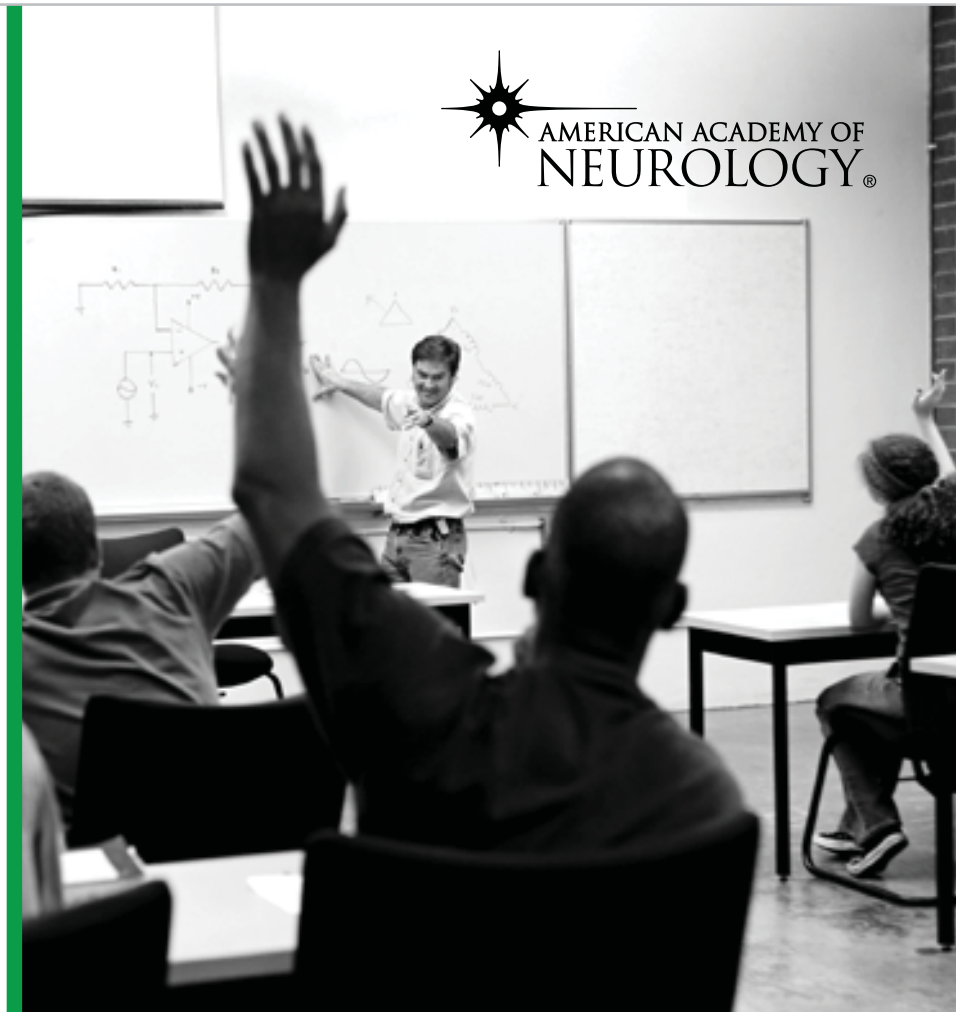
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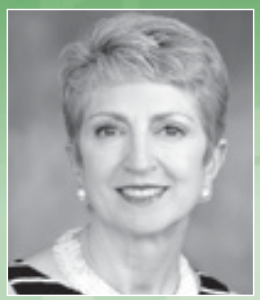


AAN 2016 Annual Meeting

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



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



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



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?

Sunday, April 17

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 Elsone, Enrique Alvarez, Nadja Borisow, Melissa Cortez, Farrah Mateen, Maureen Mealy, Jaime Sorum, Kerry Mutch, Sean Tobyne, 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 Sonderen, Helena Arino, Mar Petit-Pedrol, Frank Leypoldt, Peter Körtvelyessy, Eric Lancaster, Paul Wirtz, Marco Schreurs, Peter Sillevis 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-Desmethylclobazam 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 (rCPS) 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, Krisztina 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.

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

Ex Health & Wellness **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**

Ex Real World of Neurology **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. Safdieh, 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*

Sunday, April 17

1:00 p.m.–5:30 p.m. Integrated Neuroscience Session

I3 SIP 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. **I3.001 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. **I3.002 Data Blitz**
Peripheral and Central Nervous System Distribution of a CGRP Neutralizing Antibody [^{125}I]-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. **I3.003 Data Blitz**
Mindfulness Versus Pharmacological Preventative Treatment for Chronic Migraine (CM) with Medication Overuse (MO): Preliminary Findings —*Licia Grazzi, Emanuela Sansone, Alberto Raggi, Matilde Leonardi, Domenico D'Amico, Frank Andrasik*

2:45 p.m.–2:50 p.m. **I3.004 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.

I3.001 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*

I3.002 Peripheral and Central Nervous System Distribution of a CGRP Neutralizing Antibody [^{125}I]-LY2951742 in Male Rats —*Michael Johnson, Bernice Ellis, Deanna Maren, S. Michelle Morin, Victor Wroblewski, Kirk Johnson*

I3.003 Mindfulness Versus Pharmacological Preventative Treatment for Chronic Migraine (CM) with Medication Overuse (MO): Preliminary Findings —*Licia Grazzi, Emanuela Sansone, Alberto Raggi, Matilde Leonardi, Domenico D'Amico, Frank Andrasik*

I3.004 Non Pharmacologic Treatments of Headache from the 19th to 21st Centuries —*Noah Rosen, Robert Duarte*

I3.005 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*

I3.006 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*

I3.007 Short-Term Non-Invasive Vagus Nerve Stimulation (nVNS) for the Prevention of Menstrual Migraine —*Licia Grazzi, Gabriella Egeo, Anna Padovan, Eric Liebler, Piero Barbanti*

I3.008 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*

I3.009 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*

I3.010 Pharmacogenomics in Headache Practice —*Martin Bringham, Monika Kumar, Suresh Kumar*

I3.011 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*

I3.012 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 Lirng, Yen-Feng Wang, Wei-Ta Chen, Shuu-Jiun Wang*

I3.013 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. **I3.005 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. **I3.006 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. **I3.007 Data Blitz**
Short-Term Non-Invasive Vagus Nerve Stimulation (nVNS) for the Prevention of Menstrual Migraine —*Licia Grazzi, Gabriella Egeo, Anna Padovan, Eric Liebler, Piero Barbanti*

5:05 p.m.–5:10 p.m. **I3.008 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**

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 Vedra 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 I Talk sessions
- The program is part of the Experiential Learning Area sessions

Real World of Neurology

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*.

Sunday, April 17

1:00 p.m.–5:30 p.m. Integrated Neuroscience Session

I4 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. **I4.001 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 Pruijn, Hector Chinoy, Baziel van Engelen*

1:50 p.m.–1:55 p.m. **I4.002 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. **I4.003 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 Pacheck, Sung Yim, Kush Kapur, Basil Darras*

2:45 p.m.–2:50 p.m. **I4.004 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.

I4.001 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 Chinoy, Baziel van Engelen*

I4.002 NKG2D - IL-15 Signaling Is Critically Involved in the Pathogenesis of Inflammatory Myopathies —*Tobias Ruck, Ali Afzali, Stefan Bittner, Heinz Wiendl, Sven Meuth*

I4.003 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 Pacheck, Sung Yim, Kush Kapur, Basil Darras*

I4.004 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*

I4.005 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*

I4.006 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*

I4.007 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*

I4.008 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*

I4.009 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*

I4.010 Exercise Training Normalizes Mitochondrial Function in Myopathies Due to Heteroplasmic Mitochondrial DNA (mtDNA) Mutations —*Ronald Haller*

I4.011 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*

I4.012 Diagnostic Algorithm in Adult-Onset Mendelian PEO Associated with Mitochondrial Disease —*Grainne Gorman, Yi Shiau Ng, Ewen Sommerville, Andrew Schaefer, Robert Taylor, Robert McFarland, Doug Turnbull*

I4.013 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. **I4.005 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. **I4.006 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. **I4.007 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. **I4.008 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**

I5 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. **I5.001 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. **I5.002 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. **I5.003 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. **I5.004 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.

I5.001 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*

I5.002 Differential Effects of Hormonal Versus Non-Hormonal Contraception on Seizures: Prospective Pilot Findings of the Epilepsy Birth Control Registry—*Andrew Herzog, Hannah Mandle*

I5.003 Delivery Outcomes After Acute Migraine Treatment in Pregnancy—*Matthew Robbins, Tracy Grossman, Shravya Govindappagari, Ashlesha Dayal*

I5.004 Menstrual-Related Migraine in Adolescents: What's the Difference?—*Suzanne Hagler, Hope O'Brien, Marielle Kabbouche, Joanne Kacperski, Scott Powers, Andrew Hershey*

I5.005 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*

I5.006 COLADAS: Caribbean Origin Latin American's Disparities in Acute Stroke—*Ina Teron Molina, Abiezer Rodríguez Centeno, Fernando Santiago, Mariel López Valentín*

I5.007 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, Kassandra Munger*

I5.008 Gender Identity Disorders and Multiple Sclerosis Risk: A National Record-Linkage Study—*Julia Pakpoor, Clare Wotton, Klaus Schmierer, Gavin Giovannoni, Michael Goldacre*

I5.009 Treatment of Seizures Related to Eclampsia: A Multi-Center Retrospective Analysis, 1995-2015—*Gina Deck, Christina Yarrington, Daniel Hoch, Thomas McElrath, Page Pennell*

I5.010 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-Vizcaíno Buendía, Juan Carlos Navarro García, J. Javier Martín Fernández, Jose Meca Lallana*

I5.011 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*

I5.012 Estrogen Receptor-α (ERα) 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*

I5.013 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. **I5.005 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. **I5.006 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. **I5.007 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, Kassandra Munger*

5:05 p.m.–5:10 p.m. **I5.008 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 Bruzzone, Luka Vlahovic, Ramon Durazo-Arvizu, 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 Trikannad 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 Conners*

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
Tetrodotoxin (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

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. Safdieh, 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

6:30 a.m.–8:30 a.m.

C95 SIF 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.

Ex Health & Wellness Yoga

8:00 a.m.–9:00 a.m.

I 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.

I Neurological Exam Tips and Tricks

1:00 p.m.–2:00 p.m.

I There's an AAN App for That! Engaging with the AAN Using eMedia
Ex Health & Wellness 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
Ex Real World of Neurology 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 SIF 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.

Ex Health & Wellness Mindfulness Meditation for Healthcare Practitioners

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

3:00 p.m.–4:00 p.m.

Ex Health & Wellness "Physical Exercise and Cognitive Training in Neurology"—Exercise in Stroke

3:30 p.m.–4:30 p.m.

I 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.

Ex Health & Wellness 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

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

Monday, April 18

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 Høyer, Øyvind Busk, Øystein Holla, 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 Kundu, 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*

Meeting Schedule

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 SIP **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.

Ex Health & Wellness **Yoga**
Instructor: *Sarah Bird Nelson, JD, RYT 200, Minneapolis, MN*

8:00 a.m.–9:00 a.m.

1 **Live Intraoperative Monitoring**
Director: *Constantine Moschonas, MD, Scottsdale, AZ*

8:30 a.m.–7:00 p.m.

P3 **Poster Session III** 68



Don't Forget to Visit the

Exhibit Hall

Monday, April 18–Thursday, April 21

The Exhibit Hall is your destination for enjoying good food, socializing, networking, and learning in a fun and relaxed environment!

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View a list of exhibitors and start planning your visit at *AAN.com*

AAN 2016 Annual Meeting

Monday, April 18

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 Tantsis, Stephen Reddel, Andrew Henderson, Ostoja Vucic, Mark Gorman, Leslie Benson, Gulay Alper, Catherine Riney, Michael Barnett, John Parratt, Todd Hardy, Richard Leventer, Vera Merheb, Margherita Nosadini, Victor Fung, Fabienne Brilot, 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, JenniferSt. Sauver, Masoud Majed, Vanda Lennon, Claudia Lucchinetti, Andrew McKeon, Dean Wingerchuk, Jayawant Mandrekar, Debra Jacobson, Jessica Sagen, John Schmeling, James Fryer, Marcelo Matiello, Nilifur Kale, Angala Borders Robinson, Sean Pittock*

Discussion: 12:00 p.m.–12:05 p.m.

P3.004 Novel Findings in Anti-GABAa 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 Josè 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-TNFα (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 Patiens 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 Rufi, 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 IFNB-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 IFNB-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, Eva Havrdova, Krzysztof Selmaj, David Margolin, Karthinathan Thangavelu, Douglas Arnold*

P3.026 Patients Who Discontinued SC IFNB-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-Soerensenn, 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(P450)2C9 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 Rufi, 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, Kassandra 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, Luwig 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 Ahmed, Jasem 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-Sørensenn, 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 Yousry, 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*

Monday, April 18

Poster Session 8:30 a.m.–7:00 p.m.

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 Havari, 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, Jasem 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, Chrstoph 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, Ljubica 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" — *María Curbelo, Alejandra Martinez, Judith Steinberg, Adriana Carra*

P3.082 Comparison of Costs and Health Resource Utilization InPatients Treated with Different Disease Modifying Therapies for MultipleSclerosis — *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 —*Ai-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*

P3.085 Effects of Daclizumab HYP on Accumulation of Disability Exclusive of Acute Relapse in Moderately/Severely Disabled Relapsing-Remitting Multiple Sclerosis Patients: Neurophysical Composite Outcome from the DECIDE Study —*Jeffrey Bennett, Bruce Cree, Thomas Leist, Harold Moses, Gavin Giovannoni, Claire Tsao, Jun Zhao, Qin Pan, Yunzhi Lin, Jacob Elkins, Louis Chiodo, Rob Robinson, Steven Greenberg*

P3.086 Early Experience of 250 Multiple Sclerosis Patients Treated with Alemtuzumab in a United States MS Center —*Amanda Adcock, Christopher LaGanke*

P3.087 Long-Term Follow-Up of Laquinimod 0.6 Mg in Patients with Relapsing-Remitting Multiple Sclerosis 2 —*Giancarlo Comi, Timothy Vollmer, Fred Lublin, Yuval Dadon, Tali Gorfine, Mat Davis, Per Soelberg Sørensen, Volker Knappertz*

P3.088 Comparison of Siponimod (BAF312) Pharmacokinetics in Healthy Subjects with Different Genetic Variants of the Cytochrome(P450)2C9 Enzyme — *Anne Gardin, Mike Ufer, Gianluca Rossato, Zhenzhong Su, Yi Jin, Eric Legangneux, Kasra Shakeri-Nejad*

P3.089 Teriflunomide Slows Brain Volume Loss in Relapsing MS: A SIENA Analysis of the TEMSO MRI Dataset — *Ernst-Wilhelm Radue, Till Sprenger, Laura Gaetano, Nicole Mueller-Lenke, Jens Wuerfel, Karthinathan Thangavelu, Steve Cavalier, Ludwig Kappos*

P3.090 Improved Cognitive Outcomes in Relapsing-Remitting Multiple Sclerosis with Daclizumab HYP Over 96 Weeks in the Phase 3 DECIDE Study —*Ralph Benedict, Stanley Cohan, Sharon Lynch, Steven Greenberg, Ping Wang, Jacob Elkins, Guido Sabatella*

P3.091 Peginterferon Beta-1a Reduces Conversion of MRI Lesions to Black Holes in Patients with Relapsing-Remitting Multiple Sclerosis —*Xiaojun You, Douglas Arnold, Carmen Castrillo-Viguera, Damian Gasparotto*

P3.092 Telehealth Mindfulness Meditation Improves Cognitive Performance in Adults with Multiple Sclerosis (MS) —*Ariana Frontario, Elayne Feld, Kathleen Sherman, Lauren Krupp, Leigh Charvet*

P3.093 An Evaluation of the Longitudinal Stability of Anti-JC Virus (JCV) Antibody Levels in Patients with Multiple Sclerosis (MS) —*Emily Donovan, Christopher LaGanke*

P3.094 Anti-JC Virus Antibody Status and Use of Immunomodulatory Therapies in Patients with Multiple Sclerosis — *Idanis Berrios Morales, Kevin Kane, Peter Riskind, Carolyn Griffin, Neeta Garg*

P3.095 Safety and Tolerability 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 —*Stuart Cook, Giancarlo Comi, Peter Rieckmann, Kottil Rammohan, Per Soelberg-Soerensenn, Patrick Vermersch, Emily Martin, Fernando Dangond, Gavin Giovannoni*

P3.096 Interim Analysis Results of an Observational, Retrospective, Multicenter Study to Assess the Effectiveness of Fingolimod Treatment in Clinical Practice in Patients with Relapsing-Remitting Multiple Sclerosis in Spain: The NEXT Study —*Javier Jose Mallada, Francisco Barrero, Marisa Martínez, Eugenia Marzo, Virginia Meca Lallana, Francisco Javier Ricart, Eli Garcia*

P3.097 Analysis of Peripheral Blood Mononuclear Cell Phenotypes During Treatment with Fingolimod: A 2-Year Study of a German Cohort of Patients with Relapsing-Remitting Multiple Sclerosis — *Thomas Dehmel, Kathleen Ingenhoven, Pia Frenken, Derik Hermsen, Hans Hartung, Bernd Kieseier, Clemens Warnke*

P3.098 Adherence to Subcutaneous IFN-β1a - Final Analysis of the Non-Interventional Study READOUTsmart Using the Dosing Log and Readout Function of RebiSmart —*Peter Rieckmann, Matthias Schwab, Dieter Poehlau, Torsten Wagner, Elke Schel, Antonios Bayas*

P3.099 Discovery of ARN-6039 As a Potent, Orally Available Inverse Agonist of RORγt for Autoimmune Neuroinflammatory Demyelinating Disease —*John Rose, Noel Carlson, Venkatakrishnareddy Yerramreddy, Rajendra Appalaneni, Jeffrey Handler, Ramamohan Kancherla, Hariprasad Vankayalapati*

MS and CNS Inflammatory Disease: Switching and Comparator Studies I

P3.100 Comparison of Therapeutic Goals and Preferences in Multiple Sclerosis Patients and Providers Using Nominal Group Technique —*Nananda Col, Andrew Solomon, Haiyan Qu, Vicky Springmann, Carolina Ionete, Lori Pbert, William Anthony, Carolyn Griffin, Brenda Tierman, Christen Kutz, Idanis Berrios Morales, Ashli Hopson, Glenn Phillips, Enrique Alvarez*

P3.101 Real World Comparison of Patient Adherence and Persistence to Fingolimod Vs. Dimethyl Fumarate — *Michael Polson, John Ko, Todd Lord, Themmi Evangelatos, Vivian Herrera*

P3.102 Treatment Preference in Relapsing-Remitting Multiple Sclerosis: An Online Choice Study in Patients and Neurologists —*John Ko, Edward Fox, Paul Wicks, Pronabesh DasMahapatra, Kathryn Kendall, Walter Hong, Eric Burton, Kathleen Hawker, Irina Kosoy, Dimitri Liakhovitski, Jina Park, Vivian Herrera*

P3.103 Vitamin D Enhances Interferon-beta Response in Multiple Sclerosis — *Xuan Feng, Zhe Wang, Suad Causevic, Quentin Howlett-Prieto, Danielle Rubin, Nathan Einhorn, Anthony Reder*

P3.104 Patients Who Switched from SC IFNB-1a to Alemtuzumab in the CARE-MS I Extension Study Show Durable Improvements in Clinical Outcomes — *Hans-Peter Hartung, Douglas Arnold, Jeffrey Cohen, Alasdair Coles, Edward Fox, Eva Havrdova, Krzysztof Selmaj, David Margolin, Linda Kasten, D Alastair Compston*

P3.105 Comparison of Two Treatment Schedules with Alemtuzumab in Patients with Multiple Sclerosis —*Peter von Wussow, Martin Schreiber*

P3.106 Interim Analysis of the Effectiveness of Second-Line Fingolimod in Relapsing-Remitting Multiple Sclerosis Patients Treated with Prior First-Line Treatment, Other Than Natalizumab, in Spain: The Observational, Retrospective NEXT Study —*Virginia Meca, Marisa Martínez, Javier Jose Mallada, Eugenia Marzo, Eugenia Marzo, Francisco Barrero, Francisco Javier Ricart, Eli Garcia*

P3.107 Safety and Efficacy of Teriflunomide in Patients Switching from Subcutaneous Interferon Beta-1a — *Patrick Vermersch, Tomas Olsson, Anna Czlonkowska, Myriam Benamor, Philippe Truffinet, Annie Purvis, Jérôme de Seze*

P3.108 Preferences for Multiple Sclerosis Treatments: Differences Across Subgroups of US Patients with RRMS — *Carol Mansfield, Nina Thomas, David Gebben, Maria Lucas*

P3.109 Comparative Efficacy and Discontinuation of Fingolimod and Dimethyl Fumarate in Two Large Academic Medical Centers —*Daniel Ontaneda, Brandi Vollmer, Stefan Sillau, Samuel Cohn, Kavita Nair, Robert Bermel, Timothy Vollmer, Robert Fox, John Corboy, Jeffrey Cohen, Carrie Hersh, Enrique Alvarez*

P3.110 No Difference in Disability Progression of MS Patients Treated with Extended Interval Vs. Standard Interval Natalizumab —*Julia Fallon, Ilya Kister, Lana Zhovtis Ryerson*

P3.111 Effect of Early Versus Delayed Subcutaneous Interferon (scIFN) β-1a to Achieve No Evidence of Disease Activity (NEDA) in Patients with Clinically Isolated Syndrome (CIS): A Post-hoc Analysis of REFLEXION —*Patricia Coyle, Giancarlo Comi, Mark Freedman, Liang Chen, Kurt Marhardt, Ludwig Kappos*

P3.112 Patients with Active RRMS and an Inadequate Response to Prior Therapy Who Received Alemtuzumab Demonstrate Durable Suppression of New MRI Lesion Formation: 5-Year Follow-Up of the CARE-MS II Study —*Anthony Traboulsee, Jeffrey Cohen, Alasdair Coles, D. Alastair Compston, Edward Fox, Hans-Peter Hartung, Eva Havrdova, Krzysztof Selmaj, David Margolin, Karthinathan Thangavelu, Douglas Arnold*

P3.113 Stopping Disease Modifying Therapy in Multiple Sclerosis Patients — *Silvia Presas, José Vicente Hervás-Garcia, Cristina Ramo-Tello*

P3.114 Prediction of Individual Response to 10 Immunomodulatory Therapies in Multiple Sclerosis: A Global Observational Cohort Study —*Tomas Kalincik*

P3.115 Key Results from PREFERMS: Real-World Patient Retention and Outcomes on Fingolimod Versus Platform Injectable Disease-Modifying Therapies in Early Relapsing-Remitting Multiple Sclerosis —*Bruce Cree, Daniel Wynn, Mark Cascione, Xiangyi Meng, Lesley Schofield, Nadia Tenenbaum*

P3.116 Comparative Effectiveness Research of Disease Modifying Therapies in Multiple Sclerosis - Findings from a Large Health Insurance Claims Database —*Aaron Boster, Jacqueline Nicholas, Ning Wu, Wei-Shi Yeh, Monica Fay, Michael Edwards, Ming-Yi Huang, Andrew Lee*

P3.117 Clinical Outcomes of 200 Multiple Sclerosis Patients Switching from Natalizumab to Alemtuzumab in a Single United States MS Center — *Christopher LaGanke, Amanda Adcock*

P3.118 Association of Timing of Disease-Modifying Drug Treatment Initiation on Multiple Sclerosis Relapse Rates in Newly Diagnosed Patients —*Amy Phillips, Juanzhi Fang, Frank Corvino, David Oliveri*

P3.119 Treatment Satisfaction and Side Effect Experience with Fingolimod and Dimethyl Fumarate for Multiple Sclerosis: Findings from an Online Patient Cohort —*Rahul Sasane, Lawrence Rasouliyan, Bozena Katic, Paul Wicks, Emuella Flood, John Ko, Kristen Johnson, Vivian Herrera*

Acquired Muscle Disorders: Clinical and Pathological Aspects I

P3.120 Reliability and Validity of the 6 Minute Walk Test in Individuals with Facioscapulohumeral Dystrophy —*Katy Eichinger, Chad Heatwole, Susanne Heininger, Nikia Stinson, Kathryn Wagner, Alrabi Tawil, Jeffrey Statland*

P3.121 Use of the Six-Minute Walk Distance (6MWD) Across Duchenne Muscular Dystrophy (DMD) Studies — *Craig McDonald, H. Lee Sweeney, Xiaohui Luo, Gary Elfring, Hans Kroger, Peter Riebling, Tuyen Ong, Robert Spiegel, Stuart Peltz, Eugenio Mercuri*

P3.122 Validation of the Sporadic Inclusion Body Myositis Physical Functioning Assessment —*Valerie Williams, Theresa Coles, Carla Demuro, Sandra Lewis, Nicole Williams, Stuart Yarr, Victoria Barghout, Linda Lowes, Lindsay Alfano, Bob Goldberg, Ari Gnanasakthy, Gorana Capkun, Brian Tseng*

P3.123 Wireless Sensors to Measure Walking in Patients with Facioscapulohumeral Muscular Dystrophy (FSHD) —*Jessie Huisinga, Adam Bruetsch, Melissa Currence, Laura Herbelin, Omar Jawdat, Mamatha Pasnoor, Mazen Dimachkie, Richard Barohn, Jeffrey Statland*

P3.124 Combined Skin and Muscle Biopsy for Suspected Dermatomyositis — *Alexis Shaefer, Farkhanda Qaiser, Mohamed Kazamel, Shin Oh, Mohammad Alsharabati*

P3.125 Focal and Patchy Perifasicular Involvement Differentiates the Anti-Jo1 Inflammatory Myopathy (IM) from Dermatomyositis (DM) —*Nizar Chahin, Chafic Karam*

P3.126 SRP Antibody Associated Necrotizing Myopathy Mimicked LGMD: A Case Report —*Pariwat Thaisetthawatkul, Rodney McComb*

P3.127 Inclusion Body Myositis (IBM) and HMG CoA Reductase Antibody Myopathy: A Rare Case —*Ashish Kulhari, David Preston*

P3.128 Painless Orbital Myositis: A Rare Manifestation of Dermatomyositis —*Bushra Javed, Charlotte Zisman, Anila Thomas, Shyla Kodi, Michael Tenner, Brij Ahluwalia-Singh*

P3.129 Anti-HMGCR Necrotizing Autoimmune Myopathy Presenting As Acute-on-Chronic Weakness — *Christopher Lening, Negar Khanlou, Daniel Vitantonio, Jonathan Morrill, Anya Turetsky, Shrikant Mishra, Nasheed Jamal*

Clinical Aspects of Myasthenia Gravis and Congenital Myasthenic Syndromes

P3.130 Clinical Profile and Outcome of Post-Thymectomy Versus Non-Thymectomy Myasthenia Gravis Patients in the Philippine General Hospital: A Six-year Retrospective Study —*Ranhel De Roxas*

P3.131 Transcultural Adaptation and Validation of a Spanish Version of the Myasthenia Gravis Composite Scale — *Marcelo Rugiero, Mariela Bettini, David Genco, Maria Araoz, Maria Lourdes Posadas Martinez, L Dawidowski, L Perez, Edgardo Cristiano*

P3.132 Sleep Disturbances in Patients with Myasthenia Gravis: A Prospective Study —*Annabel Wang, Dat Le, Namita Goyal, Tahseen Mozaffar, Luis Chui, Marcel Hungs*

P3.133 Case Report: PML in a Patient with Myasthenia Gravis Treated with Multiple Immunosuppressing Agents — *Kiran Kanth, Guillermo Solorzano, Myla Goldman*

P3.134 To Report the First Case of Muscle Specific Tyrosine Kinase (MuSK) Antibody (ab) Positive Myasthenia Gravis (MG) Evolving into Immunoglobulin (Ig) G4 Related Disease —*Pooja Raibagkar, John Stone*

P3.135 Herzmyasthenie: Is Thymoma Always the Culprit? —*Kaustubh Limaye, Srikanth Vallurupalli, Ricky Lee*

P3.136 Exacerbation of Preexisting Myasthenia Gravis by Pembrolizumab: A Case Report —*Julia Zhu, Yuebing Li*

P3.137 Clinical Features and Prognosis of Ocular Myasthenia Gravis in Argentinean Patients. —*Florenia Aguirre, Andres Villa*

P3.138 A Case of Myasthenia Gravis Exacerbation in a Patient with Melanoma Treated with Pembrolizumab —*K. H. Vincent Lau, Aditya Kumar, Irene Yang, Richard Nowak*

P3.139 COLQ Mutation in Three Siblings of a Saudi Family: Congenital Myasthenia with Phenotypic Heterogeneity and Varying Ages of Onset —*Fahad Albassam, Abdulaziz Alsaman*

Acquired Peripheral Neuropathies: Clinical and Pathological Aspects II

P3.140 Anti GD1b/ GD1a Positive Pure Sensory Ataxic Neuronopathy Progressing to Severe Acute Motor Sensory Axonal Neuropathy: An Atypical Presentation of Guillan-Barre Syndrome —*Rafael Rodriguez, Rahul Shah, Xianping Li*

P3.141 Evaluation of CIDP Diagnostic Criteria and Treatment Responses — *Charles Roach, Mamatha Pasnoor, Jeffrey Statland, Mazen Dimachkie, Richard Barohn, Karthika Veerapaneni, Omar Jawdat, Arthur Dick*

P3.142 Chronic Multifocal Inflammatory Myeloneuropathy: A Novel Immunoresponsive Clinical Entity — *Erawady Mitrabhakdi, Brent Goodman, Jiraporn Laothamatas, Richard Lewis*

P3.143 Cluster of Guillain-Barré Syndrome Associated with HLA DQB1*05:01 and the Occurrence of Anti-Ganglioside and Sulfatide Antibodies — *Lucas Schirmer, Viki Worthington, Ute Solloch, Verena Loleit, Verena Grummel, Neghat Lakdawala, Donna Grant, Ralf Wassmuth, Alexander Schmidt, Friedemann Gebhardt, Till Andlauer, Jürgen Sauter, Achim Berthele, Michael Lunn, Bernhard Hemmer*

P3.144 ODS for the Rapid Screening of Inflammatory Neuropathies. —*Chafic Karam, Louis Tramontozzi*

P3.145 Guillian-Barre Syndrome After Influenza Vaccination in the United States, 1999-2015. A CDC/FDA Vaccine Adverse Event Reporting System (VAERS) Study — *Jesyree Veitia, Francisco Gomez, Abu Nsar, Nizar Souayah*

P3.146 Multifocal Motor Neuropathy: A Single Center Experience —*Jacqui-Lyn Saw, Kevin D. O'Connor, Mina John, David Nolan, Wai Leong*

P3.147 Ventral Abdominal Sensory Loss Is Common in Length Dependent Sensorimotor Peripheral Neuropathy — *Benn Smith, Mark Ross, Brent Goodman, A Leis, Charles Gervais*

P3.148 Multifocal Motor Neuropathy: Disease Stabilisation on Quinidine —*Wai Leong, Jacqui-Lyn Saw, Kevin O'Connor, David Nolan, Mina John*

P3.149 Pure Sensory Lewis-Sumner Neuropathy —*Mariane Barbosa, Cecilia Vidal, Debora Szklarz, Joana Dias, Karina Henriques, Mariana Xavier, Osvaldo Nascimento, Marcos De Freitas*

P3.150 An Unusual Presentation of Vasculitic Neuropathy —*Nisha Sinha, Nancy Bello, David Teeple*

P3.151 Case Report: Acute Hepatitis E Virus-Infection Presenting with a Mixture of Features of Guillain-Barré Syndrome and Neuralgic Amyotrophy —*Olivier Stevens, Philip Van Damme*

P3.152 Severe Acute Axonal Polyneuropathy in the Setting of Nutritional Deficiency —*Johanna Hamel, Eric Logigian*

Monday, April 18

Poster Session 8:30 a.m.–7:00 p.m.

P3.153 Acute Peripheral Neuropathy with Severe Hepatic Dysfunction: Diagnostic Challenges in Variegate Porphyria —*Doungporn Ruthirago, Parunyou Julayanont, Sahawat Tantikittichaikul, Jongyeol Kim*

P3.154 The Histopathological Evaluation of Small Fiber Neuropathy in Patients with Vitamin B12 Deficiency —*Can Ebru Bekircan-Kurt, Nalan Gunes, Mehmet Demirci, Sevim Erdem-Ozdamar, Ersin Tan*

P3.155 Castleman's Disease Neuropathies —*Elie Naddaf, Angela Dispenzieri, Jayawant Mandrekar, Michelle Mauermann*

P3.156 Polyneuropathy from Wild Transthyretin Amyloidosis: An Important New Variety —*P. James B. Dyck, Martha Grogan, Christopher Klein, William Litchy, JaNean Engelstad, Jenny Davies, Peter Dyck*

P3.157 The Francophone Anti-Mag Cohort: A Clinical Descriptive Study —*Juliette Svahn, Philippe Petiot, Karine Ferraud, Christophe Vial, Emilien Delmont, Karine Viala, Jean-Christophe Antoine, Andoni Echaniz-Laguna, Thierry Kuntzer, Antoine Gueguen, Jean-Phillippe Camdessanche*

P3.158 When to Suspect Sciatic Neuropathy: A Chart Review of the Electrophysiological Findings and Clinical Etiologies —*Adam Aubuchon, Anna Bracewell, Chad Hoyle, William Arnold, Alan Sanderson*

P3.159 ANCA-Negative Peripheral Vasculitic Neuropathy Associated with Minocycline Use —*Min Kang, Rajesh Gupta, Malgorzata Dawiskiba, Michael Pincus, Jayashri Srinivasan*

Clinical Trials in Muscle Diseases and Healthy Volunteers

P3.160 Effectiveness of Dichlorphenamide in Periodic Paralysis: An Observational, Prospective Patient Registry —*Jaya Trivedi, Amanda Jones, Mark Jasek, Robert Griggs*

P3.161 Interim Analysis of a Pilot Trial of Natalizumab in Inclusion Body Myositis —*David Saperstein, Todd Levine*

P3.162 Ataluren: An Overview of Clinical Trial Results in Nonsense Mutation Duchenne Muscular Dystrophy —*Craig McDonald, Katharine Bushby, Mar Tulinius, Richard Finkel, Haluk Topaloglu, John Day, Kevin Flanigan, Linda Lowes, Michelle Eagle, Xiaohui Luo, Gary Elfring, Hans Kroger, Peter Riebling, Tuyen Ong, Robert Spiegel, Stuart Peltz, Jan Kirschner*

P3.163 ACT DMD: Effect of Ataluren on Timed Function Tests (TFTs) in Nonsense Mutation Duchenne Muscular Dystrophy —*Nathalie Goemans, Craig Campbell, Craig McDonald, Thomas Voit, Xiaohui Luo, Gary Elfring, Hans Kroger, Peter Riebling, Tuyen Ong, Robert Spiegel, Stuart Peltz, Katharine Bushby*

P3.164 Safety and Tolerability of Ataluren in a Phase 3 Study of Patients with Nonsense Mutation Duchenne Muscular Dystrophy —*Craig Campbell, Perry Shieh, Thomas Sejersen, Xiaohui Luo, Gary Elfring, Hans Kroger, Peter Riebling, Tuyen Ong, Robert Spiegel, Stuart Peltz, Brenda Wong*

P3.165 A Pilot Study to Evaluate Adherence to the 2010 Care Considerations for Duchenne Muscular Dystrophy at Selected Clinics Identified by the Muscular Dystrophy Surveillance Tracking and Research Network (MDSTAR*net*) Sites. Phase 2: Data from Medical Record Abstraction —*Shree Pandya, Kristin Caspers Conway, Christina Trout, Christina Westfield, Deborah Fox*

P3.166 ISIS-DMPKRx in Healthy Volunteers: A Placebo-controlled, Randomized, Single Ascending-Dose Phase 1 Study —*Laurence Mignon, Daniel Norris, Kathie Bishop, Frederick Derosier, ROGER LANE, Frank Bennett*

P3.167 Study Design of a Phase 1/2a Trial with ISIS-DMPKRx for the Treatment of Myotonic Dystrophy Type 1 —*Charles Thornton, Richard Moxley, John Day, Tetsuo Ashizawa, Richard Barohn, Doris Leung, John Kissel, Nicholas Johnson, Katy Eichinger, Jason Hardage, Donovan Lott, Melissa Currence, Nikia Stinson, Wendy King, Heather Hayes, Frank Bennett, Kathie Bishop, Laurence Mignon*

P3.168 A Pilot Study to Evaluate Adherence to the 2010 Care Considerations for Duchenne Muscular Dystrophy (DMD) at Selected Clinics Identified by the Muscular Dystrophy Surveillance Tracking and Research Network (MD STAR*net*) Sites. Phase 1:Clinic Director Survey —*Shree Pandya, Kristin Caspers-Conway, Christina Trout, Christina Westfield, Deborah Fox*

Clinical Trials and Treatment of Myasthenia Gravis

P3.169 A Phase II Trial to Assess the Efficacy, Safety and Feasibility of 20% Subcutaneous Immunoglobulin in Patients with Myasthenia Gravis Exacerbation - Trial Design —*Derrick Blackmore, Ashley Mallon, Zaeem Siddiqi*

P3.170 Therapeutic Target of Memory B Cells Depletion Helps to Tailor Administration Frequency of Rituximab in Myasthenia Gravis —*Christine Lebrun Frenay, Veronique Bourg, Mikael Cohen, Alexandra Rosenthal, Claude Desnuelle, Michel Ticchioni*

P3.171 INSIGHTS: Analysis of IVIG Responsiveness in Patients with Myasthenia Gravis —*Todd Levine, Leslie Vaughn, Gary Badger, Gil Wolfe, Lara Katzin, David Saperstein, Tahseen Mozaffar, Richard Barohn, Jonathan Katz, Mazen Dimachkie, Michelle Greer, Elissa Ritt*

P3.172 Effects of Therapeutic Plasma Exchange on Myasthenic Outcome Measures —*Jeff Guptill, Vern Juel, Janice Massey, Manisha Chopra, James Howard*

P3.173 Methotrexate Polyglutamation in Myasthenia Gravis —*Laura Herbelin, Mara Becker, Mazen Dimachkie, Jeffrey Statland, Richard Barohn, Mamatha Pasnoor*

P3.174 Susceptibility of Infection in the Treatment of Myasthenia Gravis —*Harrington Anthony, Mazen Dimachkie, Jeffrey Statland, Karthika Veerapaneni, Ahmad Abuzinadah, April McVey, Mamatha Pasnoor, Melanie Glenn, Omar Jawdat, Arthur Dick, Dipika Aggarwal, Richard Barohn, Laura Herbelin*

P3.175 A Phase II Trial to Assess the Efficacy, Safety and Feasibility of 20% Subcutaneous Immunoglobulin in Patients with Myasthenia Gravis Exacerbation - Interim Analysis of Safety and Feasibility —*Ashley Mallon, Derrick Blackmore, Zaeem Siddiqi*

P3.176 A Phase II Trial to Assess the Efficacy, Safety and Feasibility of 20% Subcutaneous Immunoglobulin in Patients with Myasthenia Gravis Exacerbation - Interim Analysis of Efficacy —*Zaeem Siddiqi, Ashley Mallon, Derrick Blackmore*

P3.177 Rituximab in "Resistant" Myasthenia Gravis —*Dustin Anderson, Zaeem Siddiqi*

P3.178 Examining Case Demographics for Myasthenia Gravis (MG) Comorbidities, to Compare Plasmapheresis (PLEX) and Immunoglobulin (IVIg) Treatment Outcomes in US Hospitals, When Stratifying by Economic Indicators —*Nizar Souayah, Tamara Opila*

Motor Neuron Disease: Clinical Trials, Treatment, and Outcome

P3.179 Randomized Trial of Low Expiratory Pressure Non-Invasive Ventilation for ALS —*Teresa Jacobs, Devin Brown, Veronica Berrocal, Timothy Funckes, Kirsten Gruis*

P3.180 Longitudinal Validation of the ALS-FTD-Questionnaire - Preliminary Results —*Rosanne Govaarts, Emma Beeldman, Anita Beelen, Hepke Grupstra, Anneke Van Der Kooi, Rob De Haan, Ben Schmand, Joost Raaphorst, Marianne De Visser*

P3.181 Safety, Tolerability and Monitoring of Long-Term G-CSF Compassionate Use in ALS Patients —*Siw Johannesen, Andrei Khomenko, Dobri Baldaranov, Thomas Grimm, Ines Kobor, Jochen Grassinger, Sabine Klatt, Tina Kammermaier, Tim-Henrik Bruun, Jan Kassubek, Gerhard Schuirer, Albert Ludolph, Wilhelm Schulte-Mattler, Isabeau Prémont-Schwarz, Armin Schneider, Michael Deppe, Ulrich Bogdahn*

P3.182 Medication Exposure and Survival in ALS: An Observational Study Using Inverse Probability of Treatment Weighting —*Nimish Thakore, Erik Pioro*

P3.183 Plasmapheresis Improves the Suppressive Function of Regulatory T Cells in Patients with Fast-Progressing Amyotrophic Lateral Sclerosis —*Jason Thonhoff, David Beers, Weihua Zhao, Shixiang Wen, Jinghong Wang, Luis Lay, Lisa Thompson, Christopher Leveque, Stanley Appel*

P3.184 Do Abnormal A-Waves Predict IVIg Responsiveness in Patients with Motor Neuron Disease Mimic Syndromes? A Double-Blind Placebo Controlled Cross-Over Trial —*Rahul Remanan, Mona Shahbazi, Janki Panchal, Lindsay Kaplan, Shara Holzberg, Dale Lange*

P3.185 Survival and Disease Progression in SOD1 Familial ALS in North America —*Taha Bali, Wade Self, Teepu Siddique, Leo Wang, Elena Ratti, Kevin Boylan, Jonathan Glass, Nicholas Maragakis, James Caress, Steven Scherer, Stanley Appel, James Wymer, Summer Gibson, Lorne Zinman, Tahseen Mozaffar, Jennifer Jockel-Balsarotti, Margaret Allred, Esther Liu, Elena Fisher, Glenn Lopate, Alan Pestronk, Merit Cudkowicz, Timothy Miller*

P3.186 Decline in Slow Vital Capacity Predicts Respiratory Insufficiency, Use of Assisted Ventilation, Tracheostomy or Death in ALS —*Jeremy Shefner, Lisa Meng, Sarah Kulke, Andrew Wolff, Michael Bozik, Fady Malik, Jinsy Andrews*

P3.187 Predictive Factors of Survival and Disease Progression After Gastrostomy Tube Placement in ALS: An Interim Analysis —*Katharine Nicholson, Kellen Haley, Sarah Cornacchio, Ghazal Lashgari, Jennifer Scalia, David Schoenfeld, James Berry, Nazem Atassi*

P3.188 A Retrospective Review of Hematologic and Renal Profiles in Patients Undergoing Multi-Year Intravenous Immunoglobulin (IVIg) Therapy for Chronic Neuromuscular Diseases —*Victor Doan, Said Beydoun*

P3.189 A 24-Week, Phase III, Double-Blind, Parallel-Group Study of Edaravone (MCI-186) for Treatment of Amyotrophic Lateral Sclerosis (ALS) —*Masahiko Tanaka, Takeshi Sakata, Joseph Palumbo, Makoto Akimoto*

P3.190 Sustained Efficacy for Up to 12 Months in an Active Extension of a Phase III Study of Edaravone (MCI-186) for Treatment of Amyotrophic Lateral Sclerosis (ALS) —*Joseph Palumbo, Takeshi Sakata, Masahiko Tanaka, Makoto Akimoto*

P3.191 A Double-Blind, Parallel-Group, Placebo-Controlled, 24-Week, Exploratory Study of Edaravone (MCI-186) for the Treatment of Advanced Amyotrophic Lateral Sclerosis (ALS) —*Masahiko Tanaka, Makoto Akimoto, Joseph Palumbo, Takeshi Sakata*

P3.192 A Long-Term Safety and Efficacy Extension Study of Patients Diagnosed with Amyotrophic Lateral Sclerosis (ALS) and Treated with Edaravone (MCI-186) —*Takeshi Sakata, Joseph Palumbo, Makoto Akimoto, Masahiko Tanaka*

Neurocritical Care: Clinical Science

P3.193 Delayed Onset Heparin Induced Thrombocytopenia (HIT) Resulting in Common Carotid Artery (CCA) Occlusion —*Noorie Pednekar, Ramandeep Sahni, Brij Ahluwalia-Singh, Anila Thomas*

P3.194 "Spot Sign" After Trauma Suggestive of Venous Sinus Rupture —*Neil Nadkarni, Mitra Afshari, William Metcalf-Doetsch, Minjee Kim*

P3.195 Dural Arteriovenous Fistula, Medullary Edema, and Ondine's Curse: A Case Report —*George Culler, Mitra Afshari, Matthew Maas*

P3.196 Ketogenic Diet in Super Refractory Status Epilepsy: A Retrospective Study —*Rohit Das, Joshua Lukas, Ranjeet Singh, Laura Aykroyd, Karen Bobel*

P3.197 Seizures in Patients with Aneurysmal Subarachnoid Hemorrhage Treated with Endovascular Coiling —*Baxter Allen, Malik Fakhar, Peter Forgacs, Srikanth Boddu, Santosh Murthy, Phillip Stieg, Y. Pierre Gobin, Halinder Mangat*

P3.198 New Onset Refractory Status Epilepticus (NORSE) Lasting 110 Days Resulting in a Positive Outcome —*Katherine Sawicka, Regan Cooley, Gary Hunter*

P3.199 Reserve, Resilience and Recovery in Stroke: A Meta-Narrative Review —*Neha Dangayach, Harpreet Grewal, Errol Gordon, Stephan Mayer*

P3.200 Enteral Feeding During Induced Hypothermia After Intracerebral Hemorrhage —*Stephanie Dobak, Fred Rincon*

P3.201 The Role of Brainstem and Motor Recovery on Awakening Following Resuscitation After Cardiac Arrest —*Alessandra Cardi, Callie Drohan, Jonathan Elmer, Clifton Callaway, Ankur Doshi, Francis Guyette, Jon Rittenberger*

P3.202 Bedside Quantitative EEG Complements the Clinical Exam in Comatose Patients with Brain Hemorrhages —*Jan Claassen, Angela Velasquez, Meyers Emma, Jens Witsch, Christina Falo, Soojin Park, Sachin Agarwal, Michael Schmidt, Nicholas Schiff, Jacobo Sitt, Lionel Naccache, E. Sander Connolly, Hans-Peter Frey*

P3.203 Posterior Reversible Encephalopathy Syndrome in Adult Sickle-Cell Patients —*Alejandro Vargas, Fernando Testai*

P3.204 Using Accelerometers in the Neurological ICU to Monitor Unilaterally Motor Impaired Patients —*Jamie LaBuzetta, John Hermiz, Vikash Gilja, Navaz Karanjia*

P3.205 Frequency and Time-Course of Epileptiform Abnormalities in Subarachnoid Hemorrhage —*Jennifer Kim, Sydney Cash, Eric Rosenthal, M. Westover*

P3.206 Effect of Acute and Chronic Glycemic Control on Shunt Placement After Spontaneous Non-Traumatic Subarachnoid Hemorrhage —*Ayumi Ludwig, David Thompson, Bowie Han, Bappaditya Ray*

P3.207 The Monro-Kellie Doctrine in Action: Posterior Reversible Leukoencephalopathy Syndrome (PRES) Due to Intracranial Hypotension from Lumbo-Peritoneal Shunt Placement —*Audrey Nuccio, Jordan Amadio, Arthur Fountain, Ioannis Karakis*

P3.208 Cognitive Reserve Predicts Short-Term and Long-Term Cognitive Outcomes in Patients with SAH, SDH and ICH —*Neha Dangayach, Stanislaw Sobotka, James Lee, Anthony Costa, Joshua Bederson, Errol Gordon, Jennifer Frontera, Stephan Mayer*

P3.209 WITHDRAWN

P3.210 Deep Vein Thrombosis In Patients With Severe Traumatic Brain Injury —*Paola Mendez-Gomez, Amanda Chavez, Lacey Avila, Ali Seifi*

P3.211 Penetrating Brain Injury from Nail Guns: Epidemiological, Clinical and Forensic Features —*J. Goodman, Shankar Gopinath, Glenn Sandberg, Claudia Robertson*

P3.212 The Effect of Pre-Arrest and Hospital-Acquired Infection on Post-Cardiac Arrest Outcome —*Jessica Magid-Bernstein, Amelia Boehme, Elizabeth Matthews, Rebecca Hazan, Ashley Rodriguez, Christina Falo, Soojin Park, Jan Claassen, Mitchell Elkind, Sachin Agarwal*

P3.213 Delayed Recovery of Consciousness After Cardiac Arrest and Therapeutic Hypothermia Correlates with EEG Spectral Markers of Anterior Forebrain Mesocircuit Integrity —*Peter Forgacs, William Curley, Krithiga Sekar, Mary Conte, Nicholas Schiff*

P3.214 Cardiac Arrest: Who Lives, Who Dies, and How? —*Elizabeth Matthews, Jessica Magid-Bernstein, Rodriguez Ashley, Presciutti Alex, Christina Falo, Soojin Park, Jan Claassen, Sachin Agarwal*

P3.215 Value of Cerebral Performance Category Score for Predicting Long Term Outcomes After Cardiac Arrest —*Sachin Agarwal, Ashley Rodriguez, William Roth, Alex Presciutti, Cristina Falo, Soojin Park, Jan Claassen, Ronald Lazar*

Neurocritical Care: Clinical Science and Therapeutics

P3.216 Non-Traumatic Spinal Cord Injury at the Neurological Intensive Care Unit: Spectrum, Causes of Admission and Predictors of Mortality —*Johann Sellner, Lukas Grassner, Julia Marschallinger, Martin Dünser, Helmut Novak, Alexander Zerbs, Ludwig Aigner, Eugen Trinka*

P3.217 Thiamine Deficiency While on Total Parenteral Nutrition Mimicking Acute Stroke: A Case Report —*Alicia Parker, Danah Marafie, Varina Wolf*

P3.218 Instiutionally Standardized Education Module and EMR Documentation for Death by Neurological Criteria Evaluation Can Improve Provider Compliance with Guidelines in a Tertiary Care Academic Medical Center —*Janet Crumpler, Kimberly McDonough, Kristi Tucker, David Bowton, Sudhir Datar, Allison Brashear, Aarti Sarwal*

P3.219 Treatment of Acute Relapses in Transverse Myelitis: Steroids Alone Versus Steroids Plus Plasma Exchange —*Schwartz Kate, Maureen Mealy, Michael Levy*

P3.220 A Rare Cause of a Common Presentation: Hyperammonemic Encephalopathy Secondary to Mycoplasma Hominis Pneumonia —*Adam MacLellan, David Fam, Jennifer Robblee, Danielle Andrade*

P3.221 Effect of an Analgesia and Sedation Protocol in Neurocritical Care Patients —*Leana Mahmoud, Andrew Zullo, Corey Fehnel, Nicholas Potter, Bradford Thompson, Linda Wendell*

Neurocritical Care: Patient Safety and Quality

P3.222 Components of the Self-Fulfilling Prophesy Among Non-Neurologists in Hypoxic Ischemic Coma —*Charlene Ong, Amar Dhand, Michael Diringer*

P3.223 Pilot Study to Assess Quality of Communication in Acute Neurological Emergencies and Define Domains for Improvement —*Kristopher Dixon, Mollie Canzona, Michael Hyde, Amy Guzik, Stacey Wolfe, John Wilson, Cheryl Bushnell, Aarti Sarwal*

P3.224 Occurrence and Timeliness of Goals of Care Discussions in the Neurocritical Care Unit —*Kristopher Dixon, Mollie Canzona, Michael Hyde, Shayn Martin, David Bowton, John Wilson, Allison Brashear, Aarti Sarwal*

P3.225 Variability of Brain Death Policies in the United States —*Hilary Wang, Jennifer Robinson, Panayiotis Varelas, Galen Henderson, Eelco Wijdicks, David Greer*

P3.226 Qualitative Analysis of Satisfaction with Care of Families of Survivors and Nonsurvivors in a NICU —*Belinda Nhundu, Kevin Huang, Andrea Knies, Urs Weber, Jennifer Robinson, Nathanial Anderson, Kathleen Akgun, David Hwang*

P3.227 Medical Training and the Brain Death Exam: A Single Institution's Experience —*Kiruba Dharaneeswaran*

P3.228 Quality Improvement Initiative to Optimize Therapeutic Anticoagulation with Weight Based Heparin Infusion Nomograms for Patients with High Risk of Bleeding in Neurocritical Care —*Nick Scaturo, Garret Thompson, Benjamin Small, Sudhir Datar, Amy Guzik, Stacey Wolfe, Aarti Sarwal*

Stroke in the Young

P3.229 Argentinean Initiative of Stroke in the Young and Fabry Disease (FD): Final Results —*Ricardo Reisin, Julieta Mazziotti, Luciana Leon Cejas, Alberto Zinnerman, 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, Analia Sanchez Luceros*

P3.230 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*

P3.231 Prothrombotic States and Ischemic Stroke in the Young —*Hayet Boudjani, Sylvain Lanthier*

P3.232 Incidence of Ischemic Stroke in Young Adults, a 4 Year Retrospective Review from an Urban Tertiary Care Center in North Philadelphia —*Mohsen Pirastehfar, Paul Katz, Nina Gentile, Jaclyn Jacobi, Guillermo Linares*

P3.233 Differences in Outcomes in Young and Old Patients with Intracranial Atherosclerosis —*Jason Mathew, Tamara Strohm, Russell Cerejo, Irene Katzan, Ken Uchino*

P3.234 Non-traumatic Cerebral Fat Embolism in Sickle Cell Disease —*Nandhagopal Ramachandiran, Sameer Raniga, Salam Al Kindi, Jayakumar Dennison, Khalil Al Farsi, Mujahid Al Busaidi, AbdulHakeem Al Hashim, Faisal Al Azri, Arunodaya Gujjar, Abdullah Al-Asmi*

P3.235 Chagas Disease and Stroke: Frequency and Clinical Correlates —*Fidel Meira, Antônio Teixeira, Maria do Carmo Nunes*

P3.236 Illicit Drug Related Acute Ischemic Stroke, The Impact of Age and Gender —*Mohammad Alhatou, Taylor Kirkman, Hina Siddiqui, Abraham Alhatou*

P3.237 Factors Associated with Delay in Presentation to the Hospital for Young Adults with Ischemic Stroke —*Lester Leung, Louis Caplan*

P3.238 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*

Pediatric Epilepsy

P3.239 Reduction of Febrile Seizure Recurrence Comparative Efficacy of Intermittent Oral Levetiracetam Vs Clobazam —*Nalin Chaudhary, Randhi Narayana, Sunil Chaudhary*

P3.240 Duration of Use of Oral Cannabis Extract in Pediatric Epilepsy —*Lauren Treat, Kevin Chapman, Kathryn Colborn, Kelly Knupp*

Monday, April 18

Poster Session 8:30 a.m.–7:00 p.m.

P3.241 Antecollis and Levodopa-Responsive Parkinsonism Are Late Features of Dravet Syndrome —*Fasano Alfonso, Felippe Borlot, Anthony Lang, Danielle Andrade*

P3.242 Change in Presurgical Diagnostic Imaging Evaluation Affects Subsequent Pediatric Epilepsy Surgery Outcome —*Luc Rubinger, Carol Chan, Felice D'Arco, Rahim Moineddin, Osama Muthaffar, James Rutka, O. Snead, Mary Lou Smith, Elysa Widjaja*

P3.243 WITHDRAWN

P3.244 Health Related Quality of Life of Children with Refractory Epilepsy on the Ketogenic Diet —*Rajsekar Rajaraman, Johnson Lay, Kristina Murata, Myung-Shin Sim, Joyce Matsumoto*

P3.245 Creating a Protocol for Pediatric Patients with Anti-NMDA Receptor Encephalitis —*Ewa Way, Don Mathew, Syndi Seinfeld*

P3.246 Seizures in Children with Abusive Head Trauma: Morbidity and Risk Factor Analysis —*Raquel Farias-Moeller, Seema Bansal, Jessica Carpenter*

P3.247 Skin Integrity During Prolonged EEG Recording in Hospitalized Neonatal and Pediatric Patients —*Archana Pasupuleti, June Amling, Taeun Chang, Joseph Scafidi, Tammy Tsuchida*

P3.248 Acute Post-Operative Seizures As Predictors of Long-Term Seizure Outcome After Pediatric Epilepsy Surgery: A Meta-Analysis —*Nisha Giridharan, Paul Horn, Hansel Greiner, Katherine Holland, Francesco Mangano, Ravindra Arya*

Child Neurology and Developmental Neurology: Epilepsy, Hypoxia, and Stroke

P3.249 Disparity of Epileptiform Discharges Among Children with Autism with and Without Epilepsy —*Virgina Lee, Olivia Hayward, Phoebe Hung, Teresa Cao, Ted Hutman, Shaun Hussain, Pantea Sharifi-Hannauer*

P3.250 A Case of Non-Febrile Seizures Due to Chronic Salicylate Intoxication Following Prolonged Household Exposure to Incense Stick Fumes —*Priyanka Shekhawat, Logeswary Rajagopalan*

P3.251 Pediatric Epilepsy Readmissions: The Who, When, and Why —*Marissa Vawter-Lee, Sharon Lake, Alexandria Lutley, Shirley Fledderjohn, Anna King, Sara Zellner, Paul Horn, Amanda Jones, M Pilcher, Amanda Smith, Kristen Wesselkamper*

P3.252 Severe Hypoxia with Status Epilepticus As a Possible Etiology of Sudden Death in Lesch Nyhan Syndrome: A Case Report and Review of the Literature —*Alison Christy, Jenny Wilson*

P3.253 Predictive Factors for Epilepsy in Pediatric Patients with Sturge Weber Syndrome —*Matsanga Kaseka, Jonathan Bitton, Philippe Major*

P3.254 Hypoxic Ischemic Brain Injury and Seizures in Abusive Head Trauma —*Andra Dingman, Nicholas Stence, Victoria Allen, Kevin Chapman*

P3.255 WITHDRAWN

P3.256 Neuroimaging Markers of Cognitive Outcome in Children with Perinatal Stroke —*Kara Murias, Adam Kirton, Sana Tariq, Andrea Moir, Giuseppe Iaria*

P3.257 Identification of ADHD in Youth with Epilepsy —*Mary Kral, Michelle Lally, Andrea Boan*

P3.258 Attention Deficit Hyperactivity Disorder (ADHD) in Children with Benign Childhood Epilepsy with Centrotemporal Spikes (BECT) —*Fahad Bashiri*

Child Neurology and Developmental Neurology: Other

P3.259 Incidence and Demographics of Pediatric Intracranial Hypertension: The Columbus Ohio Experience —*Natalie Gillson, Charlotte Jones, Rachel Reem, David Rogers, Nicholas Zumberge, Shawn Aylward*

P3.260 Neonatal Mononeuropathies - A Case Series —*Michal Vytopil, Jayashri Srinivasan, Peter Kang, Basil Darras, H. Jones*

P3.261 A Study of Lobar Atrophy and White Matter Tract Damage in Pediatric Patients with Traumatic Brain Injury —*Alessandro D'Ambrosio, Maria Rocca, Erika Molteni, Elisabetta Pagani, Giacomo Boffa, Massimiliano Copetti, Susanna Galbiati, Filippo Arrigoni, Monica Recla, Alessandra Bardoni, Sandra Strazzer, Massimo Filippi*

P3.262 Three-Dimensional Super-Resolution Motion-Corrected MRI of the Fetal Posterior Fossa —*Danielle Pier, Ali Gholipour, Onur Afacan, Clemente Velasco-Annis, Sean Clancy, Kush Kapur, Judy Estroff, Simon Warfield*

P3.263 Pediatric PRES with Spinal Cord Involvement Due to Pheochromocytoma —*Daniel Freedman, Abena Koram, Natalie Gillson, Shawn Aylward*

P3.264 Clinical Metabolomic Profiling for the Diagnosis of Neurometabolic Disorders for Global Developmental Delay, Seizures —*Meeta Wagle, Taraka Donti, Qin Sun, Sarah Elsea, Lisa Emrick*

P3.265 Targeted Capture and Massively Parallel Sequencing to Identify Atypical Leukoencephalopathy in 48 Chinese Patients —*Xiaole Wang, Fei Yin, Liwen Wu, Lifen Yang, Fang He, Jing Peng*

P3.266 Clinical and Radiographic Improvement of Neurodegenerative Langerhans Cell Histiocytosis (ND-LCH) Following Dabrafenib —*E. Ann Yeh, Sarah Leary, Giulia Longoni, Oussama Abla, Weitzman Shelia, James Whitlock*

P3.267 Pain in Childhood Tourette Syndrome-Retrospective Analysis —*Bennett Lavenstein, Lauren Miyares, Leslie Dodge*

P3.268 Adapted Developmental Assessment for Ages 18 Months to 7 Years —*Lois Condie*

Neuro-oncology: Pediatric and Rare Tumors

P3.269 Dysembryoplastic Neuroepithelial Tumors: 13 Cases of a Rare Condition —*Jill Goslinga, Corey Gill, Tracy Batchelor*

P3.270 Metastatic Spread of Pineal Parenchymal Tumor of Intermediate Differentiation (PPTID, Grade II-III) Via Ventriculoperitoneal (VP) Shunt - "Higher Grade (Ki67 70%) Than the Primary (Ki67 30%)" —*Vasu Saini, Bhaumik Shah, Lynn Feun*

P3.271 Anaplastic Oligodendroglioma with IDH Mutation and 1p/19q Co-Deletion in a Patient with Ollier Disease —*Rajesh Sadasivuni, Paula Rauschkolb*

P3.272 Intracranial Pathology of Erdheim Chester Disease —*Rahul Dave, Louisa Boyd, Kevin O'Brien, William Gahl, Juvianee Estrada-Veras*

P3.273 Neurologic Manifestations of Erdheim-Chester Disease —*Louisa Boyd, Rahul Dave, Kevin O'Brien, William Gahl, Juvianee Estrada-Veras*

P3.274 Clinical Outcomes in Patients with Central Neurocytoma —*Ugonma Chukwueke, Corey Gill, Tracy Batchelor, Priscilla Brastianos*

P3.275 Spinal Myxopapillary Ependymomas in Children and Young Adults: A Population-Based Study —*Kelly Lucchesi, Ryan Grant, Asher Marks, Michael DiLuna*

P3.276 Embryonal Tumor with Multilayered Rosettes (ETMR): Clinical, Radiological and Pathological Summary of 6 Cases and Review of This Recently Defined C19MC-Altered Entity —*Bhanu Gogia, Gregory Fuller, Leena Ketonen*

P3.277 Neuronal Activity Promotes Pediatric High-Grade Glioma Infiltration Via Secreted Factors —*Tessa Johung, Michelle Monje-Deisseroth*

P3.278 Novel Treatment Combinations with Panobinostat in Diffuse Intrinsic Pontine Glioma —*Nicholas Vitanza, Yujie Tang, Noah Berlow, Charles Keller, Michelle Monje*

P3.279 An Unusual Case of Resistant Secondary Glioblastoma with BRAF V600e Mutation —*Pamela New*

P3.280 Personalized Treatment for a Patient with a BRAF V600E-Mutation Using Dabrafenib and Tumor Treatment Fields (TTFields; NovoTTF -100A) Device in a Glioblastoma Arising from Ganglioglioma —*Isaac Melguizo, silviya Meletath, Dean Pavlick, George Snipes, Veena Rajaram, Tim Brennan, Roy Hamilton, Juliann chmielecki, Julia Elvin, Norma Palma, Jeffrey Ross, Vincent Miller, Philip Stephens, Siraj Ali, Barbara Beiss*

P3.281 Promising Response to Vemurafenib Salvage Therapy in a Patient with Clinically and Radiographically Progressing Pleomorphic Xanthoastrocytoma: Our Experience with One Patient —*Morad Nasseri, Varun Shah, James Peveler, Mark Szlaczky, Geoffrey Barger*

P3.282 PIK3CA Mutation in a Mixed Rosette Forming Glioneuronal Tumor and Dysembryoplastic Neuroepithelial Tumor —*Philip Eye, Sarah Cantrell, Brett Theeler*

P3.283 Subependymal Giant Cell Astrocytoma Treatment Patterns Among Patients with Tuberous Sclerosis Complex —*Darcy Krueger, Jinlin Song, Elyse Swallow, Sarah King, Miranda Peeples, James Signorovitch, Zhimei Liu, Judith Prestifilippo, Bruce Korf, Steven Sparagana, Michael Wong, Michael Kohrman*

Neurorehabilitation: Rehabilitation After Injury, ALS, and Parkinson Disease

P3.284 The Role of Therapeutic Hypothermia After Traumatic Spinal Cord Injury - A Systematic Review —*Samir Alkabie, Andrew J. Boileau*

P3.285 Acute Care and Rehabilitation Management of the Elderly with Traumatic Cervical Spinal Cord Injury: A Cost-Utility Analysis —*Julio Furlan, B. Catharine Craven, Michael Fehlings*

P3.286 The Effect of the Novel Blood-Brain Barrier Permeable Calpain Inhibitor Ala-1.0 in a Rat Model of Traumatic Brain Injury —*Rachelle Dugue, Peter Serrano, Getaw Hassen, Hillary Michelson, Abraham Shulman, Jeffrey Goodman, Douglas Ling*

P3.287 Cerebrovascular Reactivity and Neuropsychological Function in Chronic TBI —*Aaron Wolfgang, Kimbra Kenney, Franck Amyot, L. Turtzo, Carol Moore, Erika Silverman, Christian Shenouda, Emily Spessert, Leah Harburg, Eric Wassermann, Ramon Diaz-Arrastia*

P3.288 Cortical Excitability After Mild Traumatic Brain Injury in Children —*Trevor Seeger, Adam Kirton, Karen Barlow*

P3.289 Early Ambulation in Patients with External Ventricular Drains: Results of a Quality Improvement Project —*Jacqueline Kraft, Syed Omar Shah, Nethra Ankam, Paula Bu, Kristen Stout, Sara Melnyk, Fred Rincon, M. Kamran Athar*

P3.290 Electronically Augmented Timed-Up-and-Go Test (EATUG) Differentiates Sit-To-Stand (STS) Mobility and Balance in Ambulatory Individuals with Amyotrophic Lateral Sclerosis (ambALS) and Parkinson Disease (ambPD) —*Mohammed Sanjak, Mark Hirsch, Nahir Habet, Richard Peindl, Nigel Zheng, Scott Holsten, Brandy Morgan, Tangela Mash, Danielle Englert, Sanjay Iyer, Nicole Lucas, Priscilla Russo, Elena Bravver, William Bockenek, Benjamin Brooks*

P3.291 Comparison of Driving Capacity with Distraction Using the Lane Change Task in Drivers with Amyotrophic Lateral Sclerosis Compared with Healthy Controls —*Heather Hayes, Nicholas Dorius, Summer Gibson, Pamela Mathy, Kiera Berggren, Mark Bromberg*

P3.292 Complications and Urologic Risks of Neurogenic Bladder in Veterans with Traumatic Spinal Cord Injury —*Christopher Aston, Meheroz Rabadi*

P3.293 Evaluate the Impact of Neurogenic Bladder in Veterans with Traumatic Spinal Cord Injury —*Meheroz Rabadi*

P3.294 Natural History of Headache Five Years After Traumatic Brain Injury —*Arthur Stacey, Sylvia Lucas, Nancy Temkin, Sureyya Dikmen, Kathleen Bell, Jeanne Hoffman*

Neurorehabilitation

P3.295 Escalating Doses of IncobotulinumtoxinA (400U-800U) Lead to Increasing Improvements in Disability Due to Multifocal Upper- and Lower-Limb Spasticity —*David Simpson, Djamel Bensmail, Bruce Rubin, Astrid Scheschonka, Olivier Simon, Jörg Wissel*

P3.296 Baseline Demographics and Clinical Characteristics of Patients Treated for Spasticity in the Adult Spasticity International Registry (ASPIRE Study) —*Gerard Francisco, Daniel Bandari, Ganesh Bavikatte, Wolfgang Jost, Aubrey Manack Adams, Joan Largent, Alberto Esquenazi*

P3.297 A Simple Bedside Grading Scale Can Effectively Predict Severe Post-Stroke Upper-Extremity Spasticity —*Wayne Feng, Hernan Bayona, Steve Kautz, Pratik Chhatbar*

P3.298 Kinematic and Kinetic Outcome of Robot Assisted Neurorehabilitation in Chronic Moderate-to-Severe Hemiparetic Stroke —*Tahreem Iqbal, Susan Conroy, Anindo Roy, Christopher Bever*

P3.299 Median Nerve Ultrasound During the Acute Stroke Period: A New Method of Early Detection —*Chen Lin, Aaron Loochtan, Lisa Hobson-Webb*

P3.300 The First 3 Months Post Stroke: A Unique Opportunity to Promote Exercise —*Graham Garrison, Kari Dunning, Brett Kissela, Daniel Woo, Matthew Flaherty, Pooja Khatri, Dawn Kleindorfer, Opeolu Adeoye, Charles Moomaw, Simona Ferioli, Kathleen Alwell, Boyne Pierce*

P3.301 Association of Urinary Continence Recovery with Cognition, Transfers and Discharge Disposition Following Inpatient-Rehabilitation for Stroke —*David Kushner, Douglas Johnson-Greene, Kenneth Peters*

P3.302 DTI Analysis of the Corticospinal Tracts in Clinical Trial of Intra- Arterial Stem Cell Therapy for Stroke —*Luis Guada, Kunakorn Atchaneeyasakul, Pradip Pattany, Jose Rodriguez, Kevin Ramdas, Dileep Yavagal*

P3.303 Sustained Efficacy with IncobotulinumtoxinA in Upper-Limb Post-Stroke Spasticity Over 48 Weeks (a Phase 3, Placebo-Controlled Study with an Open-Label Extension) —*Elie Elovic, Allison Brashear, Michael Munin, Petr Kaňovský, Angelika Hanschmann, Reinhard Hiersemenzel, Christina Marciniak*

P3.304 Effects of Bilateral Repetitive Transcranial Magnetic Stimulation with H-coil on Paretic Upper Limb Motor Function in Chronic Stroke —*Raffaella Chieffo, Giuseppe Scopelliti, Elise Houdayer, Giovanni Di Maggio, Laura Ferrari, Mario Fichera, Arturo Nuara, Guerrieri Simone, Roberto Santangelo, Abraham Zangen, Giancarlo Comi, Letizia Leocani*

P3.305 Rehabilitation Outcomes of Patients with Severe Strokes —*Purwa Joshi, David Abernethy, Harry McNaughton*

P3.306 A Functional Spinal Cord Injury-Induced Immune Deficiency Syndrome Propagates the Susceptibility for Bacterial Infection in a Lesion Level Dependent Manner - Neurogenic Implications —*Jan Schwab*

P3.307 Extension Study to Assess the Safety and Efficacy of Repeated AbobotulinumtoxinA Injections in Adults with Upper Limb Spasticity —*Allison Brashear, Christina Marciniak, Steven Edgley, Fatma Gul, Peter Hedera, Peter McAllister, Michael O'Dell, Bruce Rubin, Heather Walker, Claire Vilain, Adnan Mahmood, Jean-Michel Gracies*

P3.308 A Randomized Sham-Controlled Trial of Continuous Positive Airway Pressure in Patients Undergoing Intensive Inpatient Rehabilitation After Acute Stroke —*Sandeep Khot, Arielle Davis, Deborah Crane, Tanzi Patricia, Denise Li Lue, Edward Claflin, Kyra Becker, W. T. Longstreth, Nathaniel Watson, Martha Billings*

P3.309 Remote Actigraphy for Quantitative Assessment of Walking Speed in People with MS —*Akara Supratak, Gourab Datta, Chao Wu, Simiao Yu, Caroline D'Arcy, Richard Nicholas, Yike Guo, Paul Matthews*

Neuro Trauma and Sports Neurology

P3.310 Concussion Profile in Older Adults —*Melissa DiFabio, Kristopher Fayock, Elyse Andrews, Thomas Buckley*

P3.311 Multivariate Models of Biosensor Data to Actively Assess Sports Concussion and Mild Traumatic Brain Injury —*Adam Simon, David Devilbiss*

P3.312 Evaluating Concussion Recovery Through Oculomotor Testing —*Melissa DiFabio, Jessie Oldham, Ryan DeWolf, Thomas Kaminski, Thomas Buckley*

P3.313 Impacts of MTBI on Working Memory over Time: The Pilot Longitudinal Study —*Kate Essad, Hooman Azmi, Joseph Feldman, Chinwe Ogedegbe, Glenn Wylie*

P3.314 Cognitive and Balance Correlates of Exposure and Brain Health in Professional Fighters —*Sarah Banks, Jay Alberts, Charles Bernick*

P3.315 Barriers to Recovery from Concussion —*Teena Shetty, Charlotte Ching, Aashka Dalal, Kelianne Cummings, Kristin Halvorsen, Davena Zhang, Joseph Nguyen*

P3.316 Head Impact Kinematics Do Not Adversely Affect Gait Motor Performance Over the Course of a Single Football Season —*Thomas Buckley, Jessie Oldham, Barry Munkasy, Nicholas Murray*

P3.317 Von Willberand Factor and Cellular Fibronectin Plasma Concentrations Are Increased in MRI-Positive Compared to MRI-Negative Traumatic Brain Injury Patients —*Tanya Bogoslovsky, Bao-Xi Qu, Martin Cota, Lawrence Latour, Ramon Diaz-Arrastia*

P3.318 Exercise Biases Cognitive Performance and EEG Measures Used for Concussion Assessments —*Stephen Martino, David Devilbiss, Jena Etnoyer-Slaski, Adam Simon*

P3.319 Baseline Clinical Reaction Time (RTclin) in Youth and Collegiate Athletes —*Max Zeiger, Meeryo Choe, Christopher Giza, James Eckner, Sue Yudovin, David McArthur, Isaac Gadinsky*

P3.320 The Head Injury Symptoms Checklist (HISC) As a Potential Screening Tool for PPCS in TBI —*Chava Creque, Ryan Duggan, Christopher Adams, Nana Asiedu, Irene Tseretopoulos, Jamshid Ghajar*

P3.321 Cerebral Perfusion Changes in Children with and Without Post-Concussion Syndrome Following a Mild Traumatic Brain Injury Using Arterial Spin Labelling —*Karen Barlow, Marcil Lorenzo, Helen Calson, Lebel Marc*

P3.322 Cortical Thickness and Subcortical Brain Volumes in Retired Professional Rugby League Players —*Magdalena Wojtowicz, Andrew Gardner, Peter Stanwell, Christopher Levi, Sandy Shultz, Ross Zafonte, Bradford Dickerson, Grant Iverson*

P3.323 White Matter Hyperintensity in Patients with Mild Traumatic Brain Injury Correlates with Higher Coated-Platelet Levels —*Calin Prodan, Andrea Vincent, Leslie Guthery, Eleanor Mathews, Deborah Sadler, George Dale*

P3.324 Multiple Past Concussions in High School Football Players —*Grant Iverson, Brian Brooks, Rebekah Mannix, Bruce Maxwell, Magdalena Wojtowicz, Ross Zafonte, Paul Berkner*

P3.325 Factors Associated with Prolonged, Subjective Post-Concussive Symptoms —*Alexandra Stillman, Nancy Madigan, Michael Alexander*

P3.326 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*

P3.327 WITHDRAWN

P3.328 The Post-Concussion Syndrome (PCS) in Veterans of Afghanistan (OEF) and Iraq (OIF) Wars 2-11 Years After Traumatic Brain Injury (TBI) —*James Couch, Kenneth Stewart*

P3.329 Conservative Gait Termination Strategy Following Concussion —*Jessie Oldham, Kelsey Evans, Erik Wikstrom, Thomas Buckley*

P3.330 Mild Traumatic Brain Injury (TBI): What Is the Complication? —*Meeryo Choe, Max Zeiger, Sue Yudovin, David McArthur, Christopher Giza*

P3.331 No Changes in Postural Control or Near-Point Convergence Following an Acute Bout of Soccer Heading —*Jaclyn Caccese, Thomas Buckley, Thomas Kaminski*

P3.332 Majority of Patients Endorsing Post Traumatic Migraine Headaches Features Are Females —*Karameh Hawash*

P3.333 Assessing Attention: Relationship Between Circular Visual Tracking and Spatial Span, and Implication for Electronic Assessment —*Samantha Wasserman, Mackenzie Larsen, Nana Asiedu, Irene Tseretopoulos, Lisa Spielman, Jamshid Ghajar*

P3.334 To Study Risk of Seizures After Mild Traumatic Brain Injury in General Population —*Suresh Kumar, Pooja Shah, Martin Bringham*

P3.335 Symptoms and Care Provided to Concussion Patients Who Have 72 Hour Emergency Department Revisits: A Retrospective Cohort Study —*Mia Minen, Ashna Shome, Laura Balcer, Corita Grudzen, Nicholas Gavin*

P3.336 Initial Validation of a Novel Neuro-Ophthalmologic Set-Shifting Saccade Task —*Adam Simon, Stephen Martino, David Devilbiss*

Neuroepidemiology: Global Health, Neuro Trauma, and CNS Inflammation

P3.337 Secular Trends of Stroke Incidence and Transition of Stroke Subtypes Among Adults in a Low Socioeconomic Population in China from 1992 to 2013 —*Xianjia Ning, Li Yang, Wenjuan Zhao, Zhongping An, Bin Li, Hongfei Gu, Lingling Bai, Min Shi, Jun Tu, Jinghua Wang*

P3.338 Primordial Prevention of Stroke: Identifying the Determinants of Hypertension in Urban Uganda —*Jerome Chin, Aska Twinobuhungiro*

P3.339 Predictive Nature of Neuron Specific Enolase for Clinical Outcome Among Cardiac Arrest Survivors Who Have Undergone Therapeutic Hypothermia —*Alexandra Reynolds, Elizabeth Matthews, Jessica Magid-Bernstein, Ashley Rodriguez, Alex Presciutti, Christina Falo, Soojin Park, Jan Claassen, Sachin Agarwal*

P3.340 The Rate of Complications After Ventriculoperitoneal Shunt Surgery —*Alexander Merkler, Judy Ch'ang, Whitney Parker, Santosh Murthy, Hooman Kamel*

P3.341 Risk of Psychiatric Disorders After Traumatic Brain Injury —*Alexander Merkler, Aaron Gusdon, David Roh, Santosh Murthy, Hooman Kamel*

Monday, April 18

Poster Session 8:30 a.m.–7:00 p.m.

P3.342 Predicting Cognitive Impairment in Professional Fighters —*Charles Bernick, Tanujit Dey*

P3.343 Lower Cerebral BloodFlow in Professional Fighters Using Arterial Spin Labeling MRI —*Virendra Mishra, Karthik Sreenivisan, Xiaowei Zhuang, Zhengshi Yang, Sarah Banks, Dietmar Cordes, Charles Bernick*

P3.344 ICD9 Codes Can Be Used to Identify Cerebral Sinus Venous Thrombosis in Hospitalized Adults —*Ava Liberman, Michael Mullen, Steven Messe*

P3.345 Bringing Recognition and Awareness to Inner-City Neighborhoods About Stroke (BRAINS) —*Sara Wertenteil, Sarah Weingast, Dimitre Stefanov, Olajide Williams, Paul Wertenteil, Zachary Weiss, Gabrielle Sunderland, David Aharonoff, Steven Levine*

P3.346 Rho GTPase Activating Protein 26 (ARHGAP26)-Igg Autoimmunity: Frequency and Clinical Associations —*Nora Alfugham, Vanda Lennon, Lars Komorowski, Christian Probst, Sean Pittock*

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 Leimpeter, 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 Leimpeter, Robin Fross, Kathleen Comyns, Zhuqin Gu, Maya Katz, Laurie Ozelius, 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. Ahlskog, Bradley Boeve, James Bower, Michelle Mielke*

P3.351 Ambient Air Pollution Exposures and Risk of Parkinson's Disease —*Rui Liu, Michael Young, Jiu-Chiuan 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 Hoegg, 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 IFNβ in Multiple Sclerosis Patients: A Case-Control Study —*Signe Hassler, Derik Hermsen, 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 Parkinsons 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 Oravivattanakul, 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 Oravivattanakul, 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 Demylelinating 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, Amandio 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 Ollenschleger, 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 Hohler*

P3.386 Neuropsychological Response to Immunotherapy in Patients with Suspected Rapidly Progressive Dementia Secondary to Autoimmune Encephalitis: Analysis of 17 Cases —*Galeno Rojas, Ignacio Demey, Julieta Quiroga, Fatima Pantiu, Luciana Leon Cejas, Pablo Bonardo, Maria Pacha, Oscar Martinez, Claudia Uribe Roca, Juan Ollari, 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 Recpients

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*

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

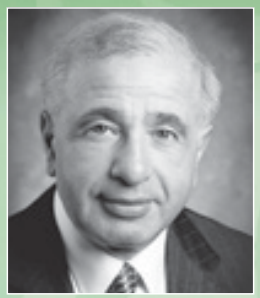
AAN 2016 Annual Meeting

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

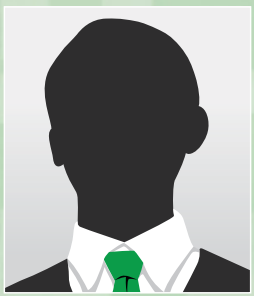
Con: Kaycee Sink, MD, MAS
Wake Forest Baptist Medical Center
Winston Salem, NC




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

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AAN 2016 Annual Meeting

Monday, April 18

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 Witoelar, 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 Gijselinck, Kristel Sleegers, Tim Van Langenhove, Anne Sieben, Jan De Bleecker, 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 Vandenberghe, 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 Gijselinck, Sebastiaan Engelborghs, Anne Sieben, Tim Van Langenhove, Jan De Bleecker, Jonathan Baets, Mathieu Vandenbulcke, Koen Van Laere, Sarah Ceyssens, Marleen Van Den Broeck, Karin Peeters, Maria Mattheijssens, Patrick Cras, Rik Vandenberghe, 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-Penry 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-Jocson, 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 Hernando, 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 Caller, 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 WEPOD Study) — *Jacqueline French, Cynthia Harden, Page Pennell, Emilia Bagiella, 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 Mandle*

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, Wendyl 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
SIF The course is part of a Subspecialty in Focus track
I The program is one of the I Talk sessions
Ex Learning Lab / Ex Excitement of Discovery / Ex Health & Wellness / Ex Navigating Your Career / Ex Real World of Neurology — 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.

Neurological Exam Tips and Tricks
Directors: *Thomas R. Swift, MD, FAAN, Augusta, GA*
Kapil D. Sethi, MD, FRCP, FAAN, Augusta, GA
Chirstopher H. Hawkes, MD, Bsc, FRCP, Romford, England

1:00 p.m.–2:00 p.m.

There's an AAN App for that! Engaging with the AAN using eMedia
Director: *Bert B. Vargas, MD, Dallas, TX*

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**

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

Learning Lab

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.

Speakers will discuss:

- The Future of Neurology Residency and Fellowship Training
- 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.*

1:00 p.m.–5:30 p.m. Integrated Neuroscience Session

I6 SIP 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. **I6.001 Data Blitz**
Gaze Deviation and Acute Stroke Care Strategies —*Zaid Mahdi, Anup Kumar Trikannad Ashwini Kumar, Pratik Bhattacharya, Ramesh Madhavan*

1:50 p.m.–1:55 p.m. **I6.002 Data Blitz**
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*

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. **I6.003 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. **I6.004 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.

I6.001 Gaze Deviation and Acute Stroke Care Strategies —*Zaid Mahdi, Anup Kumar Trikannad Ashwini Kumar, Pratik Bhattacharya, Ramesh Madhavan*

I6.002 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*

I6.003 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*

I6.004 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*

I6.005 Time is Brain: Standardized Neuro-Interventional Thrombectomy Protocols Lead to Faster Recanalization Times —*Donald Frei, Lisa Caputo, Kathryn McCarthy, Kristin Salottolo, David Bar-Or*

I6.006 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*

I6.007 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*

I6.008 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*

I6.009 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*

I6.010 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*

I6.011 Overcoming Barriers to Reduce Door to Needle Times in Acute Ischemic Stroke Patients: Field to CT —*Spozhmy Panezai, Florence Chukwuneke, Audrey Arango, Jaskiran Brar, Joshua Daniel, Daniel Korya, Siddhart Mehta, Mohammad Moussavi, Jawad Kirmani*

I6.012 Symptomatic Cerebral Ischemia Associated with Intensive Blood Pressure Lowering Following Acute Intracerebral Hemorrhage —*Natalie Organek, Megan Donohue, Lauren Gotterer, Ken Uchino*

I6.013 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. **I6.005 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. **I6.006 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. **I6.007 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. **I6.008 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

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

1:00 p.m.–5:30 p.m.

I6 SIP **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.

Ex Health & Wellness **Mindfulness Meditation for Healthcare Practitioners**
Director: *Sarah Mulukutla, MD, MPH, Stamford, CT*

3:00 p.m.–4:00 p.m.

Ex Health & Wellness **"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.

I **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.

Ex Health & Wellness **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

Monday, April 18

1:00 p.m.–5:30 p.m. Integrated Neuroscience Session

I7 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. **I7.001 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. **I7.002 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. **I7.003 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. **I7.004 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.

I7.001 Time-Dependence of Graph Theory Metrics in Functional Connectivity Analysis —*Sharon Chiang, Alberto Cassese, Michele Guindani, Marina Vannucci, Hsiang Yeh, Zulfi Haneef, John Stern*

I7.002 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*

I7.003 Focal Temporal Pole Atrophy and Network Degeneration in Semantic Variant Primary Progressive Aphasia —*Jessica Collins, Victor Montal, Maria Gorno Tempini, Bradford Dickerson*

I7.004 Structural Connectivity of Broca's Region —*Anastasia Bohsali, Joseph Gullett, Thomas Mareci, Bruce Crosson, David FitzGerald, Keith White, Stephen Nadeau*

I7.005 Differential Longitudinal Decline of White Matter Integrity in Frontotemporal Lobar Degeneration and Alzheimer's Disease —*Gabriel Marx, Fanny Elahi, Jon Elofson, Yann Cobigo, Duygu Tosun, Norbert Schuff, Bruce Miller, Howard Rosen*

I7.006 Structural Disconnection Is Responsible for Increased Resting State Functional Connectivity in Multiple Sclerosis —*Kevin Patel, Sean Tobyne, Boratyn Daria, John Bireley, Victoria Smith, Eric Klawiter*

I7.007 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*

I7.008 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*

I7.009 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*

I7.010 Functional Reorganization in Multiple Sclerosis at 7T: Altered Connectivity and Relationships to Cognitive Impairment —*Benjamin Conrad, Bailey Lyttle, Siddharama Pawate, Seth Smith*

I7.011 Targeted Capture and Massively Parallel Sequencing to Identify Atypical Leukoencephalopathy in 48 Chinese Patients —*Xiaole Wang, Fei Yin, Liwen Wu, Lifen Yang, Fang He, Jing Peng*

I7.012 Structural Organization of the Brain Connectome in Patients with Psychogenic Dystonia —*Silvia Basaia, Federica Agosta, Aleksandra Tomić, Elisabetta Sarasso, Marina Svetel, Sebastiano Galantucci, Vladimir Kostic, Massimo Filippi*

I7.013 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 Elofson, 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. **I7.005 Data Blitz**
Differential Longitudinal Decline of White Matter Integrity in Frontotemporal Lobar Degeneration and Alzheimer's Disease —*Gabriel Marx, Fanny Elahi, Jon Elofson, Yann Cobigo, Duygu Tosun, Norbert Schuff, Bruce Miller, Howard Rosen*

3:50 p.m.–3:55 p.m. **I7.006 Data Blitz**
Structural Disconnection Is Responsible for Increased Resting State Functional Connectivity in Multiple Sclerosis —*Kevin Patel, Sean Tobyne, 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. **I7.007 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. **I7.008 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**

I8 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 Neurodiagnositics 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. **I8.001 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. **I8.002 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. **I8.003 Data Blitz**
Tremor Severity Estimation Using Liftware Instrumented Eating Utensil —*Svjetlana Miocinovic, Ali Shoeb, Sarah Wang, Nicole Swann, Anupam Pathak, Jill Ostrem*

2:35 p.m.–2:40 p.m. **I8.004 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 Kontschieder, Cecily Morrison, Jonas Dorn, Samuel Rota Bulò, 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.

I8.001 Rare Disease Clinical Research: Caregivers' Perspectives on Barriers and Solutions for Clinical Research Participation —*Travis Amengual, Heather Adams, Jonathan Mink, Erika Augustine*

I8.002 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*

I8.003 Tremor Severity Estimation Using Liftware Instrumented Eating Utensil —*Svjetlana Miocinovic, Ali Shoeb, Sarah Wang, Nicole Swann, Anupam Pathak, Jill Ostrem*

I8.004 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 Kontschieder, Cecily Morrison, Jonas Dorn, Samuel Rota Bulò, Prejaas Tewarie, Kristina Miciunaite, Abigail Sellen, Antonio Criminisi, Frank Dahlke, Christian Kamm, Bernard Uitdehaag, Ludwig Kappos*

I8.005 Toward Improving Migraine Management in Primary Care: The HAPPY Project —*Jennifer Bickel, Mark Connelly*

I8.006 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*

I8.007 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*

I8.008 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*

I8.009 Long-Term Outcome of Adults with Medically Intractable Mesial Temporal Lobe Seizures Treated with Responsive Neurostimulation —*Paul Van Ness, Tara Crowder Skarpaas, Martha Morrell*

I8.010 Quantitative Gait Parameters from MCI to Moderate Dementia: Results from the GOOD Initiative —*Allali Gilles, Joe Verghese, Olivier Beauchet*

I8.011 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*

I8.012 Wireless Sensors to Measure Walking in Patients with Facioscapulohumeral Muscular Dystrophy (FSHD) —*Jessie Huisinga, Adam Bruetsch, Melissa Currence, Laura Herbelin, Omar Jawdat, Mamatha Pasnoor, Mazen Dimachkie, Richard Barohn, Jeffrey Statland*

I8.013 Overcoming Challenges in the Collection of Patient-Reported Outcomes in an Ambulatory Academic Neurology Clinic —*Lidia Maria Moura, Eli Schwamm, Valdery 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. **I8.005 Data Blitz**
Toward Improving Migraine Management in Primary Care: The HAPPY Project —*Jennifer Bickel, Mark Connelly*

4:15 p.m.–4:20 p.m. **I8.006 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. **I8.007 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. **I8.008 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**

Mon · April 18

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 Fermo, Pietro Annovazzi, Luca Prosperini, Eleonora Cocco, Simona Bonavita, Valentina Torri Clerici, Alice Laroni, Anna Maria Repice, Ignazio Roberto Zarbo, Cerqua Raffaella, Alessia Di Sapio, 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, Marrosu Maria Giovanna, Valeria Di Tommaso, Deborah Farina, Alessandra Lugaresi, 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-Descalls, 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 Nolta*

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 Nolta*

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 Lirng, 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 [^{125}I]-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.

Tuesday, April 19

6:30 a.m.–8:30 a.m.
- $ **2016 AAN Run/Walk for Brain Research**

6:30 a.m.–8:30 a.m.
- C127 SIF 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.
- Ex Health & Wellness 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.
- I New Approaches to Biosensing and Biomarkers for the Management of Neurological Disease
- Ex Health & Wellness 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 Neuroepidemilology 102
- S33 Section Topic Controversies: Autoimmune/ Paraneoplastic Neurological Disorders: Update on Imaging and Antibody Testing 102
- Ex Real World of Neurology 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 SIF Sleep, Clocks, and Alzheimer's Disease . . . 104
- I10 Remyelination and Repair in Multiple Sclerosis . 106

2:15 p.m.–3:00 p.m.
- Ex Health & Wellness Mindfulness Meditation for Healthcare Practitioners

3:00 p.m.–4:00 p.m.
- Ex Health & Wellness Dietary Interventions in MS & Medical Marijuana in MS

3:30 p.m.–4:30 p.m.
- I 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
SIP The course is part of a Subspecialty in Focus track
I The program is one of the I Talk sessions
Ex Learning Lab / Ex Excitement of Discovery / Ex Health & Wellness / Ex Navigating Your Career / Ex Real World of Neurology 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.

Ex Health & Wellness 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

Tuesday, April 19

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 KINECT: 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 Opri, Jonathan Shute, Rene Molina, Kelly Foote, Michael Okun, Aysegul 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: KINECT 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
Antiiflammatory and Neuroprotective Role of Fingolimod in Experimental Autoimmune Neuritis in Lewis Rats —*Bjoern Ambrosius, Kalliopi Pitarokoili, 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 Szelag, Tim Harrington, Adam Pacheck, 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 Uygunoglu, 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 Fadrosh, 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 SIP **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.

Ex 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.

1 **New Approaches to Biosensing and Biomarkers for the Management of Neurological Disease**
Director: *John David Hixson, MD, San Francisco, CA*

Ex Health & Wellness **Oasis in the Overwhelm**
Director: *Dina Kruzansky Markind, CPCC, Danbury, CT*

Ex **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

Tue. April 19

Learn more at *AAN.com/view/NavigatingYourCareer*.

Tuesday, 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, Sharday Grant, Ritchie Ho, Sharon Carmona, Megan Simpkinson, Kathryn Wu, Lillian Daughrity, 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 Gurol, 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 Kawas*

Discussion: 12:10 p.m.–12:15 p.m.

P4.006 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*

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 Viglietta, 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 Abdolalizadeh, 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, Dareen AlShaer, Khalid Al-Safi, Yousuf Al-Sawwaf*

P4.018 Atypical Freezing of Gait Associated with a Corpus Callosum Lesion —*Marian Dale, Martina Mancini, Carolyn Curtze, Fay Horak, Brett Fling*

Imaging: Alzheimer's Disease and Aging

P4.019 Network Correlates of Neurocognitive Efficiency at the Early Stages of Alzheimer's Neurodegeneration —*Matteo De Marco, Francesca Meneghello, Davide Duzzi, Annalena Venneri*

P4.020 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*

P4.021 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*

P4.022 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*

P4.023 Differential Longitudinal Decline of White Matter Integrity in Frontotemporal Lobar Degeneration and Alzheimer's Disease —*Gabriel Marx, Fanny Elahi, Jon Elofson, Yann Cobigo, Duygu Tosun, Norbert Schuff, Bruce Miller, Howard Rosen*

P4.024 Dementia Diagnosis Using an Index of Severity Based on DTI Data — *Kevin Chen, Jeremy Strain, Kyle Womack*

P4.025 Brain Volumetric Predictors of Cognitive Decline in an African American Cohort —*Allison Lindauer, Nora Mattek, Raina Croff, Tiffany Kirkpatrick, Nicole Fleming, Lisa Silbert, Jeffrey Kaye, Deniz Erten-Lyons*

P4.026 Neocortical Limbic Volume Predicts Longitudinal Gait Performance Decline in Older Adults —*Ellen McGough, Valerie Kelly, Kurt Weaver, Katie Askren, Rebecca Logsdon, Susan McCurry, Kenneth Pike, Thomas Grabowski, Linda Teri*

Imaging, Diagnosis, and Management: Other Dementias

P4.027 Neuropsychological and MRI Findings in MAPT Mutation Carriers in the Evolution from the Asymptomatic to Symptomatic State —*Christina Dheel, Scott Przybelski, Matthew Senjem, Kejal Kantarci, David Jones, Julie Fields, Mary Machulda, Clifford Jack, Rosa Rademakers, David Knopman, Zbigniew Wszolek, Ronald Petersen, Bradley Boeve*

P4.028 Functional Connectome Architecture of Alzheimer's Disease, Mild Cognitive Impairment and Behavioral Variant of Frontotemporal Dementia: A Graph Analysis Study —*Federica Agosta, Elisa Canu, Silvia Basaia, Alessandro Meani, Sebastiano Galantucci, Francesca Caso, Giuseppe Magnani, Roberto Santangelo, Monica Falautano, Giancarlo Comi, Andrea Falini, Massimo Filippi*

P4.029 Focal Temporal Pole Atrophy and Network Degeneration in Semantic Variant Primary Progressive Aphasia — *Jessica Collins, Victor Montal, Maria Gorno Tempini, Bradford Dickerson*

P4.030 Predicting Decline in Agrammatism, Apraxia of Speech and Parkinsonism in Agrammatic Primary Progressive Aphasia —*Jennifer Whitwell, Stephen Weigand, Joseph Duffy, Edythe Strand, Mary Machulda, Heather Clark, Matthew Senjem, Clifford Jack, Keith Josephs*

P4.031 Longitudinal Progression of Atrophy in Non-Fluent Primary Progressive Aphasia Follows the Functional/Structural Speech Motor Network —*Maria Luisa Mandelli, Eduard Vilaplana, H.Isabel Hubbard, Jesse Brown, Miguel Santos, Richard Binney, Suneth Attygalle, Maya Henry, Roland Henry, Howard Rosen, Bruce Miller, William Seeley, Maria Gorno Tempini*

P4.032 Tracking the Development of Aphasia in Primary Progressive Apraxia of Speech: A Tensor-Based Morphometry Study —*Jennifer Whitwell, Joseph Duffy, Edythe Strand, Mary Machulda, Heather Clark, Matthew Senjem, Anthony Spychalla, Clifford Jack, Keith Josephs*

P4.033 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 Elofson, John Kornak, Bruce Miller, Howard Rosen*

P4.034 The Prevalence and Prognosis of Patients with Enlarged Ventricles — *Neill Graff-Radford, David Jones, Jeffery Gunter, Colleen Thomas, Julia Crook, Bradley Boeve, David Knopman, Clifford Jack, Ronald Petersen*

P4.035 Volumetric Quantification of Neurodegeneration Shows Selective Vulnerability of the Default-Mode Network in Sporadic Creutzfeldt-Jakob Disease —*Julio Rojas -Martinez, Matteo Paoletti, Johnathan Elofson, Ignacio Illan-Gala, Howard Rosen, Michael Geschwind*

P4.036 Frequency of FTLD Mutations in a Commercial Laboratory Versus a Specialty Clinic —*Natasha Rabinowitz, Jennifer Yokoyama, Anna Karydas, Giovanni Coppola, Luke Bonham, Jamie Fong, Katherine Rankin, Bruce Miller, Alison Bright, Izabela Karbassi, Marc Meservey, Khalida Liaquat, Matthew Gallen, Carol Hoffman, Meagan Krasner, Whitney Dodge, Joseph Higgins*

P4.037 How Effective is a Multidisciplinary Approach in Normal Pressure Hydrocephalus (NPH)? —*Banu Sundar, Lindsey Jolley, Oguz Cataltepe*

P4.038 A Comparative Analysis of the Insoluble Brain Proteome in Alzheimer's Disease, Chronic Traumatic Encephalopathy and Frontotemporal Dementia —*Chad Hales, Eric Dammer, Duc Duong, James Webster, Ahmad Zeineddin, Nicholas Seyfried, James Lah*

Behavioral and Cognitive Neurology: Markers of Cognition

P4.039 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*

P4.040 Relationship of White Matter Hyperintensity and Cortical Volume with Gait Velocity in Older Adults —*Ali Ezzati, Adam Brickman, Molly Zimmerman, Mindy Katz, Carol Derby, Michael Lipton, Richard Lipton, Joe Verghese*

P4.041 Functional Network Reorganization Following Subcortical Stroke: Applying a Lesional-Functional Imaging Approach —*Maiya Geddes, Yamei Tie, John Gabrieli, Scott McGinnis, Alexandra Golby, Susan Whitfield-Gabrieli*

P4.042 Wernicke's Encephalopathy or Creutzfeldt Jakob Disease? Report of Cases with Non-classic Presentation of Thiamine Deficiency and Challenging Brain MRI Findings —*Yara Mikhaeil-Demo, Stephan Schuele, Arth Srivastava, Borna Bonakdarpour*

P4.043 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*

P4.044 WITHDRAWN

P4.045 Cerebellar Connectivity and Glutamatergic Metabolite Concentration in ASD As Assessed by FcMRI/MRS — *David Beversdorf, Dylan Weber, John Hegarty*

P4.046 Structural MRI and Molecular PET Imaging (AV45 and AV1451) in the Diagnosis of Chronic Traumatic Encephalopathy In Vivo: Study of a Retired NFL Player —*Dara Dickstein, Mariel Pullman, Corey Fernandez, Jennifer Short, Lale Kostakoglu, Karin Knesaurek, Barry Jordan, Wayne Gordon, Kristen Dams-O'Connor, Bradley Delman, Cheuk Tang, Steven DeKosky, James Stone, Robert Cantu, Patrick Hof, Samuel Gandy*

P4.047 Finding the Imposter: Lesions Causing Capgras Syndrome Are Functionally Connected with Brain Regions Perceiving Familiarity —*Richard Darby, Simon Laganiere, Sashank Prasad, Michael Fox*

Behavioral and Cognitive Neurology: Clinical Imaging Correlates

P4.048 Structural Connectivity of Broca's Region —*Anastasia Bohsali, Joseph Gullett, Thomas Mareci, Bruce Crosson, David FitzGerald, Keith White, Stephen Nadeau*

P4.049 F-MRI Correlates of Picture Naming in Arabic Bilinguals —*Haythum Tayeb, Jamaan Al-Ghamdi, Khalid Al-Safi, Yousuf Al-Sawwaf, Ahmad Naushad*

P4.050 Documentation Bias in Functional Neurological Symptom Disorder: Comparing the Prevalence and Documentation of Functional Neurological Symptom Disorder and Parkinson's Disease —*Katherine Leaver, Esther Yi, Briana Evans, Kim Bullock, Joanna Dearlove*

P4.051 The Influence of Right and Left Frontotemporal Stimulation on Visuospatial Creativity —*Nicholas Milano, Annika Goldman, Adam Woods, John Williamson, Lealani Acosta, Damon Lamb, Han Zhang, Kenneth Heilman*

P4.052 Neural Correlates of Sense of Effort in Active Duty Military Members with Mild Traumatic Brain Injury — *Anneliese New, Amy Ramage, Donald Robin, David Tate*

P4.053 Auditory Mismatch Negativity (MMN) As a Marker for Damage in Cognitive Network in Motor Neuron Disease —*Parameswaran Iyer, Kieran Mohr, Bahman Nasseroleslami, Edmund Lalor, Orla Hardiman*

P4.054 Asomatognosia in Hyper-Acute Stroke —*Daniel Antoniello, Joseph Petrsoric, Jon Rosenberg*

P4.055 Creutzfeldt-Jakob Disease Presenting with Bilateral Alien Hand Syndrome —*Rebecca Michael, Jinny Tavee*

P4.056 Perceptual Pseudoneglect: Laterality and the Perception of Tactile Pressure —*Tigran Kesayan, Damon Lamb, John Williamson, Adam Falchook, Kenneth Heilman*

Behavioral and Cognitive Neurology: Health Services and Assessment

P4.057 EEG Features Associated with Delirium —*Avinash Sagi, Eyal Kimchi, M. Westover*

P4.058 The Real Inside Out: Neuroanatomic Co-Localization of Color, Taste, & Affect —*Mohamed Salah, Feras Shalabi, Alan Hirsch, Dima Mohammad, Tasnim Mohammad, Neil Allen*

P4.059 Effect of High-Frequency Electrical Stimulation of the Claustrum on Sustained Attention in Rats —*Arezou Bayat, Sahar Jahan, Sweta Joshi, Komei Tsuchiya, Phillip Connell, Mohamad Koubeissi*

P4.060 Getting a Handle on Virtual Tools: An Examination of the Neuronal Activity Associated with Virtual Tool Use —*Austin Reno, Kelene Fercho, Rozzy Finn, Taylor Bosch, Lee Baugh*

P4.061 Characteristic Pulvinar Sign in Female Fabry Disease: First Case Report —*Salman Farooq, Bradley Hiner, Thomas Chelimsky*

P4.062 Associations Between Adherence to Epilepsy Quality Measures and Patient Reported Outcomes in Epilepsy —*Lidia Maria Moura, Thiago Carneiro, Emily Thorn, Barbara Vickrey, Daniel Hoch*

P4.063 Credit Assignment Across Limbs in a Bimanual Object Lifting Task — *Erik Burnison, Kelene Fercho, Lee Baugh*

P4.064 Relationship of Reaction Time to Perception and Volitionally Delayed Response —*Kimford Meador, David Loring*

P4.065 Basimglurant, an MGluR5-Selective Negative Allosteric Modulator, Dose Not Reduce Pain but Alleviate Pain Related Anxiety-Like Behavior —*Guohong Cai, Xin Wang, Yinwei Che, Jing Yang, Shengxi Wu*

P4.066 Direct Conversion of Human Fibroblasts to Induced Serotonergic Neurons —*Zhimin Xu, Houbo Jiang, Ping Zhong, Zhen Yan, Shengdi Chen, Jian Feng*

P4.067 Association of the Fractal Dimension of Retinal Arteries and Veins with Quantitative Brain MRI Measures in HIV-Infected and Uninfected Women — *Howard Crystal, Susan Holman, Yvonne W Lui, Alison Baird, Hua Yu, Ronald Klein, Diana Rojas-Soto, Richard Leung, Deborah Gustafson, Glenn Stebbins*

EEG and Clinical Neurophysiology

P4.068 Patients with Focal Epilepsy but Without Interictal Epileptiform Discharges —*Aidin Shariatzadeh, Yahya Agha-Khani, Samuel Wiebe*

Tuesday, April 19

Poster Session 8:30 a.m.–7:00 p.m.

P4.069 The Role of Electroencephalography During Antiepileptic Drugs Tapering and "RELAPSE"- a Score in Predicting Seizure Recurrence —*Biplab Das, Parampreet Kharbanda, Manoj Goyal, Vivek Lal, Sudesh Prabhakar*

P4.070 Performance of Quantitative EEG Display in Automated Seizure Identification at a Busy University Hospital —*Kanika Arora, Ayaz Khawaja, Amr Ewida, Ashley Thomas, Jennifer DeWolfe, Jennifer DeWolfe, Neil Billeaud, Lawrence Ver Hoef, Jerzy Szaflarski, Sandipan Pati*

P4.071 Interictal Spikes OnIntracranial EEG As a Potential Biomarker of Epilepsy Severity —*Ruta Yardi, Juan Bulacio, William Bingaman, Jorge Gonzalez-Martinez, Imad Najm, Lara Jehi*

P4.072 Clinical and EEG Characteristics of Preterm Neonates Undergoing Continuous Electroencephalography in the NICU —*Ersida Buraniqi, Arnold Sansevere, Ann Bergin, Phillip Pearl, Tobias Loddenkemper*

P4.073 A Systematic Classification and Consistent Reporting Mechanism Yields High Inter-Rater EEG Agreement —*Richard Burgess, Gregory Wooledge, Dileep Nair*

P4.074 Quantitative (Spectral) Analysis of Continuous EEG for Prognostication in Post Cardiac Arrest Coma —*Sara Wiley, Babak Razavi, Karen Hirsch, Kimford Meador*

P4.075 Dynamics of Quantitative EEG Changes During Cerebral Hypoperfusion —*Babak Razavi, Kimford Meador*

MRI and Ultrasonography Studies in Peripheral Neuropathies

P4.076 A Head-to-Head Comparison of High-Resolution Sonography and MRI in Treatment-Naive Chronic Inflammatory Neuropathies —*Stephan Goedee, Ludo Van Der Pol, Jan-Thies Van Asseldonk, Leendert Visser, Leonard Van den Berg*

P4.077 Quantification of Proximal Nerve Pathology in Charcot-Marie-Tooth Diseases Via Magnetization Transfer MRI —*Richard Dortch, Lauren Brooks, Jun Li*

P4.078 Diffusion Tensor Imaging As a Functional Measure in Determination of Peripheral Nerve Lesions in CIDP Treated with Subcutaneous Immunoglobulin —*Johannes Jakobsen, Michael Væggemose, Henning Andersen, Lars Markvardsen*

P4.079 Diagnostic Utility of Ultrasound in Diagnosis of Carpal Tunell Syndrome —*Santoshi Billakota, Lisa Hobson-Webb*

P4.080 Nerve Ultrasound in Diabetic Patients with Neuropathic Symptoms —*Kalliopi Pitarokoili, Antonios Kerasnoudis, Ralf Gold, Min-Suk Yoon*

P4.081 Neuromuscular Ultrasound in Carpal Tunnel Syndrome with Normal Nerve Conduction Studies —*Jessica Williams, Michael Cartwright*

P4.082 Intraneural Perineurioma: The Value of MRI Neurography —*Luciana Leon Cejas, Gabriela Vargas Flores, Daniela Binaghi, Mariano Socolovsky, Cintia Marchesoni, Ana Pardal, Alberto Dubrovsky, Soledad Monges, Ana Lia Taratuto, Ricardo Reisin*

P4.083 Neuromuscular Ultrasound Localizes Electrically Non-Localizable Ulnar Neuropathy —*Mohammad Alrajeh, David Preston*

P4.084 Peripheral Nerve Ultrasound in Children with Dejerine-Sottas Disease —*Eppie Yiu, Sanne Hobbelink, Monique Ryan*

P4.085 Sciatic Nerve Magnetic Transfer MRI Is a Stronger Predictor of Disability in Charcot-Marie-Tooth Diseases Than Downstream Measures in Skeletal Muscle —*Neal Langdon, Lauren Brooks, Jun Li, Richard Dortch*

Imaging Studies in Muscle Diseases and Others

P4.086 Muscle MRI in Becker Muscular Dystrophy and Correlation with DMD Mutations and Outcome Measures —*Andrea Barp, Luca Bello, Paola Campadello, Claudio Semplicini, Paolo Ortolan, Riccardo Zanato, Roberto Stramare, Elena Pegoraro*

P4.087 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*

P4.088 Cardiomyopathy in Late Onset Pompe Disease Diagnosed by Cardiac MRI: A Case Series —*Meredith Bryarly, Sharon Nations, Pradeep Mammen, Jaya Trivedi*

P4.089 Muscle Magnetic Resonance Imaging in Inclusion Body Myositis: Presentation of 12 Cases —*Mariela Bettini, Maria Araoz, Marcelo Rugiero, Marcelo Chaves, David Genco, Silvia Christiansen, Alejandro Rasumoff, Edgardo Cristiano*

P4.090 Quantitative Ultrasound Detects Disease Progression in Duchenne Muscular Dystrophy —*Craig Zaidman, Kush Kapur, Jim Wu, Amy Pasternak, Lavanya Madabusi, Heather Szelag, Tim Harrington, Adam Pacheck, Sung Yim, Basil Darras, Seward Rutkove*

P4.091 Neutral Lipid Storage with Myopathy. Role of Micro RNA and Muscle Imaging —*Corrado Angelini, Elisabetta Tasca*

P4.092 Patient Centricity and Big Data in Rare Neurological Diseases: Reality or Bright Future? —*Alexander Sherman, Roger Selsov, Ervin Sinani, Jason Walker, Priyadarshini Vader, Florian Eichler, Merit Cudkowicz*

P4.093 Utility of BBaD Neuromuscular Research Codes in the Era of ICD-10 —*Omar Jawdat, Melanie Glenn, Laura Herbelin, Mamatha Pasnoor, Wilson Bryan, Mazen Dimachkie, April McVey, Richard Barohn*

Imaging Studies and Clinical Features in Motor Neuron Disease

P4.094 Multimodal Longitudinal MRI Study in Amyotrophic Lateral Sclerosis (ALS) —*Milena de Albuquerque, Helen Andrade, Thiago Rezende, Lucas Branco, Anamarli Nucci, Marcondes Franca, Jr.*

P4.095 Cervical Spine Deformity As a Cause of Hirayama Disease —*Akira Yokote, Jun Tsugawa, Shinji Ouma, Yoshio Tsuboi*

P4.096 Magnetic Resonance Measures of Subcortical and Cortical Gray Matter in Amyotrophic Lateral Sclerosis —*Eugenio Distaso, Domenico Mezzapesa, Eustachio D'Errico, Antonio Scarafino, Alessandro Introna, Rosa Cortese, Irene Tempesta, Francesco Federico, Franca Dicuonzo, Isabella Simone*

P4.097 Imaging Motor Neuron Disease: Lessons from Single Subject Analyses —*Senda Ajroud-Driss, Thomas Gallagher, Teepu Siddique*

P4.098 Very Longterm MRI Data May Show Individual Disease Progression in Amyotrophic Lateral Sclerosis (ALS) Patients Treated with Granulocyte Colony Stimulating Factor (G-CSF) —*Dobri Baldaranov, Andrei Khomenko, Ines Kobor, Siw Johannesen, Thomas Grimm, Anna Wirth, Tim-Henrik Bruun, Jochen Grassinger, Gerhard Schuierer, Wilhelm Schulte-Mattler, Michael Deppe, Ulrich Bogdahn*

P4.099 Metabolic Spatial Connectivity in Amyotrophic Lateral Sclerosis: A 18F-FDG PET Study —*Adriano Chio, Johanna Öberg, Fabrizio De Carli, Andrea Calvo, Cristina Moglia, Antonio Canosa, Flavio Nobili, Angelina Cistaro, Marco Pagani*

P4.100 Reverse Split Hand Syndrome: Dissociated Intrinsic Hand Muscle Atrophy Pattern in Monomelic Amyotrophy Spectrum Disorder —*Ravinder Singh, Atchayaram Nalini*

P4.101 Clinical Profile of Monomelic Amyotrophy (MMA) and Role of Persistent Viral Infection —*Deepti Vibha, Madhuri Behari, Vinay Goyal, Garima Shukla, Rohit Bhatia, Achal Srivastava, S Vivekanadhan*

Movement Disorders: Parkinson's Disease Imaging

P4.102 Corpus Callosum Volume Is Decreased in Parkinson's Disease —*Ian Bledsoe, Doug Merkitch, Glenn Stebbins, Bryan Bernard, Jennifer Goldman*

P4.103 Cortical Thinning Associated with Mild Cognitive Impairment in Parkinson's Disease —*Sebastiano Galantucci, Federica Agosta, Tanya Stojkovic, Igor Petrovic, Elka Stefanova, Elisa Canu, Massimiliano Copetti, Vladimir Kostic, Massimo Filippi*

P4.104 The Cerebral Structural and Functional Signatures of Impulse Control Disorder in Parkinson's Disease —*francesca imperiale, Federica Agosta, Elisa Canu, Vladana Špica, Milica Ječmenica, Massimiliano Copetti, Vladimir Kostic, Massimo Filippi*

P4.105 A Cognitive FMRI Study in Non-Manifesting LRRK2 and GBA Carriers —*Noa Bregman, Avner Thaler, Anat Mirelman, Tanya Gurevich, Mali Gana-Weiss, Avi Orr-Urtreger, Talma Hendler, Nir Giladi*

P4.106 Tractography Analysis of Corticospinal Tract, Cingulum and Corpus Callosum in Parkinson's Disease —*Rachel Guimaraes, Paula Azevedo, Luiza Piovesana, Lidiane Campos, Brunno Campos, Anelyssa D'Abreu, Fernando Cendes*

P4.107 Resting-State and Task-Related FMRI Correlates of Working Memory Performance in Parkinson's Disease, on and off Dopamine Replacement Therapy —*Alison Simioni, Alain Dagher, Lesley Fellows*

P4.108 Functional Connectome Organization is Altered in PD Patients with Mild Cognitive Impairment —*Sebastiano Galantucci, Federica Agosta, Iva Stankovic, Silvia Basaia, Tanya Stojkovic, Elka Stefanova, Elisa Canu, Alessandro Meani, Vladimir Kostic, Massimo Filippi*

P4.109 Refining DaTscan for the Diagnosis of Parkinsonism Using a Semiquantitative Algorithm —*Eric Gutflais, Tsao-Wei Liang, Andrew B. Newberg, Laura Scorr*

P4.110 DaT SPECT Imaging Impacts Diagnostic and Treatment Decisions: Results from a Medical Claims Database Study —*Charles Jarecke, Geoff Mwaungulu, Allen King, James McEnaney*

P4.111 A General Framework for the Analysis of Neuroimaging Data by Fisher Vector Descriptors and Its Use for the Improvement of Parkinson's Disease Diagnosis —*Luis Salamanca, Nico Diederich, Alexander Skupin*

Headache: Imaging and Other

P4.112 Identifying Migraine: Building Classifiers Using Resting-State FMRI Data —*Catherine Chong, Nathan Gaw, YinLin Fu, Jing Li, Teresa Wu, Todd Schwedt*

P4.113 MRI with Intrathecal Gadolinium to Detect a CSF Leak: Feasibility and Long Term Safety from an Open Label Single Centre Cohort Study —*Annelies Vanhee, Koen Paemeleire, Jan Casselman, Ludo Vanopdenbosch*

P4.114 Unique CT Perfusion Imaging in a Case of HaNDL: New Insight into Pathophysiology of Acute Attacks —*Matthew Burke, Michael Lamb, Marika Hohol, Christine Lay*

P4.115 Transcranial Doppler Ultrasonography Is a Monitoring Tool for Reversible Cerebral Vasoconstriction Syndrome —*Jay Levin, Jorge Benavides, Claudine Caddick, Karen Laurie, Janet Wilterdink, Shadi Yaghi, Brian Silver, Muhib Khan*

P4.116 Origin of Distal Hyperintense Vessels in FLAIR MRI in Reversible Cerebral Vasoconstriction Syndrome Include the Venous System —*Deb Mojumder, Agnieszka Ardelt, Fernando Goldenberg*

P4.117 Pneumocephalus After Epidural Anesthesia —*Abhinav Ohri, Jasdeep Khurana, Jyoti Pillai*

P4.118 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*

P4.119 Menstrual-Related Migraine in Adolescents: What's the Difference? —*Suzanne Hagler, Hope O'Brien, Marielle Kabbouche, Joanne Kacperski, Scott Powers, Andrew Hershey*

P4.120 A Link Between Migraine, Tension Type Headache and Irritable Bowel Syndrome: Clinical and Genetic Indicators —*Derya Uluduz, Sema Cakmak, Aynur Ozge, Enver Ucbilek, Orhan Sezgin, Fatma Soylemez, Gulhan Temel, Arzu Kanik*

P4.121 Perspectives of Adolescents/Young Adults on the Burden of Their Parent's Migraine: Results from the CaMEO Study —*Dawn Buse, Scott Powers, Amy Gelfand, Juliana VanderPluym, Kristina Fanning, Michael Reed, Aubrey Manack Adams, Richard Lipton*

P4.122 Spontaneous Carotid Dissection in a Patient After Incidental Amphetamine Salt Overdose Presenting As Cluster Like Headache. —*Hirsh Kaveeshvar, Rabih Kashouty, Vivek Loomba*

P4.123 Resistin, A Putative Biomarker for Migraine? —*Hossein Ansari, Zahra Gol*

P4.124 Botulinum Toxin Treatment of Chronic Migraine - A Double Blind Study with a Novel Technique Employing Fewer Injections. —*Diana Richardson, Bahman Jabbari*

P4.125 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*

MS and CNS Inflammatory Disease: MRI Correlates of Cognition and Fatigue in Multiple Sclerosis

P4.126 Impaired Inter/Intra Hemispheric Connectivity, Regional Cortical Thinning and Thalamic Volume Are Associated with Cognitive Impairment in Multiple Sclerosis —*Flavia Nelson, Zafer Keser, Benson Mwangi, Jeffrey Wilken, Jerry Wolinsky, Ponnada Narayana, Khader Hasan*

P4.127 Functional Cognitive Control Load in Multiple Sclerosis —*Laura Vacchi, Maria Rocca, Alessandro Meani, Mariaemma Rodegher, Vittorio Martinelli, Giancarlo Comi, Andrea Falini, Massimo Filippi*

P4.128 Cerebellar Contribution to Motor and Cognitive Impairment in Multiple Sclerosis Patients: A Sub-Regional Structural MRI Analysis —*Alessandro D'Ambrosio, Maria Rocca, Elisabetta Pagani, Gianna Carla Riccitelli, Bruno Colombo, Mariaemma Rodegher, Andrea Falini, Giancarlo Comi, Massimo Filippi*

P4.129 MRI Correlates of Cognitive Functioning in a Large Cohort Multiple Sclerosis Patients on Disease-Modifying Treatment —*Tomas Uher, Lukas Sobisek, Maria Pia Sormani, Manuela Vaneckova, Zdenek Seidl, Jan Krasensky, Blahova Dusankova Jana, Eva Havrdova, Dana Horakova*

P4.130 Detection of Multiple Sclerosis Related Cognitive Impairment by Functional MRI Using a Novel Working Memory Paradigm with Validation by Standard Neuropsychological Testing —*Carlos Perez, Edward Zuniga, Muhammad Akhtar, Jerry Wolinsky, Ponnada Narayana, Jeffrey Wilken, Joel Steinberg, Flavia Nelson*

P4.131 Fatigue in Multiple Sclerosis: The Contribution of Resting-State Functional Connectivity Reorganization —*Alvino Bisecco, Federica Di Nardo, Renato Docimo, Giuseppina Caiazzo, Alessandro d'Ambrosio, Rosaria Sacco, Simona Bonavita, Mario Cirillo, Fabrizio Esposito, Gioacchino Tedeschi, Antonio Gallo*

P4.132 Brain Activation Patterns of Cognitive Fatigue in Multiple Sclerosis: An FMRI Study —*Gereon Nelles, Emanuelle Tinelli, Maria Esmeralda Quartuccio, Simona Pontecorvo, Maria Polidori, Ada Francia, Francesca Caramia*

P4.133 The Relationship Between Speed of Processing and White Matter Integrity in Secondary Progressive Multiple Sclerosis: A VBM and TBSS Study —*Riccardo Manca, Maria Stabile, Francesca Bevilacqua, Basil Sharrack, Annalena Venneri*

P4.134 Functional Reorganization in Multiple Sclerosis at 7T: Altered Connectivity and Relationships to Cognitive Impairment —*Benjamin Conrad, Bailey Lyttle, Siddharama Pawate, Seth Smith*

P4.135 Measures of Glutamate Using Chemical Exchange Saturation Transfer (CEST) MRI Related to Cognition —*Adrienne Dula, Siddharama Pawate, Bailey Lyttle, Benjamin Conrad, Seth Smith*

MS and CNS Inflammatory Disease: MRI Brain and Spinal Cord Atrophy Measures and Correlations in Multiple Sclerosis

P4.136 Patterns of Regional Gray Matter and White Matter Atrophy Progression Contributing to Clinical Deterioration in MS: A 5-Year Tensor-Based Morphometry Study —*Paolo Preziosa, Maria Rocca, Elisabetta Pagani, Sarlota Mesaros, Jelena Drulovic, Massimo Filippi*

P4.137 Age at Disease Onset Influences Gray Matter and White Matter Damage in Adult Multiple Sclerosis Patients —*Laura Vacchi, Maria Rocca, Bruno Colombo, Mariaemma Rodegher, Lucia Moiola, Angelo Ghezzi, Giancarlo Comi, Andrea Falini, Massimo Filippi*

P4.138 Subcortical Grey Matter Volumes Predict Subsequent Walking Function in Very Early Multiple Sclerosis —*Bardia Nourbakhsh, Christina Azevedo, Hadi Maghzi, Rebecca Spain, Daniel Pelletier, Emmanuelle Waubant*

P4.139 Whole Brain Volume Quantification in Multiple Sclerosis: Ready for Translation into Clinical Practice? —*Heidi Beadnall, Chenyu Wang, Therese Burke, Ruth Oliver, Sean Hatton, Joshua Barton, Linda Ly, Steve Vucic, Michael Barnett*

P4.140 Serum MicroRNAs Are Related to Brain MRI Lesions and Atrophy in Patients with Multiple Sclerosis —*Roopali Gandhi, Brian Healy, Keren Regev, Anu Paul, Felipe Von Glehn Silva, Renxin Chu, Sheena Dupuy, Gloria Kim, Fariha Khalid, Howard Weiner, Rohit Bakshi*

P4.141 BraVo Pilot Project: Real World Clinical Usefulness of Brain Atrophy Monitoring of MS Patients —*Philippe Beauchemin, Roger Tam, David Li, Andrew Riddehough, Anthony Traboulsee*

P4.142 Optical Coherence Tomography Is Associated with Development of Brain Atrophy in Relapsing-Remitting Multiple Sclerosis: A Longitudinal 5-Year Follow-Up Study —*Sirin Gandhi, Jesper Hagemeier, Avinash Chandra, Shaik Ahmed Sanai, Dejan Jakimovski, Rahil Ahmed, Deepa Ramaswamy, Niels Bergsland, Bianca Guttman, Robert Zivadinov*

P4.143 Crossectional Quantitative MRI in Early MS - One Step to Individual Prognosis. —*Gerhard Winkler, Alaleh Raji, Lothar Spies, Roland Opfer*

P4.144 HLA-DRB1*1501 Influences the Development of Brain and Spinal Cord Pathology over the First 5 Years After a Clinically Isolated Syndrome —*Olga Ciccarelli, Wallace Brownlee, Andreea Manole, Daniel Altmann, Maria Psatha, Claudia Wheeler-Kingshott, Henry Houlden, David Miller*

MS and CNS Inflammatory Disease: Neuromyelitis Optica Spectrum Disorders: Imaging and Differential Diagnosis

P4.145 Ring-Enhancing Spinal Cord Lesions in Neuromyelitis Optica Spectrum Disorder —*Nicholas Zalewski, Padraig Morris, Sean Pittock, Brian Weinshenker, Karl Krecke, Claudia Lucchinetti, Timothy Kaufmann, Dean Wingerchuk, Eoin Flanagan*

P4.146 Metabolomic Profiling of Multiple Sclerosis and Neuromyelitis Optica Spectrum Disorder by Nuclear Magnetic Resonance —*In Hye Jeong, Hyun-Hwi Kim, Su-Hyun Kim, Jae-Won Hyun, Sung Jean Park, Ho Jin Kim*

P4.147 The Central Vein Sign on SWI at 3T MRI Differentiates Multiple Sclerosis from Neuromyelitis Optica —*Rosa Cortese, Lise Magnollay, Floriana De Angelis, Carmen Tur, Ferran Prados, Sebastien Ourselin, Marios Yiannakas, Isabella Laura Simone, David Miller, Tarek Yousry, Olga Ciccarelli*

P4.148 Spinal Cord Atrophy Is Observed in Neuromyelitis Optica Spectrum Disorder Patients Without History of Prior Myelitis —*Rachel Ventura, Sohae Chung, Timothy Shepherd, Ilya Kister*

P4.149 MRI Measures of Cervical Cord Atrophy and Water Content in Neuromyelitis Optica —*Anna Combes, Lucy Matthews, David Li, Katrina McMullen, Gareth Barker, Steven Williams, Anthony Traboulsee, Jacqueline Palace, Shannon Kolind*

P4.150 Long Term Disability in Neuromyelitis Optica Spectrum Disorder Is Associated with Number of Relapses, MRI Lesion Length and Race —*Maureen Mealy, Michael Levy*

P4.151 No Differences in Spinal Cord White and Grey Matter Diffusion Abnormalities Between Neuromyelitis Optica Spectrum Disorder and Multiple Sclerosis —*Rosa Cortese, Lise Magnollay, Floriana De Angelis, Arman Eshaghi, Francesco Grussu, Ferran Prados, Sebastien Ourselin, Marios Yiannakas, Isabella Laura Simone, David Miller, Claudia Gandini Wheeler-Kingshott, Olga Ciccarelli*

P4.152 Discriminating Long Myelitis of Neuromyelitis Optica Spectrum Disorders from Sarcoidosis —*Eoin Flanagan, Timothy Kaufmann, Karl Krecke, Allen Aksamit, Sean Pittock, Mark Keegan, Caterina Giannini, Brian Weinshenker*

P4.153 Disease Exacerbation After Rituximab Induction in Neuromyelitis Optica and Myasthenia Gravis —*Andres Villa, Florencia Aguirre, Luciana Melamud*

P4.154 A Rare Case of Neuromyelitis Optica in Childhood Associated with Leptomeningeal Enhancement and Lumbosacral Myeloradiculitis —*Jayson Rodriguez, Omar Hussein, Rosario Maria Riel-Romero, Eduardo Gonzalez-Toledo, Arun Asha Kalra, Alireza Minagar*

MS and CNS Inflammatory Disease: Neuroimaging

P4.155 Combining High-Resolution FLAIR and T2 to Improve Multiple Sclerosis Lesion Conspicuity —*Vanessa Wiggermann, Enedino Hernandez-Torres, Anthony Traboulsee, David Li, Alexander Rauscher*

P4.156 Assessment of APT CEST in the Cervical Spinal Cord of Multiple Sclerosis Patients at 3T —*Samantha By, Alex Smith, Adrienne Dula, Bailey Lyttle, Siddharama Pawate, Seth Smith*

P4.157 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*

Tuesday, April 19

Poster Session 8:30 a.m.–7:00 p.m.

P4.158 A Novel Method for Quantification of Normal Appearing Brain Tissue in Multiple Sclerosis: Magnetic Resonance Fingerprinting —*Kunio Nakamura, Anagha Deshmane, Deepti Guruprakash, Yun Jiang, Dan Ma, Jar-Chi Lee, Elizabeth Fisher, Richard Rudick, Jeffrey Cohen, Mark Lowe, Vikas Gulani, Mark Griswold, Daniel Ontaneda*

P4.159 Neurite Orientation Dispersion and Density Imaging (NODDI) in RRMS —*Lucas Kipp, Niamh Cawley, Ferran Prados, Torben Schneider, Sebastien Ourselin, Claudia Wheeler-Kingshott, David Miller, Alan Thompson, Olga Ciccarelli*

P4.160 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*

P4.161 Clinical T1-Weighted Brain Imaging at Ultra-High Field Using M2PRAGE: Application to Multiple Sclerosis —*Pascal Sati, Blake Dewey, Varun Sethi, Sunil Patil, Tobias Kober, Gunnar Krueger, Daniel Reich*

P4.162 Quantitative Susceptibility Mapping Study of Deep Gray Matter Iron at 3T in Large Cohort of Multiple Sclerosis Patients —*Jesper Hagemeier, Schweser Ferdinand, Michael Dwyer, Paul Polak, Niels Bergsland, Bianca Weinstock-Guttman, Robert Zivadinov*

P4.163 Evolution of Brain Iron Levels in Multiple Sclerosis: A 2-Year Longitudinal Quantitative Susceptibility Mapping Study at 3T —*Jesper Hagemeier, Ferdinand Schweser, Michael Dwyer, Paul Polak, Niels Bergsland, Bianca Weinstock-Guttman, Robert Zivadinov*

P4.164 Functional Connectivity Changes in the Cognitive-affective Network in MS —*Couto Blas, Sinay Vladimiro, Pagani Cassara Fatima, Sol Esteves, Diana Bruno, Lucas Sedeño, Maria Roca, Facundo Manes, Agustin Ibañez*

P4.165 Examining the Reproducibility of Myelin-Specific Magnetic Resonance Imaging Across Sites and Scanner Manufacturers —*Lisa Eunyoung Lee, Emil Ljungberg, Alex Mackay, Alexander Rauscher, David K. Li, Anthony Traboulsee, Chase Figley, Shannon Kolind*

P4.166 Analysis of Cortical Metabolism in Multiple Sclerosis: A 3T 18F-FDG PET/MRI Study —*Monica Margoni, Alice Favaretto, Diego Cecchin, Davide Poggiali, Andrea Lazzarotto, Stefano Pravato, Alice Riccardi, Franco Bui, Paolo Gallo*

P4.167 Microglial Activation Correlates with Disease Progression in Multiple Sclerosis —*Laura Airas, Eero Rissanen, Jouni Tuisku, Juha Rinne*

P4.168 The Contribution of Cortical Lesions to a Magnetic Resonance Disease Severity Scale in Multiple Sclerosis —*Fawad Yousuf, Gloria Kim, Shahamat Tauhid, Bonnie Glanz, Renxin Chu, Subhash Tummala, Brian Healy, Rohit Bakshi*

P4.169 The Role of the Spinal Cord As an Adjunct to the Brain in the MRI Definition of "No Evidence of Disease Activity" in Multiple Sclerosis —*Fariha Khalid, Subhash Tummala, Tarun Singhal, Vinit Oommen, Gloria Kim, Rohit Bakshi*

P4.170 Brain and Spinal Cord MRI Findings in Primary Progressive Vs. Relapsing-Remitting Multiple Sclerosis —*Akram Dastagir, Shahamat Tauhid, Brian Healy, Alicia Chua, Tanuja Chitnis, Howard Weiner, Rohit Bakshi*

P4.171 Deep Gray Matter Segmentation from 1.5T Vs. 3T MRI in Normal Controls and Patients with Multiple Sclerosis —*Renxin Chu, Shelley Hurwitz, Shahamat Tauhid, Rohit Bakshi*

P4.172 An MRI-Defined Measure of Cerebral Lesion Severity to Assess the Therapeutic Effect of Glatiramer Acetate in Multiple Sclerosis —*Gloria Kim, Shahamat Tauhid, Sheena Dupuy, Subhash Tummala, Fariha Khalid, Brian Healy, Rohit Bakshi*

P4.173 Sample Size Requirements for Treatment Effects Using Deep Gray Matter Volume from 3T MRI in Progressive Forms of Multiple Sclerosis —*Shahamat Tauhid, Renxin Chu, Gloria Kim, Fawad Yousuf, Brian Healy, Rohit Bakshi*

P4.174 Visual Cortical Reorganization Following Optic Neuritis: A Resting State Functional MRI Study —*Yael Backner, Timm Oberwahrenbrock, Carsten Finke, Noa Raz, Friedemann Paul, Netta Levin*

P4.175 Prognostic Factors Associated with Axonal Loss After Optic Neuritis —*Rhian Raftopoulos, Simon Hickman, Ahmed Toosy, Basil Sharrack, Shahrukh Mallik, David Paling, Daniel Altmann, Marios Yiannakas, Prasad Malladi, Rose Sheridan, Ptolemaios Sarrigiannis, Nigel Hoggard, Martin Koltzenburg, Claudia Wheeler-Kingshott, Klaus Schmierer, Gavin Giovannoni, David Miller, Raju Kapoor*

P4.176 Quantitative Spinal Cord MRI in Radiologically Isolated Syndrome: Preliminary Results of a Prospective Study —*Oh Jiwon, Paula Alcaide-Leon, Stephanie Sankar, Kateryna Cybulsky, Benjamin Ahn, Catherine Leurer, Allan Martin, Marika Hohol, Daniel Selchen, Aditya Bharatha, Paul O'Connor*

P4.177 Visual Pathway Damage in Multiple Sclerosis at Clinical Onset —*Marco Puthenparampil, Lisa Federle, Elisabetta Pilotto, Davide Poggiali, Alessio Signori, Edoardo Midena, Maria Pia Sormani, Paolo Gallo*

P4.178 Hippocampal and Cognitive Impacts of Depression in Multiple Sclerosis —*Nancy Sicotte, Stefan Gold, Mary-Frances O'Connor, Enrique Lopez, Kimberly Smith, Cristina Yamakawa, Brian Renner, Jin Gahm, Yonggang Shi*

P4.179 Cortical Thickness Measurements from 1.5T Vs. 3T MRI in Healthy Subjects and Patients with Multiple Sclerosis —*Subhash Tummala, Renxin Chu, Fariha Khalid, Sheena Dupuy, Shahamat Tauhid, Brian Healy, Rohit Bakshi*

P4.180 Investigating Early Radiographic and Biometric Evidence of Multiple Sclerosis in Presymptomatic First-Degree Relatives —*Zongqi Xia, Sonya Steele, Anshika Bakshi, Joan Ohayon, Lori Chibnik, Irene Cortese, Philip De Jager, Daniel Reich*

P4.181 Myelin Damage in Relapsing Multiple Sclerosis Is Associated with Decreased N-Acetylaspartate and Creatine Concentrations —*Julia Schubert, Erin MacMillan, Irene Vavasour, Eduardo Vianna, Anna Dzyakanchuk, Youngjin Yoo, Roger Tam, Shannon Kolind, Anthony Traboulsee*

P4.182 Pineal Gland Size and Risk of Multiple Sclerosis —*Alejandro Kohler, Hernán Chaves, Laura Negrotto, Maria Gaitan, Maria Ysrraelit, Marcela Fiol, Jorge Correale, Mauricio Farez*

Epilepsy/Clinical Neurophysiology: Imaging

P4.183 Detection of Epileptogenic Lesions Using MRI Double Inversion Recovery (DIR) Sequence in Patients with Drug-Resistant Epilepsy (DRE) —*Thomas Wychowski, Ali Hussain, Madalina Tivarus, Gretchen Birbeck, Michel Berg, Michael Potchen*

P4.184 Pre-Surgical PET Mapping Predicts Surgical Outcome After Anterior Temporal Lobectomy —*Sharon Chiang, Michele Guindani, Marina Vannucci, Hsiang Yeh, Zulfi Haneef, John Stern*

P4.185 Time-Dependence of Graph Theory Metrics in Functional Connectivity Analysis —*Sharon Chiang, Alberto Cassese, Michele Guindani, Marina Vannucci, Hsiang Yeh, Zulfi Haneef, John Stern*

P4.186 Use of Magnetic Resonance Imaging and Diffusion Tensor Weighted Images in Identifying Epileptogenic Network in 383 Intractable Epileptic Patients —*Bhoopathy Rangappan Munirathinam, S. Vignesh, C. Amarnath, B. Arthy, Kesavamurthy Bhanu, Avathvadi Srinivasan*

P4.187 Preliminary Observation Using NODDI in Temporal Lobe Epilepsy —*Jose Antonio Pantangco, Nicholas Davenport, Bryon Mueller, Jazmin Camchong, Kelvin Lim, Thomas Henry*

P4.188 Magnetic Resonance Elastography of the Hippocampus in Mesial Temporal Sclerosis: Initial Results —*Curtis Johnson, Hillary Schwarb, William Olivero, Tracey Wszalek, Graham Huesmann*

P4.189 High Field 7T In-Vivo and 9.4T Ex-Vivo MRI for Epilepsy Surgery Evaluation —*HaeWon Shin, Sang Hyun Park, Valerie Jewells, Hongyu An, Eldad Hadar, Dimitri Trembath, Weili Lin, Dinggang Shen*

P4.190 Acute Diffusion-Weighted MRI Abnormalities in Status Epilepticus —*Jeyong Son*

P4.191 Acute Uncontrolled Seizures with Discrete Brain Lesion on MR Imaging May Be Due to Unrecognized Immune Mediated Inflammatory Process —*Deepti Zutshi, Sandeep Mittal, Maysaa Basha, William Kupsky, Aashit Shah*

Epilepsy/Clinical Neurophysiology: Intraoperative Monitoring, Intracranial, and Long-term EEG

P4.192 Novel Intraoperative Neurophysiologic Monitoring (IONM) Techniques During Thoracic Endovascular Aortic Repair (TEVAR) to Rapidly Assess Central Spinal Cord Versus Peripheral Limb Ischemia —*Leslie Lee, Jason Lee, Eric Jones, S. Charles Cho, Viet Nguyen, Scheherazade Le, Jaime Lopez*

P4.193 Simultaneous Recording of Motor Related Cortical Potentials to Different Basal Components of Voluntary Movements —*Walter Troni, Francesca Boretto, Alessia Di Sapio, Federica Melillo, Morese Rosalba, Valentini Maria Consuelo*

P4.194 Prevalence of Ictal Infraslow Potentials (IISPs) in Scalp Recorded Video-EEG Recordings and Their Correlation with Various Seizure and Epilepsy Variables —*Janki Lavingia, Natalia Dorland, Christopher Anderson, Chad Carlson, Manoj Raghavan*

P4.195 The Rate of False Lateralization from Scalp EEG in Epilepsy Patients with Bilaterally Implanted Intracranial EEG —*Michael Young, Mona Sazgar, Indranil Sen-Gupta, Travis Losey, Firas Bannout, Jane Hwang, Erika Pietzsch, Sumeet Vadera, Frank Hsu, Jack Lin, Lilit Mnatsakanyan*

P4.196 Outcomes of Bilateral Diagnostic Intracranial EEG in Non-Lateralized Treatment Resistant Epilepsy —*Travis Hill, Benjamin Rubin, Vineet Tyagi, Jason Theobald, Alyson Silverberg, Mary Miceli, Patricia Dugan, Chad Carlson, Werner Doyle*

P4.197 Quantitative Burst Suppression As a Biomarker in the Phase 2 Trial of SAGE-547: Lessons Learned for the First International Phase 3, Randomized, Controlled Trial for Super-Refractory Status Epilepticus (The STATUS Trial) —*Eric Rosenthal, Helen Colquhoun, Michael Quirk*

P4.198 A Retrospective Review of Rescue Medications Used During Video EEG-Monitoring in the Epilepsy Monitoring Unit —*Carolyn Tsai, Scott Mintzer, Maromi Nei, Michael Sperling, Christopher Skidmore*

P4.199 Operating Characteristics of Electroencephalographic (EEG) Trends in Identifying Ictal Patterns on Pre-Recorded Emergency Department Electroencephalograms —*Geetha Chari, Shahriar Zehtabchi, Ahmet Omurtag*

P4.200 Simplified Spectrographic Display for Bedside Electrographic Seizure Detection in the ICU —*Peter Yan, Tamar Melman, Zachary Grinspan*

Epilepsy and Clinical Neurophysiology: Psychogenic Non-epileptic Seizures, Quality of Life, and Emotions

P4.201 Characterizing Peri-ictal Mood Changes in Patients with Psychogenic Nonepileptic Seizures —*Serena Yin,*

Maureen Cassady, Kathryn Grimes, Katherine Turlington, Mary Richert, Mark Kvarta, Scott Thompson, Jennifer Hopp

P4.202 Factors Contributing to Diagnostic Delay in Psychogenic Non-Epileptic Spells—*Jessie Grewal, Jacquelyne Cios*

P4.203 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*

P4.204 Patient Emotions and Perceptions of Antiepileptic Drug Changes and Titration During Treatment for Epilepsy—*Jesse Fishman, Gregory Cohen, Srikanth Bharatham, Imane Wild*

P4.205 The Association of Adherence with Health-Related Quality of Life by Age Group Among Patients with Epilepsy—*Lulu Lee, Fulton Velez*

P4.206 The Effects of Anxiety, Depression and Personality Disorders on Neurocognitive Functioning in Patients with Psychogenic Nonepileptic Seizures—*Sigrid Young, Grayson Baird, Jennifer Davis, Andrew Blum, W. LaFrance*

P4.207 Depression in Clinically Diagnosed Patients with Epilepsy in Northwestern Nigeria—*Desola Owolabi, Lukman Owolabi, Owoidoho Udofia, Shehu Sale*

P4.208 Correlating Peri-ictal Mood Scores to Hippocampal Volume in Patients with Epilepsy—*Kathryn Grimes, Maureen Cassady, Serena Yin, Katherine Turlington, Mary Richert, Mark Kvarta, Chandler Sours, Rao Gullapalli, Scott Thompson, Jennifer Hopp*

P4.209 Depression in Epileptic Patients Is Influenced by the Duration of Epilepsy: A Cross Sectional Study in Patients with Epilepsy—*Mohammed AL Qahtani, Dlaim Al Qahtani, Faisal Al Malwi, Mohannad Assiri, Muthusamy Velmurugan, Harsha Bhatia, Fawzi Babtain*

Epilepsy/Clinical Neurophysiology: Status Epilepticus

P4.210 Phase 2 Data Suggest Heterogeneity of Presentation and Comorbidity Burden Do Not Impact Activity of SAGE-547 in Patients with Super-Refractory Status Epilepticus—*Helen Colquhoun, Mollie Baird, Shane Raines, Jeffrey Jonas, Steve Kanes*

P4.211 Status Epilepticus in Children: Relationship Between Pre-Hospital Treatment and Outcome—*Marina Gaínza Lein, Iván Sánchez Fernández, Michele Jackson, Nicholas Abend, Ravindra Arya, J. Brenton, Jessica Carpenter, Kevin Chapman, William Gaillard, Tracy Glauser, Joshua Goldstein, Howard Goodkin, Ashley Helseth, Kush Kapur, Mohamad Mikati, Katrina Peariso, Robert Tasker, Alexis Topjian, Mark Wainwright, Angus Wilfong, Korwyn Williams, Tobias Loddenkemper*

P4.212 Intravenous Administration of Ganaxolone Attenuates Electroencephalographic Seizures in a Diazepam Resistant Model of Status Epilepticus—*Michael Saporito, Julia Tsai, Albena Patroneva*

P4.213 Associations Between Types and Timing of Seizures with Status Epilepticus and Seizure Clusters: Results from SeizureTracker Database—*kush kapur, Daniel Goldenholz, Marina Lein, Ryan Hodgeman, Robert Moss, William Theodore, Tobias Loddenkemper*

P4.214 Defining the Health Economic Burden of Treatment for Super-Refractory Status Epilepticus Patients—*Jamil Beg, Thomas Anderson, Kevin Francis, Todd Foster, Lisa Meckley, Susheel Sukhtankar, Steven Kanes, Lidia Moura*

P4.215 Ketogenic Diet Treatment for Pediatric Super-Refractory Status Epilepticus—*Brian Appavu, Lisa Vanatta, John Condie, John Kerrigan, Randa Jarrar*

P4.216 Does Immunotherapy Work for New-Onset Refractory Status Epilepticus? A Pooled-Analysis of Available Literature—*Jennifer DeWolfe, Ayaz Khawaja, Henna Qadri, Farkhanda Qaiser, David Miller, Jerzy Szaflarski*

P4.217 Is Lacosamide an Effective Option in the Acute Treatment for Status Epilepticus?—*Hardik Doshi, Kushak Suchdev, Deepthi Kandipalli, Navid Seraji-Bozorgzad, Deepti Zutshi*

Epilepsy/Clinical Neurophysiology: Co-morbidities

P4.218 Use of Antiepileptic Drugs and Risk of Psychiatric Diseases in People with Epilepsy: A Retrospective Case-Control Study—*Gary Yuen-ming Kai, Victor Li, Cheuk-yin Anthony Lam, Tsun-wai Cheung, Pui-hung Ho, Chung-yin Leung, Hung-wai Li, Chiu-kei Kenneth Ngan, Chang Richard Shek-kwan, Shu Leonh Ho*

P4.219 Rapid Development of Chronic Neuroendocrine Dysfunction in an Animal Model of Temporal Lobe Epilepsy—*Aynara Wulsin, James Herman, Steve Danzer*

P4.220 Different Cognitive Parameters in Bilateral and Unilateral Hippocampal Sclerosis—*Ebru Nur Yavuz, Basar Bilgic, Erdem Tuzun, Serra Sencer, Altay Sencer, Nerses Bebek, R. Gurses, Aysen Gokyigit, Oget Oktem, Betul Baykan*

P4.221 Sleep Characteristics and Prevalence of Sleep Disorders in Epilepsy Patients Without Sleep Complaints—*Hava Dede, Nerses Bebek, Merih Karbay, Bedia Samanci Marangozoglu, Candan Gurses, Betul Baykan, Derya Karadeniz, Aysen Gokyigit*

P4.222 Neurocognitive Adverse Event Profile of USL255 (Qudexy® XR; Topiramate Extended-Release Capsules): Phase 3 PREVAIL and PREVAIL OLE Studies—*Ilan Blatt, Steve Chung, Balduin Lawson, Huy Nguyen, Vincent Yu, Mary Holmay, Mark Halvorsen, Robert Hogan*

P4.223 Syncope-Induced Convulsions in Adults: A Case Series—*Dearbhla Kelly, Daniel Costello*

P4.224 Hospitalization for Acute Myocardial Infarction and Co-morbid Diagnosis of Seizures/Epilepsy: Analysis of the National Inpatient Sample—*Oladimeji Akinboro, Odunayo Olorunfemi, Stephen Jesmajian, Bruce Ovbiagele*

P4.225 Treatment of Seizures Related to Eclampsia: A Multi-Center Retrospective Analysis, 1995-2015—*Gina Deck, Christina Yarrington, Daniel Hoch, Thomas McElrath, Page Pennell*

P4.226 Ictal Asystole in a Patient with Posterior Reversible Encephalopathy Syndrome (PRES) and Seizures: A Case Report—*Joanna Suski, Maromi Nei, Reginald Ho*

Epilepsy/Clinical Neurophysiology: Patient Safety and Quality

P4.227 Factors Impacting Quality of Life in Patients with Epilepsy—*Edward Firouztale, Edward Barnoski, Bhupinder Anand, Laura Buck, Constantine Saketos, Keti and Constantina Bardi*

P4.228 The STOP-BANG Questionnaire Improves the Detection of Epilepsy Patients at Elevated Risk for Obstructive Sleep Apnea—*Anumeha Sharma, Jennifer Molano, Brian Moseley*

P4.229 WITHDRAWN

P4.230 Does a 2-hour EEG Tell Us More Than a 30-Minute EEG?—*Zabeend Mahuwala, Mark Agostini, Ryan Hays, Kan Ding, Barbara Voth, Agnes Todd, Marilyn Sigman*

Neuro-oncology: Neurologic Complications of Cancer

P4.231 Carefully Phenotyped Changes in Neuropathy Measures with Exposure to Neurotoxic Chemotherapy—*Noah Kolb, Summer Brown, J. Singleton, A.Gordon Smith*

P4.232 Dural Metastases in 14 Patients with Systemic Cancer: An Exploratory Retrospective Study—*Michael Ackerl, Michel Loyoddin, Horvath-Mechtler Barbara, Anna Grisold, Birgit Surboeck, Wolfgang Grisold*

P4.233 The Clinical Phenotype and Neuropathic Outcomes of Paclitaxel-Acute Pain Syndrome—*Summer Brown, Gordon Smith, Rob Singleton, Noah Kolb*

P4.234 Glioproliferative Lesion of the Spinal Cord Derived from Intrathecal Administration of Stem Cells—*Mir Saad, Michael Miller, Daniel Cagney, Vamsidhar Chavakula, Indira Guleria, Ayal Aizer, Keith Ligon, John Chi, Aaron Berkowitz*

P4.235 Carcinomatous Meningitis Due to Metastatic Linitis Plastica—*Rajiv Narula, Neil Masangkay*

P4.236 Multiple Sclerosis and Cranial Radiation—*Sepideh Mokhtari, Fehr Duc, Harini Veeraraghavan, Kathryn Beal, Robert Young, Lisa DeAngelis*

P4.237 The Likelihood of Developing Leptomeningeal Metastasis (LM) in Cancer Patients with Neurological Symptoms but Negative Neuroimaging and CSF Cytology—*Aya Haggiagi, Xuling Lin, Samuel Briggs, Larisa Shagabayeva, Lisa DeAngelis, Adrienne Boire, Elena Pentsova*

P4.238 A Case of Pembrolizumab-Induced Central Nervous System Toxicity in a Patient with Metastatic Melanoma—*Nina Massad, Sunhee C. Lee, Patrick A. Lasala, Mary R. Welch*

P4.239 A Case of Intramedullary Spinal Cord Metastatic Melanoma—*Peter Wrigley, Mc O'Neil Plancher, Richard Curry*

P4.240 Ataxia and Supranuclear Palsy Related to Anti-Ma2 Paraneoplastic Syndrome: A Diagnostic and Therapeutic Dilemma—*Damian Berezovsky, Dinesh Jillella, Muhammad-Atif Zubairi, Timothy Winter*

Neuro-oncology: Quality of Life

P4.241 Anti-Epileptic Choice During Glioblastoma Treatment: Potential Survival Benefits—*Michael Nissenbaum, Stephanie Aronson, Margarita Mikhaylova, Sean Hwang, Alexis Demopoulos*

P4.242 Glioblastoma Multiforme Among Elderly; a Tertiary Care Center Experience—*Sarah Lapointe, Marie Florescu, David Simonyan, Karine Michaud*

P4.243 Patterns of End of Life Care in a Retrospective Cohort of Glioblastoma Patients—*Lauryn Chris, David Korones, Susan Ladwig, Jennifer Serventi, Robert Holloway, Nimish Mohile*

P4.244 Effect of Seizure Morbidity on Neurocognitive Outcome, Quality of Life, and Social Attainment in Adult Survivors of Childhood Cancers—*Zsila Sadighi, Raja Khan, Jennifer Zabrowski, Chenghong Li, Tara Brinkman, Deo Kumar Srivastava, Leslie Robison, Melissa Hudson, Kevin Krull*

P4.245 Quality Improvement and Practice Based Research InNeuro-Oncology Using the Electronic Medical Record—*Ryan Merrell, Nina Martinez, Susan Stasinos, James Mureson, Shaun Walters, Laura Amelse, Inna Glatman, Magdalena Dudek, Vimal Patel, Roberta Frigerio, Demetrius Maraganore*

P4.246 Results of the Modified Atkins Diet in Patients with Recurrent Glioma: Retrospective Review—*Hatim Attar, Sarah Rolfe, Marge Marsey, Lisa Rogers*

P4.247 Improving the Efficiency of Molecular Brain Tumor Testing—*Justin Jordan, Julie Batten, Jochen Lennerz, Matthew Frosch, Tracy Batchelor, A. John Iafrate*

P4.248 Hemolytic Anemia Associated with Dapsone PCP Prophylaxis in GBM Patients with Normal G6PD Activity—*Lisa Rogers, Peter Oppelt, Jill Barnholtz-Sloan, Quinn Ostrom, Lalitha Nayak*

P4.249 The Risk of Cognitive Impairment After Chemotherapy in Lung Cancer Patients in the Context of Neurotrophins Expression in Peripheral Blood Mononuclear Cells—*Slawomir Michalak, Joanna Rybacka-Mossakowska, Joanna Gazdulska, Iwona Golda-Gocka, Rodryg Ramlau, Wojciech Kozubski*

Tuesday, April 19

Poster Session 8:30 a.m.–7:00 p.m.

P4.250 Pooled Analysis of Menstrual Irregularities from 3 Major Clinical Studies Evaluating Everolimus for the Treatment of Tuberous Sclerosis Complex —*Steven Sparagana, David Franz, Darcy Krueger, John Bissler, Noah Berkowitz, Karin Burock, J. Kingswood*

Neuro-oncology: Neuroimaging

P4.251 Challenges in the Imaging of Response and Progression During Treatment with Immune Checkpoint Inhibitors for Glioblastoma: Insights from Advanced Neuro-Imaging —*Alexandra Miller, Robert Young, Mark Dunphy, Praneil Patel, Julio Arevalo-Perez, Robert Latek, Lewis Strauss, Ricardo Zwirtes, Vlad Coric, Monil Shah, Antonio Omuro*

P4.252 Quantitative MRI Morphologic Characteristics and Quantitative Histologic Profiles in Surgically Proven Radiation Necrosis Versus Recurrent Brain Tumor —*Lisa Rogers, Owais Alsrouji, Leo Wolansky, Chaitra Badve, Curtis Tatsuoka, Kate Clancy*

P4.253 Pathological Correlation of USPIO Imaging in Primary Central Nervous System Lymphoma —*Prakash Ambady, Csanad Varallyay, Joao Prola Netto, Randall Woltjer, Edward Neuwelt*

P4.254 MRI Changes in Newly Diagnosed Glioblastoma During Treatment with Chemoradiation and Adjuvant Temozolomide —*Ina Ly, Yangming Ou, Xiao Da, Tracy Batchelor, Jayashree Kalpathy-Cramer, Elizabeth Gerstner*

P4.255 Evolution and Progression of Cerebral Microbleeds After Whole Brain Radiation Therapy —*Jorg Dietrich, Duangnapa Roongpiboonsopit, Hugo Kuijf, Altstein Lily, Andreas Charidimou, Li Xiong, Anastasia Vashkevich, Sergi Martinez-Ramirez, Helen Shih, Anand Viswanathan*

P4.256 Textiloma - An Unusual Mimic of Brain Tumor Recurrence: A Case Series —*Deborah Forst, Derek Oakley, Tracy Batchelor, Jorg Dietrich*

P4.257 Correlation of DTI Based Tractography of Dentato-Rubrothalamic Tract and Posterior Fossa Mutism —*Fereshteh Behdani, S.Amir Javadi*

P4.258 Combined Brain Mapping and Low-Field Intraoperative MRI for Brain Tumor Resection —*Robin Petrizzo*

P4.259 Calcifying Pseudoneoplasms of the Neuraxis (CAPNON): Case Series and Literature Review —*Ankush Bhatia, Sahr Syed, Leonidas Arvanitis, Robert Aiken*

Neuro-ophthalmology/Neuro-otology

P4.260 Recurrent Alternating Homonymous Hemianopia Due to Mitochondrial Encephalomyopathy with Lactic Acidosis and Stroke-Like Episodes (MELAS) —*Kristen Krysko, Sundaram Arun*

P4.261 Individual Retinal Layer Thinning over Time in Multiple Sclerosis: What Is Optic Neuritis Hiding? —*Sheridan Reed, Jessica Chorostecki, Christina Caon, Carla Santiago Martinez, Fen Bao, Omar Khan, Navid Seraji-Bozorgzad*

P4.262 Most Common Etiology for Benign Paroxysmal Positional Vertigo (BPPV) -- Study of 270 Cases —*Gobinathan Devathasan, Senna William*

P4.263 The First Case of Intracranial Rosai Dorfman Disease —*Justin Spaulding, Steven Saraf, Kate Essad, Murray Christianson*

P4.264 A Case of Bilateral Optic Neuritis Due to NMO in the Setting of HIV —*Benjamin Osborne*

P4.265 Macular Retinal Nerve Fiber Layer Axonal Damage and Macular Retinal Ganglion Cell Loss in Clinically Isolated Syndrome: A Potential Marker of Neurodegeneration? —*Sara Collorone, Niamh Cawley, David Miller, Ahmed Toosy, Olga Ciccarelli*

P4.266 Cognitive and Psychiatric Comorbidities in Patients with Vestibular Disorder —*S.S. Surenthiran, Laura Smith, David Wilkinson, Mayur Bodani*

P4.267 Dorsal and Lateral Column Degeneration Causing Progressive Myelopathy in a Case of Leber's Hereditary Optic Neuropathy —*Edward Gettings, Walter Royal*

P4.268 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*

P4.269 Effect of Accommodation on Pupillary Unrest —*Caroline Vloka, Michael Rosenberg*

P4.270 Clinical and Investigational Profile of Patients with Cavernous Sinus Syndrome in a Tertiary Care Hospital Setup in North India —*Sanat Bhatkar, Manoj Goyal, Kanchan Mukherjee, Paramjeet Singh, Vivek Lal*

P4.271 Central Positional Nystagmus Associated with Cerebellar Tumors —*Seung-Han Lee, Sang-Jun Park, Jae-Hwan Choi, Tai-Seung Nam*

P4.272 Subthalamic Nuclei Deep Brain Stimulation Improves ColorVision in Patients with Advanced Parkinson's Disease —*Oana Dumitrascu, Jan Kaminski, Ueli Rutishauser, Michele Tagliati, Sang-Ho Kim*

P4.273 Imaging Features of Idiopathic Intracranial Hypertension (IIH) in Children —*Alexander Hartmann, Bruno Soares, Beau Bruce, Amit Saindane, Nancy Newman, Valerie Biousse, Jason Peragallo*

P4.274 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*

P4.275 Neuronal Afferent Visual System Damage in MOG-Antibody Associated Optic Neuritis Is As Severe As in AQP4-Antibody Positive NMOSD —*Hanna Zimmermann, Florence Pache, Janine Mikolajczak, Sophie Schumacher, Anna Lacheta, Sven Jarius, Brigitte Wildemann, Markus Reindl, Amy Waldman, Klemens Ruprecht, Nasrin Asgari, Kerstin Soelberg, Marius Ringelstein, Orhan Aktas, Friedemann Paul, Alexander Brandt*

P4.276 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*

P4.277 Measuring Axonal Loss with Serial OCT Testing in Multiple Sclerosis Patients —*Mark Morrow, Fawzi Abukhalil*

Parasomnias and Hypersomnias

P4.278 Risk Factors for Probable Rapid Eye Movement Sleep Behavior Disorder: A Community-Based Study —*Janice Wong, Junjuan Li, Milena Pavlova, Shuohua Chen, Aiping Wu, Shouling Wu, Xiang Gao*

P4.279 Corticomuscular and Corticocortical Coherence Analyses in Patients with REM Sleep Behavior Disorder with or Without Parkinsonism —*Gyeong Seon Choi*

P4.280 Chronotypes, Nocturnal Melatonin Level and Excessive Daytime Sleepiness in Parkinson's Disease (PD) —*Aliya Sarwar, Suzanne Moore, Max Hirshkowitz*

P4.281 Novel Observation-Based Criteria for Sleep-Wake Classification in a Preclinical Model of Sleep Disorder —*Quynh Vo, Anthony Mell, Vishakh Iyer, Kala Venkiteswaran, Siven Chinniah, Jidong Fang, Thyagarajan Subramanian*

P4.282 The Spectrum of Sleep Pathology in Definite Creutzfeldt-Jakob Disease —*Peter Kang, Gabriela De Bruin, Leo Wang, Miranda Lim, Beau Ances, Bob Bucelli*

P4.283 Online Case-Based Education Improves Clinical Decision-Making for Diagnosing and Treating Narcolepsy —*Stacey Hughes, Thomas Finnegan*

P4.284 Repetitive Squeezing of Bed Partner's Arm Throughout the Night: A Case Report of REM-Related Seizures —*Ima Ebong, Douglas Wallace, Maria Lopez*

P4.285 Hypersomnia and Reduction in Essential Tremor After Bilateral Subthalamic Ischemic Stroke —*Siva Pesala, Krishna Nalleballe, Pradeep Bollu*

Sleep Disordered Breathing and Insomnia

P4.286 Impact of Diabetes on Sleep Disorders and Sleep Quality —*Atheer AL Suhaym, Hussam Assiri, Adel Alhazzani, Latifa Alsaffar, Abdullah Mawkili*

P4.287 A Unique Pattern on Memory Testing in Dementia Screening Predicts Obstructive Sleep Apnea —*Amber Gerber, Donn Dexter*

P4.288 Severity of Sleep Disordered Breathing in Amnestic MCI and in the MCI Preceding Dementia with Lewy Bodies —*Linda Hershey, Barbara Carlson, Kellie Jones, Michael Wenger, John Carlson*

P4.289 Sleep-Disordered Breathing and Aberrant Pneumatization of Skull Bones —*Pablo Castillo, Mauricio Zambrano, Oscar Del Brutto*

P4.290 Can REM Without Atonia (RWA) Be Present in Pseudo-REM Sleep Behavior Disorder (pseudo-RBD) Due to Obstructive Sleep Apnea (OSA)? —*Irina Petrenko, Divya Gupta*

P4.291 Hemispheric Differences in EEG Spectral Power in Patients with Obstructive Sleep Apnea —*Derek Su, Pradeep Sahota, Mahesh Thakkar*

P4.292 Effects of Suvorexant on the Insomnia Severity Index in Patients with Insomnia: Analysis of Pooled Phase-3 Data —*William Herring, Ellen Snyder, Duane Snavely, Christopher Lines, David Michelson*

P4.293 Clinical Profile of Suvorexant for the Treatment of Insomnia Over 3 Months in Men and Women: Gender Subgroup Analysis of Pooled Phase-3 Data —*William Herring, Kathryn Connor, Duane Snavely, Ying Zhang, Ellen Snyder, Christopher Lines, David Michelson*

Movement Disorders: Essential Tremor

P4.294 Deep Brain Stimulation and Climbing Fiber Synaptic Pathology in Essential Tremor —*Sheng-Han Kuo, Chi-Ying Lin, Jie Wang, Jyun-you Liou, Ravi Louis, Wei-Pu Wu, Jesus Gutierrez, Phyllis Faust, Elan Louis*

P4.295 Tremor Severity Estimation Using Liftware Instrumented Eating Utensil —*Svjetlana Miocinovic, Ali Shoeb, Sarah Wang, Nicole Swann, Anupam Pathak, Jill Ostrem*

P4.296 Climbing Fiber-Purkinje Cell Synaptic Pathology in Tremor and Cerebellar Degenerative Diseases —*Sheng-Han Kuo, Chi-Ying Lin, Jie Wang, Danielle Lee, Phyllis Faust, Arnulf Koeppen, Elan Louis*

P4.297 Exploratory Trial Results for SAGE-547 in Essential Tremor —*Aaron Ellenbogen, Shane Raines, Stephen Kanes*

P4.298 Predictors of Deep Brain Stimulation Outcome in Tremor Patients —*Claire Sandoe, Vibhor Krishna, Francesco Sammartino, Yu-Yan Poon, Clement Hamani, Andres Lozano, Alfonso Fasano*

P4.299 Resetting Tremor by Single Pulse Transcranial Magnetic Stimulation of the Motor Cortex and the Cerebellum in Essential Tremor and Dystonic Tremor —*Panyakaew Pattamon, Hyun Joo Cho, Prachaya Srivanitchapoom, Mark Hallett*

P4.300 Repeated Spiral Drawings Can Distinguish Motor Learning from Tremor Changes in Patients with Essential Tremor —*Lan Luo, Qiping Yu, Ana Mirallave, Elan Louis, Seth Pullman*

P4.301 Upper Extremity Cooling Reduces Tremor Acutely in Patients with Essential Tremor: Preliminary Data —*Leonardo Almeida, Lisa Warren, Heather Simpson, Vinata Vedam-Mai, David Vaillancourt, Daniel Martinez-Ramirez, Michael Okun, Aparna Wagle-Shukla*

P4.302 Familial Aggregation and Co-Aggregation of Essential Tremor and Parkinson's Disease —*Elan Louis, Lorraine Clark, Ruth Ottman*

P4.303 Incidence of Impedance Fluctuations in Patients with Thalamic Deep Brain Stimulation for Essential Tremor and Their Effect on Clinical Outcome —*Jonathan Eskenazi Markewitz*

Movement Disorders: Parkinson Plus Syndromes

P4.304 Decreased Coenzyme Q10 Levels in Multiple System Atrophy Cerebellum —*Emanuele Barca, Giulio Kleiner, Goumei Tang, Saba Tadesse, Chi-Ying Lin, Eliezer Masliah, Sheng-Han Kuo, Catarina Quinzii Hirano*

P4.305 Sniffing the Diagnosis: Olfactory Testing in Neurodegenerative Parkinsonism —*Florian Krismer, Bernadette Pinter, Christoph Müller, Philipp Mahlknecht, Michael Nocker, Eva Reiter, Atbin Djamshidian, Sylvia Boesch, Gregor Wenning, Christopher Scherfler, Werner Poewe, Klaus Seppi*

P4.306 Longitudinal Clinical and Brain MRI Changes in Multiple System Atrophy —*Francesca Caso, Federica Agosta, Ivan Nikolic, Milica Lukić-Ječmenica, Igor Petrović, Iva Stanković, Vladimir Kostic, Massimo Filippi*

P4.307 Esophageal Involvement in Multiple System Atrophy —*Takayoshi Shimohata, Hiroshige Taniguchi, Hideaki Nakayama, Kazuhiro Hori, Makoto Inoue, Masatoyo Nishizawa*

P4.308 Association of Amyotrophic Lateral Sclerosis with Basal Ganglia Impairment —*Dilafruz Mirzaeva, Anna Prokhorova, Bakhrom Muinjanov*

P4.309 The Role of Life Stressors in the Etiopathogenesis of Progressive Supranuclear Palsy —*Kristen Kelley, Steven Edland, Guerry Peavy, Irene Litvan*

P4.310 Spinal Cord Alpha Synuclein Deposition Associated with Spinal Myoclonus in a Patient with Multiple System Atrophy of the Cerebellar Type (MSA-C) —*Anna Bank, Derek Oakley, Matthew Frosch, Jeremy Schmahmann*

P4.311 Correlates of Quality of Life in Progressive Supranuclear Palsy (PSP) —*Lenora Higginbotham, Vanessa Johnson, Alexander Pantelyat*

P4.312 Distinct Synuclein Seeds in Parkinson Disease and Multiple System Atrophy —*Tritia Yamasaki, Brandon Holmes, Jennifer Furman, Dhruva Dhavale, Paul Kotzbauer, Marc Diamond*

Movement Disorders: Miscellaneous

P4.313 Gait Disorders: Classification and Epidemiology —*Raja Boddepalli, Kateryna Kurako, Nestor Galvez-Jimenez*

P4.314 A Case Series of Concomitant Parkinson's Disease and Cryptogenic Epilepsy —*Andre Son, Milton Biagioni, Dorian Kaminski, Alec Gurevich, Britt Stone, Rebecca Gilbert, Melissa Nirenberg, Alessandro Di Rocco*

P4.315 The Clinical Presentation of Atlantoaxial Subluxation in Light of Three Cases Undergoing Stabilizing Surgery —*Helena Huhmar, Ville Leinonen, Lauri Soinne*

P4.316 Objective Assessment of Gait and Walking Ability in an Outpatient Neurology Clinic —*Ming Shao, Liu Jinyi, Jing Liu, Jia Xu, Xiaoshuang Guo, Bin Hu*

P4.317 Drug-induced Parkinsonism in a Patient with Methamphetamine Abuse —*Justin Yancey*

P4.318 A Case of Bilateral "Middle Ear Myoclonus" —*Jason Siegel, Zbigniew Wszolek*

P4.319 Restless Limb Syndrome (RLS) May Precede Motor Manifestations of Parkinson Disease by More Than 10 Years: A Population Based Study —*David Dickoff, Roshana Sirkin*

P4.320 Treatment of Movement Disorders in *ADCY5*-Related Disorders with Deep Brain Stimulation: A Case Series —*Marisela Dy, Florence Chang, Sol De Jesus, Irina Anselm, Neil Mahant, Pamela Zeilman, Lance Rodan, Kelly Foote, Wen-Hann Tan, Emad Eskandar, Nutan Sharma, Michael Okun, Victor Fung, Jeffrey Waugh*

P4.321 Increased Neuroinflammation in Asymptomatic LRRK2 Mutation Carriers: A Pilot PET Imaging Study —*Vesna Sossi, Rostom Mabrouk, Matthew Walker, Elham Shahinfard, Nasim Vafai, Jessie Fu, Nicole Heffernan, Jessamyn McKenzie, Matthew Farrer, Jing Zhang, Zbigniew Wszolek, Jan Aasly, A Stoessl*

P4.322 Comorbid Idiopathic Parkinson's Disease and Stiff Person Syndrome: A Case Report —*Matthew Lustig, Shaena Blevins*

Movement Disorders: Other

P4.323 Systematic Literature Review of Droxidopa in Clinical Trials for Neurogenic Orthostatic Hypotension (nOH) in Parkinsonism —*Khashayar Dashtipour, Jack Chen, Stephanie Tashiro, Morteza Rashidian*

P4.324 Delusional Infestation in Parkinson's Disease: A Case Series —*Jennie Davis, Julie Kurek, John Morgan, Kapil Sethi*

P4.325 A Gene for Risk Taking: Effect of Genotypic Variants on Decision Making, Response Inhibition and Impulsivity in Parkinson's Disease —*Roopa Rajan, Soumya Krishnamoorthy, Syam Krishnan, Gangadhara Sarma, Asha Kishore*

P4.326 A Case of Reemergent Punding and Impulse Control Disorder Associated with Levodopa-Carbidopa Intestinal Gel in Parkinson Disease —*Addie Patterson, Irene Malaty, Michael Okun, Daniel Martinez-Ramirez*

P4.327 Sequence Effect in Parkinson's Disease: A Manifestation of Central Fatigue? —*Ayse Tinaz, Ajay Pillai, Mark Hallett*

P4.328 Sustained Relief of Multiple Types of Gait Freezing in Parkinson's Disease: A Novel, Music-Based Meta-Conditioning Treatment Protocol (Ambulosono) —*Bin Hu*

P4.329 Can Stimulation of Deep Brain Tissue Improve the Expression of the Mouth in Parkinson Disease Patients —*Maria Alvarez, Patrick Grogan*

P4.330 Why Do Patients with Parkinson Disease Fall? A Single Center Experience —*Abraham Lieberman, Aman Deep, Thurmon Lockhart, Christopher Frames, Saulena Shafer, Margaret McCauley*

P4.331 Symptom Severity and Pain Intensity May Predict Post-subthalamic Nucleus Deep Brain Stimulation Impulsivity in Parkinson's Disease —*Hannah Breit, Aaron Rothstein, Bradley Avery, Anusha Boyanpally, Jared Hesse, Robert Coghill, Ihtsham Haq*

P4.332 Characteristics of Psychosis in Parkinson's Disease Without Dementia —*Matthew Barrett, Carol Manning, Binit Shah, Lama Alameddin, Jessica Stenclik, Flanigan Joseph, Madaline Harrison, G. Wooten, Scott Sperling*

P4.333 A Computerized Cognitive Behavioral Therapy Randomized, Controlled, Pilot Trial for Insomnia in Parkinson's Disease (ACCORD-PD Study) —*Shnehal Patel, Anwar Ahmed, Nancy Foldvary-Schaefer, Oluwadamilola Ojo, Gencer Genc, Srivadee Oravivattanakul, Hubert Fernandez*

P4.334 The Influence of Bacterial Amyloid on Alpha Synuclein (AS) Misfolding in the Rat —*Robert Friedland, Madave Rane, Evelyne Gozal, Shinying Jin, rekha Jagadapillai1, Andrew Roberts, Ruolan Liu, Eliezer Masliah, Vilius Stribinskis*

P4.335 Deep Brain Stimulation May Be Beneficial for Levodopa-Refractory Tremor in Benign Tremulous Parkinsonism —*Takuya Konno, Owen Ross, Robert Wharen, Ryan Uitti, Zbigniew Wszolek*

P4.336 Effects of Dopaminergic Medication on Working Memory in Patients with Parkinson's Disease with and Without Mild Cognitive Impairment —*Elena Sherman, Kai Zhang, David Everling, Anisa Marshall, Sophie YorkWilliams, Vinod Menon, Kathleen Poston*

P4.337 Depletion of Nigrosome 1 in Parkinsonian Brains As Demonstrated by the Loss of the "Swallow Tail Sign" on 3T MRI-SWI —*Kenji Yoshikawa, Makiko Tanaka, Yoshiomi Shimidzu, Nobuyasu Kitamura*

P4.338 The Effect of Variable Deep Brain Stimulation Frequencies on Balance and Gait in Patients with Either Subthalamic Nucleus(STN)or Globus Pallidus Internus (GPi)Deep Brain Stimulator: A Quantitative Analysis —*Aman Deep, Abraham Lieberman, Rohit Dhall, Saulena Shafer, Noriko Tateuchi, Edith Simpson, Christopher Frames*

Cerebrovascular Case Reports

P4.339 Embolic Stroke in Relation to Dynamic Vertebral Artery Stenosis: A Case Report —*Saeed Alghamdi, Oscar Benavente*

P4.340 Intracerebral Hemorrhage Due to Reversible Cerebral Vasoconstriction Syndrome in the Setting of Antipsychotic Medication —*Yi Li, Firas Kaddouh, J. Diego Lozano, Adalia Jun-O'Connell, Muhammad Ramzan*

P4.341 Atypical PRES in Systemic Hodgkins Lymphoma Post R-ABVD Chemotherapy —*Nawal Shaikh, Crystal Wong*

P4.342 A Case of Multiple Recurrent Ischemic Stroke in a Patient with Cholangiocarcinoma and Initiation of Anticoagulation Therapy for Secondary Stroke Prevention —*Jia Zhen Cheng, Ryna Then*

P4.343 The Utility of Factor VIII Infusion in a Rare Case of SHAM Syndrome —*David Roh, William Roth, Fawaz Al-Mufti, Wendy Chung, Connolly E. Sander, Andrew Eisenberger, Soojin Park, Jan Claassen, Sachin Agarwal*

P4.344 An Uncommon Cause for Multiple Cerebral Ischemic Infarcts —*Jamal Khattak, Masoom Desai, Dhaval Desai, Elizabeth Wise, Kari Moore, Jignesh Shah, Michael Wilder, Kerri Remmel, Wei Liu*

P4.345 Non-Apoplectic Pituitary Macroadenoma Causing Stroke —*Neil Datta, Janhavi Modak, Christoph Stretz, Bhaskar Roy, Catherine Hosley*

P4.346 Case Report - IV Thrombolysis with Subsequent SAH in Setting of Occult Spontaneous MCA Dissection —*Ali Saeed, Saqib Chaudhry, John Bunka, Anmar Razak*

P4.347 Acute Stroke Due to High Voltage Electrocution —*Laxmi Kokatnur, Imran Khan, Oleg Chernyshev, Mohan Rudrappa*

P4.348 Unilateral Restless Leg and Stuttering Speech As Acute Presentation of Pontine Stroke —*Andrew Treister, Robert Claycomb, Royya Modir*

P4.349 Facial Colliculus and Opalski Stroke Syndromes Caused by Vertebral Artery Dissection. Case Report —*Saeed Alghamdi, Omar Ayoub, Nasser Alzahrani*

P4.350 Multifocal Micro-Embolic Infarcts in Hypereosinophilic Syndrome: A Case Report —*Anne Nguyen, Koen Vanden Driessche, Jan Hajek, Luke Chen, Laura Wilson*

Tuesday, April 19

Poster Session 8:30 a.m.–7:00 p.m.

P4.351 Antiphospholipid Syndrome-Associated Crescendo Stroke Events Treated with Rituximab —*Antoinette O' Connor, Grainne Murphy, Simon Cronin*

P4.352 A Case of Resolution of Thalamic Pain Syndrome Following Endovascular Stenting —*Scott Le, Jennifer Rasmussen, Patrick Noonan*

P4.353 Retrograde Thromboembolism to Basilar Artery During Arteriovenous Graft Thrombectomy —*Hisham Salahuddin, Mouhammad Jumaa, Gretchen Tietjen, Syed Zaidi*

P4.354 Reversible Cerebral Vasoconstriction Syndrome Presenting As Coma —*Muhammad Khan, Amelia Adcock*

P4.355 Thrombosis at the Site of Pulmonary Venous Anastomosis Following Lung Transplantation Presenting with Multiple, Bilateral, Supra- and Infra-Tentorial Ischemic Strokes in the Setting of a Known Patent Foramen Ovale — *Stephen Yeung, Mamdouh Bakhos, Jose Biller*

P4.356 Rare and Fulminant Presentation of Adult Moyamoya Disease: A Case Report —*Vishank Shah, Joseph Kass*

P4.357 Stroke Due to Air Embolism Related to Laser Ablation of Accessory Vein —*Prachi Kale, Bushra Javed, Noorie Pednekar, Ramandeep Sahni, Louise Resor, Michael Tenner, Brij Ahluwalia-Singh*

P4.358 Radiotherapy Induced Atherosclerosis and Stroke Syndrome (RIASS) Causing Bilateral Vision Loss and Multifocal Strokes. A Case Report and Literature Review —*Jaivir Rathore, Mohsin Ali, Lawrence Ulanski, Fernando Testai*

P4.359 An Unusual Cause of Monocular Vision Loss: A Case Report — *Lauren Dunn, Christine Kim, Sara Rostanski, Joshua Willey*

P4.360 Collateral Blood Flow Availability in Acute Ischemic Stroke: A Case Report —*Sara Rostanski, Sean Lavine, J. Mohr*

P4.361 Focal Seizures As the First Manifestation of CADASIL; Novel Mutation Detected by Next Generation Exome Sequencing —*Silva Emanuel, Valeria Alvarez, Graciela Serebrinsky, Valeria Lujan Salutto, Claudio Mazia*

P4.362 Aplication of Theta Burst Transcranial Magnetic Stimulation Over Both Hemispheres on Acute Thrombotic Stroke Patient —*Paulus Sugianto, Hidayatullah Hasyim*

P4.363 Imaging of a Fatal Air Embolism from ERCP —*William Jens, Angelica Lee, Muhammad Ibrahimi*

P4.364 Aortic Sarcoma Mimicking a Thrombus Filling Vascular Lumen: A Rare Cause of Cerebral Infarction —*Hyojae Kim, Sang-Beom Jeon, Kye-Won Park, Hyunjin Kim, Bum Joon Kim, Sun Kwon*

P4.365 Ischemic Stroke After Plasma Donation —*Hisham Salahuddin, Sharmeen Hussaini, Gretchen Tietjen*

P4.366 Unusual Intersection: Elucidating the Role of Erdheim Chester Disease in Stroke —*Lila Sheikhi*

P4.367 Hypersomnolence and Horizontal Gaze Palsy in Artery of Percheron Infarcts: Clinical-Radiographic Correlates —*Shashank Agarwal, Breehan Chancellor, Jonathan Howard*

P4.368 An Unusual Case of Acquired Alexia Without Agraphia Caused by Perioperative Stroke —*Ugur Sener, Jason Siegel, Benjamin Eidelman*

P4.369 Palinopsia in a Patient with an Acute Occipital Lobe Stroke —*Kevin Weber, Grace Ma, Andrew Slivka*

P4.370 Thromboangitis Obliterans Resulting in Multisystem Aneurysms: A Case Report —*Emiliya Melkumova, Artin Minaeian, Shamaehah Javed, Ramandeep Sahni, John Fallon, George Kleinman, Michael Tenner, Brij Ahluwalia-Singh*

P4.371 Matrix Metalloproteinase Levels in Cervical and Intracranial Carotid Dolichoarteriopathies —*Yildiz Arslan, İlker Burak Arslan, Yeliz Pekçevik, Ufuk Şener, Şükran Köse, Yasar Zorlu*

P4.372 Supplemental Venous Drainage to Internal Jugular Veins for Cerebral Venous Efflux: An Angiographic Study — *Muhammad Ishfaq, Adnan Qureshi, Nabeel Herial, Asif Khan, Muhammad Suri*

P4.373 Recurrent Spells of Unresponsiveness Secondary to Bilateral Carotid Stenosis Caused by Giant Cell Arteritis —*Mervat Wahba*

P4.374 Recurrent Strokes in Giant Cell Arteritis: Treatment Dilemma —*Vivek Yadala, Parvinder Kaur, Ramandeep Sahni, Paul Eugene Lleva*

P4.375 HSV-2 Encephalitis Presenting As Multifocal Ischemic Stroke —*Fanglin Zhang, Ai Sumida, Jason Margolesky, Leticia Tornes, Alberto Ramos, Sebastian Koch*

P4.376 Clinical and Angiographic Aspects of Cerebral Thrombotic Vasculopathies : A Brazilian Single Center Experience —*Elizeu Neto, Jose Guilherme Caldas, Michel Frudit*

P4.377 A Case of Multiple Intracranial Aneurysm in a Patient with Intimomedial Mucoid Degeneration —*Sunhee Kim, Alejandro Vargas, Fernando Testai*

P4.378 Stroke from Meningitis Induced Vasculopathy: Vasospasm Vs. Vasculitis —*Khaled Moussawi, Henrikas Vaitkevicius, Steven Feske*

P4.379 Primary Angiitis of the Central Nervous System: An Unusual Case of a Rare Neurologic Disorder —*Eileen Vallin, Joshua Martin, Aaron Grossman*

Non-Atherosclerotic Arteriopathies

P4.380 Intraarterial Treatment for Acute Ischemic Stroke: Analysis of Outcomes of Dissection Vs. Non-Dissection Mechanism in 445 Patients — *Judd Jensen, Kristin Salottolo, Kathryn McCarthy, David Loy, Donald Frei, Jeffrey Wagner, Michelle Whaley, David Bar-Or*

P4.381 Pain After Cervical Artery Dissection —*Jina Youn, Shyam Prabhakaran*

P4.382 Intraarterial Treatment for Acute Ischemic Stroke Due to Dissection: Retrospective Series of 24 Cases —*Judd Jensen, Kristin Salottolo, Kathryn McCarthy, Donald Frei, David Loy, Jeffrey Wagner, Michelle Whaley, David Bar-Or*

P4.383 The Alterations of RNF213 Genotypes and Angiogenic Factors in Moyamoya Patients in Taiwan —*Ming-Jen Lee, Meng-Fai Kuo, Ya-Fang Chen, Pi-Chuan Fan, Kuo-Chuan Wang, Huey-Ling You, Li Gray, Yong Zhou, Kai Wang*

P4.384 Characteristics of Atypical Intracranial Hemorrhage in Moyamoya Disease: A Case Series —*Sanskriti Mishra, Anand Patel, Sammy Pishanidar, Jacob Rube, Reuben Burshtein, Steven Tversky, Thomas Kodankandath, Edom Seyoum, Amir Dehdashti, David Langer, Paul Wright, Richard Libman, Jeffrey Katz*

P4.385 Cerebrospinal Fluid Characteristics in Patients with Posterior Reversible Encephalopathy Syndrome (PRES) —*Colin Ellis, Ramani Balu*

P4.386 Reversible Cerebral Vasoconstriction Syndrome with Delayed Cortical Subarachnoid Hemorrhage — *Seung Min Kim, Sang-Won Ha*

P4.387 Cervical Arterial Fibromuscular Dysplasia in a Bi-Ethnic Population: A Retrospective Study in the U.S.-Mexican Border —*Tatiana Chacon-Quesada, Ihtesham Qureshi, Jose Gavito-Higuera, Gustavo Rodriguez, Salvador Cruz-Flores, Alberto Maud*

P4.388 Intracranial Fibromuscular Dysplasia in a Middle-Aged Woman with Recurrent Ischemic Stroke —*Nicole Beaton, Amer Malik, Yvan Maque-Acosta, Sebastian Koch*

P4.389 Case of Fatal Posterior Reversible Encephalopathy Syndrome Presenting As Cerebellar Edema and Reverse Herniation —*Mona Thakre, Jihad Inshasi*

General Neurology: Vascular Disease and Imaging

P4.390 Is It Possible to Treat "Stroke-Like Symptoms" with Hemodialysis? — *Milena Rodriguez Alvarez, Anjana Pillai, Edgar Gomez, Arpine Avagyan, Menachem Gold, David Sternman, Lisa Thompson*

P4.391 Systemic Vasculitis Causing Multiorgan Dysfunction Masquerading As Tumefactive Demyelination —*Ankush Bhatia, Dusan Stefoski, Roumen Balabanov*

P4.392 An 8-Week Lifestyle Educational Program Improves Depression Related to Reduced Blood Flow — *Francisco Eduardo Ramirez, Katelyn Antuna, Neil Nedley*

P4.393 Idiopathic Intracranial Hypertension (IIH) Manifesting with Nausea and Vomiting in the Absence of Headache in an Adult —*Abdulrahman Bouges, Yousef AlSaid, Sarmad Chaudhry, Ahmed Hassan, Edward Cupler*

P4.394 Concurrent Osmotic Demyelination Syndrome (ODS) and Wernicke's Encephalopathy (WE) in a Patient with Alcoholic Cirrhosis —*Prateek Thatikunta, Alok Sachdeva, Tanaporn Rasameesoraj, Trisha Dickey, Sushma Chennubhotla, Lisa Rogers*

P4.395 Featal Serotonin Syndrome in Marchiafava-Bignami Disease : Case Report —*Yehya Seddeq, Saeed Alghamdi*

P4.396 A Case Report of Metronidazole-Induced Central Nervous System Complications —*Ning Wu, Joseph Nguyen, Aiesha Ahmed*

P4.397 Methylene Blue Encephalopathy —*Luciana Leon Cejas, Fatima Pantiu, Julieta Quiroga, Pablo Bonardo, Claudia Uribe Roca, Anibal Chertcoff, Maria Pacha, Gabriel Napoli, Manuel Fernandez Pardal, Ricardo Reisin*

General Neurology: Imaging in Clinical Diagnosis

P4.398 Osmotic Demyelination Syndrome and Rhabdomyolysis Secondary to Postpartum Hypernatremia —*Varun Raghavan M.S, Archana N.B, Dr Agadi J.B, Dr Karthik N, Dr Deepak N*

P4.399 A Homeopathic Disaster: Case Report of Turpentine Toxicity —*Holly MacCallum, Amy Towfighi*

P4.400 Heat Stroke from Prolonged Sauna Producing Bilateral Thalamic and Brainstem Hyperintensities on Diffusion-Weighted MRI —*Alessandro Fois, Tania Farrar, Stephen Tisch*

P4.401 Hypoglycemia Induced Cerebral Cortical Laminar Necrosis: A Case Report —*Sunali Shah, Chantale Branson, Brian McGeeney*

P4.402 WITHDRAWN

P4.403 Posterior Reversible Encephalopathy Syndrome with Multiple Cerebellar Mass-Like Lesions Secondary to Amphetamine —*Sahawat Tantikittichaikul, Doungporn Ruthirago, Sara Ali, Angel Claudio, Jongyeol Kim*

Neuroscience Research Prize Recipients

P4.404 The Effect of Polyphenols in Spices on the Aggregation of the Amyloid-Beta Peptide 1-40; an In Vitro Study — *Swathi Srinivasan*

P4.405 To Brux or Not to Brux: The Development of Two Novel, Non-Invasive Devices for the Detection of Bruxism — *Brian Singer*

P4.406 Ostracism and the Maximization of Social Reward —*Han Xu*

AAN 2016 Annual Meeting

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



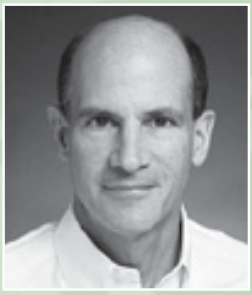
Jeremy D. Schmahmann, MD, FAAN
Massachusetts General Hospital
Boston MA

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

Tuesday, 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 Buetefisch, 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 Shiau 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, Jimming 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 —*Kaustubh Limaye, Rahul Ravilla, Appalnaidu 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 Urday, 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**

Ex Real World of Neurology **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, Rehovet, Israel

1:00 p.m.–5:30 p.m. Integrated Neuroscience Session

I9 SIP Sleep, Clocks, and Alzheimer's Disease

This program is offered in partnership with the Sleep Section.

Coordinators: Aleksandar Videnovic, MD, MSc, FAAN, and Yo-El 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-El 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. **I9.001 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. **I9.002 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. **I9.003 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. **I9.004 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.

I9.001 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*

I9.002 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*

I9.003 Impact of Armodafinil Therapy on Neuropsychiatric Features in Dementia with Lewy Bodies —*Karen Kuntz, Sara Mason, Maria Lapid, Jeremiah Aakre, Emily Lundt, Bradley Boeve*

I9.004 Sleep Deficiency Is Associated with Lack of Exercise and Higher BMI Among Community-Dwelling Older Adults —*Kelly Sullivan*

I9.005 A Unique Pattern on Memory Testing in Dementia Screening Predicts Obstructive Sleep Apnea —*Amber Gerber, Donn Dexter*

I9.006 Severity of Sleep Disordered Breathing in Amnestic MCI and in the MCI Preceding Dementia with Lewy Bodies —*Linda Hershey, Barbara Carlson, Kellie Jones, Michael Wenger, John Carlson*

I9.007 Hemispheric Differences in EEG Spectral Power in Patients with Obstructive Sleep Apnea —*Derek Su, Pradeep Sahota, Mahesh Thakkar*

I9.008 Cerebral Perfusion and the Risk of Dementia in the General Population —*Frank Wolters, Hazel Zonneveld, Peter Koudstaal, Albert Hofman, Meike Vernooij, Mohammad Ikram*

I9.009 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*

I9.010 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*

I9.011 Is the EEG Important in the Study of Patients with Cognitive Symptoms? —*Agustina Tamargo, Analia Calle, Alejandro Thomson, Maria Gonzalez Toledo, Diego Nadile, José Molina, Santiago O'Neill, Elena Fontela, Alfredo Thomson*

I9.012 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. **I9.005 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. **I9.006 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. **I9.007 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. **I9.008 Data Blitz**
Severity of Sleep Disordered Breathing in Amnestic 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

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

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.

Ex Health & Wellness **Mindfulness Meditation for Healthcare Practitioners**
Director: *Sarah Mulukutla, MD, MPH, Stamford, CT*

3:00 p.m.–4:00 p.m.

Ex Health & Wellness **Dietary Interventions in MS & Medical Marijuana in MS**
Director: *Vijayshree Yadav, MD, Portland, OR*

3:30 p.m.–4:30 p.m.

I **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

Tuesday, April 19

1:00 p.m.–5:30 p.m. Integrated Neuroscience Session

I10 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. **I10.001 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. **I10.002 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. **I10.003 Data Blitz**
The Development of a Novel Zebrafish Model of Demyelination Allowing Therapeutic Development to Promote Remyelination in Multiple Sclerosis —*Alexander McGown, Tennore Ramesh, Basil Sharrack*

2:45 p.m.–2:50 p.m. **I10.004 Data Blitz**
Oligodendrogliopathy in Multiple Sclerosis: Relation to Low Glycolytic Metabolic Rate of Oligodendrocytes —*Qiao Ling Cui, Malena Rone, Damla Khan, Melissa Bedard, Guillermina Almazan, Samuel Ludwin, Timophy 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.

I10.001 IL-33 Expression in MS: Role in Remyelination and Repair —*Subramaniam Sriram, Chandramohan Natarajan, Song-Yi Yao, Charles Spurlock, John Tossberg, Thomas Aune*

I10.002 LINGO-1 Negatively Regulates Oligodendrocyte Differentiation by Blocking the β-integrin Signaling Pathway —*Sha Mi, Guanrong Huang, Xinhua Lee, Zhaohui Shao*

I10.003 The Development of a Novel Zebrafish Model of Demyelination Allowing Therapeutic Development to Promote Remyelination in Multiple Sclerosis —*Alexander McGown, Tennore Ramesh, Basil Sharrack*

I10.004 Oligodendrogliopathy in Multiple Sclerosis: Relation to Low Glycolytic Metabolic Rate of Oligodendrocytes —*Qiao Ling Cui, Malena Rone, Damla Khan, Melissa Bedard, Guillermina Almazan, Samuel Ludwin, Timophy Kennedy, Jack Antel*

I10.005 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*

I10.006 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*

I10.007 NDC-1308, a Small Molecule with Remyelinating Activity for Treatment of Secondary Progressive Multiple Sclerosis Patients —*Steven Nye, James Yarger*

I10.008 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*

I10.009 Evidence That the Anti-LINGO-1 Monoclonal Antibody BIIB033 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*

I10.010 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*

I10.011 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*

I10.012 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*

I10.013 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. **I10.005 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. **I10.006 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. **I10.007 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. **I10.008 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

S35 Behavioral and Cognitive Neurology

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 Niolat, 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, SooAe 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 Buthorn, 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 Spangehl, 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 Spangehl, 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*

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.

Wednesday, April 20

6:30 a.m.–8:30 a.m.

C166 SIF Acute Neurological Emergencies

C167 SIF 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.

I 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.

I Personalized Neurogenomic Medicine

Ex Health & Wellness 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

Ex Real World of Neurology 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 SIF Neurocritical Care and Neuroscience Crossroads: From Bench To Bedside 126

I12 SIF Amyloid and Beyond: From Bench to Bedside 128

3:00 p.m.–4:00 p.m.

Ex Health & Wellness Guts & Glory: The importance of Diet & Exercise in Managing Persons with Multiple Sclerosis

3:30 p.m.–4:30 p.m.

I 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
SIP The course is part of a Subspecialty in Focus track
I The program is one of the I Talk sessions
Ex 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

Wednesday, 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 Chinoy, 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 Carrell, Ellie Carrell, 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 Shiau 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, Kassandra Munger*

6:45 a.m. S37.002
Increased Sodium Intake Is Not Associated with MS Activity or Progression in BENEFIT —*Kathryn Fitzgerald, Kassandra 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, Evanthia 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 Dankwoski, 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 Noethen, 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 Mädler, 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 Vaishnaw, 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, Talaignair 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*

- 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 Kataki, 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.

I **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.

I **Personalized Neurogenomic Medicine**
Director: *Joseph J. Higgins, MD, FAAN, Marlborough, MA*

Ex Health & Wellness **Integrating Management of Activity and Exercise in Routine Clinical Practice**
Director: *Lisa M. Shulman, MD, Baltimore, MD*

I TALKS

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

Wednesday, 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 Impedence 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*

P5.013 Response to IVIG in Patients with CIDP: The INSIGHTS Quality Improvement Registry —*Todd Levine, Jonathan Katz, Richard Barohn, David Saperstein, Gil Wolfe, Lara Katzin, Tahseen Mozaffar, Mazen Dimachkie, Gary Badger, Leslie Vaughn, Elissa Ritt, Michelle Greer*

P5.014 Ultrasound Is a Sensitive Technique to Detect Fasciculations of Cranial Muscles in Amyotrophic Lateral Sclerosis (ALS) —*Cullen O'Gorman, Charles Kassardjian, Michael Baria, Janneke Weikamp, Nens Van Alfen, Andrea Boon*

P5.015 Structural Brain MRI Abnormalities in Kennedy's Disease —*Pilar Maria Ferraro, Federica Agosta, Giorgia Querin, Nilo Riva, Cinzia Bertolin, Elisa Da Re, Massimiliano Copetti, Giancarlo Comi, Andrea Falini, Gianni Soraru, Massimo Filippi*

P5.016 The Novel M.9997 T>A $TRNA^{Gly}$ Variant Causes Multisystem Mitochondrial Disease Including Myopathy, Neuropathy, Cardiomyopathy, Intestinopathy and Nephropathy —*Jennifer Roggenbuck, Alexandra Ilacqua, Adam Aubuchon, John Kissel*

P5.017 Persistent Intraoperative Neurophysiologic Monitoring Changes in Scoliosis Surgery Correlate with Postoperative Deficits —*Viet Nguyen, Hazel Shen, Charles Cho, Scheherazade Le, Leslie Lee, Jaime Lopez*

P5.018 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*

Genetics of Peripheral Neuropathies

P5.019 Genotype-Phenotype Relationships in Peripheral Neuropathies: Challenging the 'Status Quo' —*Tracy Brandt, Courtney Downtain Pickersgill, Sharon Suchy*

P5.020 Novel Intragenic Duplication of MFN2 Gene Cause CMT2A with Considerable Phenotypic Variability —*Gyula Acsadi, Sylvia Ounpuu, Agnes Jani-Acsadi*

P5.021 Neuropathy Associated HSPB1 Mutations Result in Loss of Neuroprotection in an In Vitro Model of Astrocyte Toxicity to Motor Neurons —*Patrick Heilman, SungWon Song, Carlos Miranda, Kathrin Meyer, Che Best, Brian Kaspar, Stephen Kolb*

P5.022 Variants in Four Genes on Chromosome 12 Is Associated with Intermediate Charcot-Marie-Tooth Disease —*Geir Braathen, Helle Høyer, Øyvind Busk, Kristian Tveten, Camilla Skjelbred, Michael Russell*

P5.023 Clinical and Genetic Assessment in Korean Patients with Congenital Insensitivity to Pain with Anhidrosis —*Tai-Seung Nam, Seung-Han Lee, Sang-Jun Park, Jae-Hwan Choi, Myeong-Kyu Kim, Sung-Taek Jung, Seok-Yong Choi*

P5.024 Clinical and Genetic Heterogeneity in Charcot-Marie-Tooth Neuropathy Type 2 Patients from Turkey —*Hacer Durmus, Halil Ibrahim Akcay, Merve Sivaci, Piraye Serdaroglu, Feza Deymeer, Esra Battaloglu, Yesim Parman*

P5.025 Erythromelalgia: A Novel Mutation in SCN9A Causing Chronic Neuropathic Burning Feet Syndrome Without Classic Skin Findings —*Jigar Mankad, Chamindra Konersman*

P5.026 Clinical and Mutation Analysis of GAP Junction Beta 1 (GJB1) Gene in Brazilian Patients with the Diagnosis of X-Linked Type 1 Charcot-Marie-Tooth Disease (CMTX1) —*Eduardo Uchoa Cavalcanti, Maria Cristina Freitas, Savana Camilla Santos, Carlos Eduardo Martins, Osvaldo Nascimento*

P5.027 A Novel CMT2P Missense Mutation in the RING Domain of LRSAM1 Impairs the Nuclear Transport of FUS — *Sezgi Arpag, Bo Hu, Brett Parker, Audra Hamilton, Robin Yawn, Jane Howard, William Burnette, Stephan Zuchner, Jun Li*

P5.028 Recurrent Episodes of Stroke-Like Symptoms in a Patient with Charcot-Marie-Tooth Neuropathy X Type 1 (CMTX1) —*Ning Wu, Sarita Said Said, Shyamsunder Sabat, Matthew Wicklund, Mark Stahl*

P5.029 Severe Neuropathic Pain Syndrome, with Ulceromutilating Neuropathy and Spastic Paraparesis, Associated with the P.Ala354Pro Variant in ATL1 —*Neha Khade, Catherine Ashton, Mark Davis, Wally Knezevic, Merrilee Needham*

Pathomechanism and Biomarkers in Muscle Diseases and Myasthenia

P5.030 Clinicopathological Features of Anti-NT5c1A Positive Patients in the Group of Myositis Patients with CD8-MHC-1 Complex Pathology —*Chiseko Ikenaga, Meiko Maeda, Shoji Tsuji, Jun Shimizu*

P5.031 NKG2D - IL-15 Signaling Is Critically Involved in the Pathogenesis of Inflammatory Myopathies —*Tobias Ruck, Ali Afzali, Stefan Bittner, Heinz Wiendl, Sven Meuth*

P5.032 Effect of Deflazacort and Prednisone on Muscle Enzymes in the Treatment of Duchenne Muscular Dystrophy —*Jordan Dubow, Stephen Wanaski, Timothy Cunniff, James Meyer*

P5.033 Post Insulin Receptor Signalling Abnormalities Contribute to Insulin Resistance in Myotonic Dystrophies — *Giovanni Meola, Valentina Renna, Sara Iachettini, Barbara Fossati, Lorenzo Saraceno, Roberto Colombo, Rosanna Cardani*

P5.034 The Compromised Fidelity of B Cell Tolerance Checkpoints Contributes to Autoimmunity in Myasthenia Gravis — *Panos Alexis Stathopoulos, Jae-Yun Lee, Sasha Gupta, Jing-Li Shan, Elizabeth Cotzomi, Richard Barohn, Mazen Dimachkie, Luis Querol, Henner Morbach, Jason Bannock, Casey Lee, Patrick Waters, Richard Nowak, Kevin O'Connor*

P5.035 Predictive Value of Single-Fiber EMG in Orbicularis Oculi Muscle To Treatment in Patients with Seronegative Ocular Myasthenia: A Series of Hundred Forty Two Patients —*Goran Rakocevic, Mary Kay Floeter*

P5.036 Measuring Clinical Efficacy of Azathioprine in Myasthenia Gravis with Mean Corpuscular Volume —*Ning Yang, Qin Li Jiang*

P5.037 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*

P5.038 Should the Use of the Extended Myositis Antibody (EMA) Panel Be Part of the Routine Work-Up in Suspected Myositis? —*Antoinette O' Connor, Jennifer Mulhall, Sinead Harney, John Ryan, Grainne Murphy, Michael Henry, Peter Annis, Aisling Ryan*

Biomarkers and Clinical Features of Motor Neuron Disease and Biomarkers in Peripheral Nerve Disorders

P5.039 Biomarkers Reflect ALS Clinical Courses —*Siw Johannesen, Dobri Baldaranov, Andrei Khomenko, Thomas Grimm, Ines Kobor, Tina Kammermaier, Jochen Grassinger, Sabine Klatt, Jan Kassubek, Michael Deppe, Gerhard Schuirer, Albert Ludolph, Wilhelm Schulte-Mattler, Isabeau Prémont-Schwarz, Armin Schneider, Tim-Henrik Bruun, Ulrich Bogdahn*

P5.040 Potential Immune Biomarkers for Disease Progression in ALS —*Weihua Zhao, David Beers, Jason Thonhoff, Dan Neal, Shixiang Wen, Jinghong Wang, Stanley Appel*

P5.041 Changes in Motor Unit Number Estimate and Forced Vital Capacity As Predictors of ALS Progression —*Nicholas Olney, Michael Kohn, Catherine Lomen-Hoerth, Richard Olney*

P5.042 Skeletal Muscle MicroRNAs 206 and 424 Are Prognostic Markers in Amyotrophic Lateral Sclerosis (ALS) — *Milena de Albuquerque, Helen Andrade, Simoni Avansini, Benilton Carvalho, Iscia Lopes-Cendes, Anamarli Nucci, Marcondes Franca, Jr.*

P5.043 Retinal Degeneration Detectable by Optical Coherence Tomography As a Potential Biomarker for Amyotrophic Lateral Sclerosis —*Darin Rosen, Annabel Boeke, Jacqueline Bernard*

P5.044 Hemoglobin Levels Improve Following Switch from Intravenous to Subcutaneous Administration of Immunoglobulin in CIDP and MMN — *Ingelise Christiansen, Johannes Jakobsen, Lars Markvardsen*

P5.045 Biomarkers for Rapid Progression in Familial Amyloid Neuropathy —*Sung-Tsang Hsieh, Chi-Chao Chao*

P5.046 In-Vivo Reflectance Confocal Microscopy of Meissner's Corpuscles As an Objective Measure of Diabetic Polyneuropathy —*Peter Creigh, Janet Sowden, David Herrmann*

Genetics of Hereditary Motor Neuron Disease and Spastic Paraplegia

P5.047 Whole Exome Sequencing of Familial ALS and Trios of Sporadic ALS to Identify New Genes Associated with ALS —*Kushtrim Ahmeti, Kreshnik Ahmeti, Jianhua Yan, Faisal Fecto, Nailah Siddique, Margaret Pericak-Vance, Han-Xiang Deng, Teepu Siddique*

P5.048 Immunohistochemical Analysis of ErbB4 in the Transgenic Mouse Model of Amyotrophic Lateral Sclerosis —*Yuji Takahashi, Yurika Numata-Uematsu, Seiichi Nagano, Chihiro Matsumoto, Terunori Sano, Miho Murata, Yuko Saito*

P5.049 Genetic Background of the Hereditary Spastic Paraplegia Phenotypes in Hungary —*Maria Molnar, Peter Balicza, Zoltan Grosz, Michael Gonzalez, Renata Bencsik, Klara Pentelenyi, Aniko Gal, Edina Varga, Peter Klivenyi, Stephan Zuchner*

P5.050 Results from a Multi-Gene NGS Panel for Hereditary Spastic Paraplegia —*Jody Westbrook, Christopher Tan, Marina Rabideau, Shan Yang, Tom Winder*

P5.051 Clinical and Neuropathological Study of an Autopsied Case of Familial ALS with SOD1 Mutation with Very Long Survival —*Yo-ichi Takei, Kenya Ogichi, Taka-aki Miyahira, Akiyo Hineno, Akinori Nakamura, Shinji Ohara, Yoshiaki Furukawa*

P5.052 The Genetic Signature of Sex Chromosome-Related Mutations Expressing As a Neurodegenerative Disorders: Rarity, Randomness or Underestimation? —*Fernando Santos Pinheiro, Keith McAvoy, Kenneth Fischbeck, Elijah Stommel*

P5.053 Study of Intermediate-Length PolyQ Repeats in Sporadic and Familial Amyotrophic Lateral Sclerosis —*Felix Nunez-Santana, Jianhua Yan, Eanna Ryan, Jessica Lowry, Nailah Siddique, Teepu Siddique*

P5.054 Clinical and Genetic Heterogeneity in Familial ALS Patients from Turkey —*Hacer Durmus, Mine Sezgin, Bedia Marangozoglu Samanci, Aslihan Ozoguz, Feza Deymeer, Piraye Serdaroglu, Nazli Basak, Yesim Parman*

P5.055 Comparison of the Diagnostic Yield of Comprehensive and Phenotypically Driven Multi-Gene Panels for Neuromuscular Disorders —*Amanda Lindy, Margaret Bradbury, Sharon Suchy, Dianalee McKnight*

P5.056 Atypical Electropherogram Patterns Are Observed Among C9orf72 (G4C2) Expansion Carriers in a Familial and Sporadic ALS and ALS/FTD North American Cohort Study —*Jessica Lowry, Jianhua Yan, Farnoosh Feiz, Yi Yang, Lisa Kinsley, Nailah Siddique, Han-Xiang Deng, Teepu Siddique*

P5.057 Characterization of Gait and Fatigue in Children and Adults with Spinal Muscular Atrophy Using Instrumented Footwear —*Jacqueline Montes, Damiano Zanotto, Sally Dunaway, Rachel Salazar, Darryl De Vivo, Sunil Agrawal*

Hereditary Muscle Diseases: Genetics and Phenotype

P5.058 WITHDRAWN

P5.059 Potential Mechanisms for Prolonged Loss of Ambulation with Deflazacort in Duchenne Muscular Dystrophy - Tolerability Profile and Effects on Growth —*Timothy Cunniff, Stephen Wanaski, Jordan Dubow, James Meyer*

P5.060 Isolated Triceps Myositis As an Initial Presentation of Pompe Disease — *Tyler Koehn, Jeffrey McClean, Patrick Grogan*

P5.061 Beta Sarcoglycanopathy Caused by a New Mutation in a Palestinian Family —*Ricardo Madrid*

P5.062 The Core Protein to Myogenesis NFAT5 Forms Aggresomes in Normal and Duchenne Muscular Dystrophy Myotubes Exposed to Cell Stressors —*Sandrine Herbelet, Elly De Vlieghere, Gert Van Peer, Boel De Paepe, Eline Nys, Laurens Weynants, Jo Vandesompele, Olivier De Wever, Jens Schmidt, Jan De Bleecker*

P5.063 Recognizing Congenital Myopathy in an Adult - A Case Report — *Carla Grosmann, Kara Jones*

P5.064 Case of Recurrent, Severe Rhabdomyolysis with Chronic Pain and Dysphagia Cause by Novel Mutation in RYR1 Gene —*Jigar Mankad, Michael Collins, Serena Thompson, David Bick, Alison La Pean Kirschner*

P5.065 Cardiac Conduction Defects in Oculopharyngeal Muscular Dystrophy — *Naganand Sripathi, Kavita Grover*

P5.066 Clinical and Molecular Features of Myotonic Dystrophy Type 1 in Peru — *Karina Milla-Neyra, Miguel Inca-Martinez, Olimpio Ortega-Davila, Victoria Marca, Indira Tirado-Hurtado, Alex Cabrejo-Bravo, Saul Lindo-Samanamud, Maria-Luiza Saraiva-Pereira, Pilar Mazzetti Soler, Laura Jardim, Mario Cornejo Olivas*

P5.067 A Premature Stop Codon in MYO18B Is Associated with Severe Nemaline Myopathy with Cardiomyopathy —*Edoardo Malfatti, Johann Bohm, Emmanuelle Lacene, Norma Romero, Jocelyn Laporte*

Wednesday, April 20

Poster Session 8:30 a.m.–7:00 p.m.

P5.068 Inherited Myopathies with Early Respiratory Involvement —*Elie Naddaf, Margherita Milone*

P5.069 Late Diagnosis of SEPN-1 Related Myopathy : Case-Series Report of Initially Unexplained Respiratory Insufficiency —*Fahad Albassam, Abdulaziz Alsaman*

P5.070 Diagnostic Algorithm in Adult-Onset Mendelian PEO Associated with Mitochondrial Disease —*Grainne Gorman, Yi Shiau Ng, Ewen Sommerville, Andrew Schaefer, Robert Taylor, Robert McFarland, Doug Turnbull*

P5.071 A Novel Intronic Mutation in TK2 Affects MRNA Expression and Causes Adult-Onset Mitochondrial Depletion Syndrome —*Carlos Lopez-Gomez, Caterina Garone, Christoph Karch, Hannes Vogel, Jeffrey Ralph, Michio Hirano*

P5.072 A Novel RRM1 P.381R>H Mutation Causing MNGIE-like Disease —*Marti Juanola-Falgarona, Eyaid Wafaa, Ali Naini, Kurenai Tanji, Peter Nagy, Catarina Quinzii Hirano, Michio Hirano*

P5.073 Different Clinical Manifestations of MELAS in a Single Family —*Shiney Koshy, Joshua Kamins, Shrikant Mishra, Charles Flippen, Sandeep Singh*

P5.074 Hereditary Inclusion Body Myopathy Without Paget Disease and Frontotemporal Dementia Associated with Valosin-Containing Protein Mutation: A Case Report —*Katrina Pack, Alison Walsh, Goran Rakocevic*

Neuroepidemiology: Neuromuscular and Pediatric Epilepsy

P5.075 Hereditary Spastic Paraplegia Type 4 (SPG4): A Clinico-Genetic Study in a Large Cohort of Patients with Spastic Paraplegia —*Marzia Mearini, Lucia Pedace, Antonella Casella, Montecchiani Celeste, Fabrizio Gaudiello, Marialuisa Miele, Jose Luiz Pedroso, Carlo Caltagirone, Roberto Massa, Orlando Barsottini, Renato Munhoz, Toshitaka Kawarai, Antonio Orlacchio*

P5.076 Ethnicity and Age of Patients Hospitalized with Myasthenia Gravis: Unique Demographics in Hawaii —*Amy Li, Jaskirat Takhar, Rachel Lee, Nina Beckwith, Keli Tahara, Arash Ghaffari Rafi, Joel Sabugo, J. Douglas Miles*

P5.077 Causes and Predictors of Mortality in a Large U.S. Myotonic Dystrophy Type 1 Adult Cohort —*Julian Duda, Yedatore Venkatesh, William Groh*

P5.078 Prevalence of Polyneuropathy in the General Population: The Rotterdam Study —*Rens Hanewinckel, Judith Drenthen, Albert Hofman, Pieter Van Doorn, Mohammad Ikram*

P5.079 Annual Hospital Admissions for Myasthenia Gravis in Hawai'i Compared to Other States —*Keli Tahara, Nina Beckwith, Amy Li, Arash Ghaffari Rafi, Jaskirat Takhar, Joel Sabugo, Rachel Lee, J. Douglas Miles*

P5.080 The Relationship Between Bone Mineral Density and Cardiovascular Function in Duchenne Muscular Dystrophy: A Retrospective Cohort Study —*Tara Kervin, Mathula Thangarajh*

P5.081 Abdominal Obesity is Related to Polyneuropathy, Irrespective of Diabetes: A Population-Based Analysis —*Rens Hanewinckel, Judith Drenthen, Albert Hofman, Pieter Van Doorn, Mohammad Ikram*

P5.082 Corticosteroid Treatment and Growth Patterns in Ambulatory Males with Duchenne Muscular Dystrophy —*Molly Lamb, Nancy West, Lijing Ouyang, Michele Yang, David Weitzenkamp, Katherine James, Emma Ciafaloni, Shree Pandya, Deborah Fox, Carolyn DiGuiseppi*

P5.083 Hospital Care for Mental Health and Substance Abuse in Pediatric Epilepsy —*Adys Mendizabal, Dylan Thibault, Nicholas Abend, Kathryn Davis, James Crispo, Allison Wright Willis*

P5.084 Obesity Is an Independent Predictor of Pediatric Hospitalizations for Epilepsy: Data from the Nationwide Emergency Department Sample (NEDS) —*Delaram Safarpour, Dylan Thibault, Allison Wright Willis*

Neuroepidemiology: Neuro-oncology and ALS

P5.085 A Retrospective Study to Identify Novel Prognostic Factors for Glioblastoma Patients Survival: Survival Outcomes Prognostication in Glioblastoma Diagnosed Patients —*Jad Dandashi, Andrea Calvo, Damir Nizamutdinov, Eliana Vasquez, Eileen Stock, Samantha Dayawansa, Jun Zhang, Ekokobe Fonkem, Erxi Wu, Jason Huang*

P5.086 Projected Number of Amyotrophic Lateral Sclerosis Cases from 2005 to 2030 —*Karissa Arthur, Bryan Traynor, Adriano Chio*

P5.087 Amyotrophic Lateral Sclerosis Mortality in the United States, 2011-2013 —*Theodore Larson, Wendy Kaye, Paul Mehta, Kevin Horton*

P5.088 Earlier Disease Onset in Non-Caucasian Amyotrophic Lateral Sclerosis (ALS) Patients: Retrospective Analysis from Two Tertiary Centers —*Hristelina Ilieva, Iago Pinal Fernandez, Peter Natov, Elizabeth Mosmiller, Lora Clawson, Ericka Simpson, Stanley Appel, Nicholas Maragakis*

P5.089 Pseudobulbar Affect (PBA) As a Predictor of Survival in ALS —*Rosanna Tortelli, Simona Arcuti, Roberta Barone, Chiara Zecca, Rosa Capozzo, Maria Rosaria Barulli, Isabella Simone, Giancarlo Logroscino*

P5.090 Rural Environment, Pesticide Exposure and the Risk of Amyotrophic Lateral Sclerosis: A Meta-Analysis of Observational Studies —*Dongchao Shen, Liying Cui, Bo Cui, Jia Fang*

P5.091 The Evaluation and Management of Alternative Diagnoses in Amyotrophic Lateral Sclerosis —*Meena Kannan, Jonathan Glass*

P5.092 Time-Trend Evolution and Determinants of Sex Ratio in Amyotrophic Lateral Sclerosis —*Benoit Marin, Giancarlo Logroscino, Simona Arcuti, Massimiliano Copetti, Philippe Couratier, Farid Boumediene, Pierre-Marie Preux, Ettore Beghi*

P5.093 Novel Gender Selective Survival Effect of C9orf72 in European ALS Cohorts —*James Rooney, Russell McLaughlin, Alice Vajda, Isabella Fogh, Ashley Jones, Henk-Jan Westeneng, Mark Heverin, Ruben van Eijk, Wim Robberecht, Philip Van Damme, Leonard Van den Berg, Jan Veldink, Ammar Al-Chalabi, Adriano Chio, Orla Hardiman*

P5.094 National Amyotrophic Lateral Sclerosis (ALS) Biorepository Feasibility Study —*Wendy Kaye, Laurie Wagner, Thor Stein, Paul Mehta*

Animal Models and Experimental Studies in Neuromuscular Diseases

P5.095 Immortalized Human Neuronal Progenitor Cells (ReNcell CX) Represent an Ideal Model to Investigate the Inhibition of Adult Neurogenesis in the SVZ Mediated by TGF-β —*Sabrina Kuespert, Eva Zitzelsperger, Sebastian Peters, Siw Johannesen, Sabine Klatt, Tim-Henrik Bruun, Jochen Grassinger, Ludwig Aigner, Ulrich Bogdahn*

P5.096 Immunmodulatory Effects of Intrathecal Administration of Human Immunoglobulins in Experimental Autoimmune Neuritis Model in Lewis Rats —*Kalliopi Pitarokoili, Felix Kohle, Ralf Gold, Min-Suk Yoon*

P5.097 Effects of Deflazacort on Growth and Development in Juvenile Rats —*Stephen Wanaski, Elise Lewis, Jordan Dubow, James Meyer, Timothy Cunniff*

P5.098 Changes in Twitch Morphometry of Gastrocnemius Muscle in the SOD1 G93A Mouse Model —*Benjamin Sanchez, Jeffrey Widrick, Seward Rutkove*

P5.099 Hyperglycemia Enhanced Human Schwann Cells Sensitivity to Hypoxia —*Hongxin Chen, Zhao Zhong Chong, Nizar Souayah*

P5.100 Diagnostic Neurosonography in Mouse Models of Demyelinating Charcot-Marie-Tooth Diseae Type 1A —*Sang Beom Kim, Byung-Ok Choi, Young Bin Hong, Joon-Hyun Shin*

P5.101 Phosphodiesterase-3 Inhibitor Cilostazol Ameliorates Motor Impairment of Experimental Autoimmune Neuritis in Lewis Rats Via Deviation of Cytokine MRNA Expression —*Wataru Hagiwara, Toshiki Fujioka, Masashi Inoue, Shingo Konno*

P5.102 The ALS Stratification Prize-Using the Power of Big Data and Crowdsourcing for Catalyzing Breakthroughs in Amyotrophic Lateral Sclerosis (ALS) —*Neta Zach, Robert Kueffner, Nazem Atassi, Adriano Chio, Merit Cudkowicz, Orla Hardiman, Gustavo Stolovitzky*

Autonomic Disorders: Autonomic Neuropathies

P5.103 Sympathetic Adrenergic and Cholinergic Innervation of Sweat Glands Across a Spectrum of Disease —*Ningshan Wang, Roy Freeman, Christopher Gibbons*

P5.104 Heterogeneity and Continuum of Clinical Features in Autoimmune Autonomic Ganglionopathy: A Nationwide Survey in Japan —*Shunya Nakane, Akihiro Mukaino, Osamu Higuchi, Yukio Ando*

P5.105 Autonomic Dysfunction in Familial Amyloid Polyneuropathy Associated with Transthyretin Alanine 60 Variant —*Jacquie Baker, Kurt Kimpinski*

P5.106 Familial Amyloidotic Polyneuropathy in Crete, Greece —*Minas Tzagournissakis, Cleanthe Spanaki, Georgios Amoiridis, Andreas Plaitakis, Panayiotis Mitsias*

P5.107 QSART Abnormalities in Cold-Induced Sweating Syndrome Type 1 —*Jannatul Ferdous, Sahawat Tantikittichaikul, Sara Ali, Khondoker Alam, Ahmed Eldokla*

P5.108 Autoimmunity & Autonomic Impairment: Preliminary Characterization of a Clinical Syndrome with Sjögren's Features Associated with Novel Organ Specific Antibodies —*Mark Gudesblatt, Karl Wissemann, Lauren Stiles, Steven Xian, Myassar Zarif, Lori Fafard, Barbara Bumstead, Hos Loftus, Cindy Jadoo, Marijean Buhse, Jennifer Jamison-Forgnone, Lakshmanan Suresh*

P5.109 The Diagnostic Dilemma of Fabry Disease: Unusual Presentation in Young Female Delays Diagnosis —*Thomas Chelimsky, Salman Farooq, Syed Jafri, Bradley Hiner*

P5.110 Empiric Treatment of Suspected Autoimmune Autonomic Neuropathies —*Glen Cook, Mark Landau*

P5.111 B12 Deficiency Is a Cause of Reversible Autonomic Failure: A Case Report —*Pariwat Thaisetthawatkul*

P5.112 Obstructive Sleep Apneas Are More Common Than Central Sleep Apneas in Patients with Mild Familial Dysautonomia —*Max Hilz, Sebastian Moeller, Susanne Buechner, Hanna Czarkowska, Indu Ayappa, Felicia Axelrod, David Rapoport*

Autonomic Disorders: Miscellaneous

P5.113 Cognitive and Behavioral Side Effects in Patients Treated with Droxidopa for Neurogenic Orthostatic Hypotension —*Katherine McDonell, Cyndya Shibao, Italo Biaggioni, David Robertson, Daniel Claassen*

P5.114 Orthostatic Cerebral Blood Flow Velocity Drop Depends on the Duration of Orthostatic Hypotension in Patients with Sympathetic Failure —*Peter Novak, Lucia Rivera Lara, Daniela Pimentel, Lan Qin, Majaz Moonis, Freddy Alfaro-Martinez, Vera Novak*

P5.115 Electrochemical Skin Conductance in Autonomic Synucleinopathies —*Horacio Kaufmann, Jose Martinez, Jose-Alberto Palma, Leila Percival*

P5.116 Joint Hypermobility Syndrome in a Postural Orthostatic Tachycardia Syndrome (POTS) Cohort —*Brent Goodman, Charlene Hoffman-Snyder, Priya Dhawan*

P5.117 Autonomic Dysfunction in Autism Spectrum Disorders (ASD) —*Brent Goodman*

P5.118 Autonomic Symptoms Endorsed by Adults with Autism Spectrum Disorders —*Bryan Woodruff, M'hamed Temkit, James Adams, Brent Goodman*

P5.119 Fingolimod Seems to Dampen Cardiac Autonomic Modulation at the Cardiac but Not the Central Level —*Max Hilz, Ruihao Wang, Francesca Canavese, Mao Liu, Carmen de Rojas Leal, De-Hyung Lee, Ralf Linker*

P5.120 Shapiro Syndrome with Agenesis of Corpus Callosum and Hyperhidrosis: A Case Report — *Christopher Nance, Arshi Naz*

P5.121 The Utility of Valsalva Maneuver in the Diagnosis of Orthostatic Disorders —*Iryna Palamarchuk, Jacquie Baker, Kurt Kimpinski*

P5.122 Military Personnel with Traumatic Stress Demonstrate Improved Autonomic Cardiovascular Regulation After Use of a Closed Loop Neurotechnology —*Catherine Tegeler, Hossam Shaltout, Sung Lee, Charles Tegeler*

Autonomic Disorders: Orthostatic Hypotension

P5.123 Orthostatic Hypotension and Near-Total Cervical Artery Atherosclerotic Occlusion - A Case Report —*Claudia Chou, Eugene Scharf, Wolfgang Singer*

P5.124 Delayed Orthostatic Hypotension Variants —*Pearl Jones, Joseph Marotta, Christopher Gibbons, Roy Freeman*

P5.125 Number-Needed-to-Treat Analysis of Droxidopa in Patients with Symptomatic Neurogenic Orthostatic Hypotension —*Pamela Vo, Clément François, Gerald Rowse, L. Arthur Hewitt, Robert Hauser*

P5.126 Integrated Cardiovascular Safety Profile of Droxidopa —*Gerald Rowse, Robert Hauser, William White, L. Arthur Hewitt*

P5.127 Analysis of the Incidence of Supine Hypertension with Droxidopa — *Lawrence Hewitt, Stuart Isaacson, William White, Gerald Rowse*

P5.128 Durability of Effect With Long-Term Droxidopa Treatment in Patients with Symptomatic Neurogenic Orthostatic Hypotension —*Stuart Isaacson, Jerome Lisk, Grace Liang, Gerald Rowse*

P5.129 Effect of Age on the Efficacy and Safety of Droxidopa for Symptomatic Neurogenic Orthostatic Hypotension — *Guangbin Peng, Gerald Rowse, Rachel Couchenour, Manju Beier*

P5.130 Responder Analyses of Droxidopa in Patients with Symptomatic Neurogenic Orthostatic Hypotension — *Gerald Rowse, Lawrence Hewitt, Alan Shields, Roy Freeman, Horacio Kaufmann*

P5.131 Rationale and Design of the Neurogenic Orthostatic Hypotension to Assess Sustained Effects of Droxidopa Therapy (RESTORE) Study —*Randall Owen, Guangbin Peng, Stephen Gorny, Charles Cram, Gerald Rowse*

P5.132 Development of a Neurogenic Orthostatic Hypotension Activities of Daily Living (nOH -ADL) Scale —*Clement Francois, Christy Houle, Amy Duhig*

Child Neurology and Developmental Neurology: Encephalitis, Genetics, and Hypoxia

P5.133 Analytical Performance of a Genome-Phenome Analyzer for Use in a Clinical Laboratory —*Joseph Higgins, Zhenyuan Wang, Malgorzata Jaremko, Sat Dev Batish, Michelle York*

P5.134 Diagnostic Whole Exome Sequencing to Study a Cohort of Greek Patients with Heterogeneous Neurological and Other Disorders —*Ioannis Zaganas, Emmanouella Vogiatzi, Athanassios Evangeliou, Garyfallia Gouna, Vasileios Mastorodemos, Dimitra Kotzamani, Lambros Mathioudakis, Mara Bourbouli, Martha Spilioti, Pelagia Vorgia, Olga Grafakou, Georgios Niotakis, Evagellos Pavlou, Michalis Mavridis, Minas Tzagournissakis, Katerina Monti, Dimitrios Zafeiriou, Georgios Amoiridis, Dimitris Kafetzopoulos, Andreas Plaitakis, Helen Latsoudis*

P5.135 Extended Clinical Spectrum of Anti-NMDA Receptor Encephalitis in Children —*Ajay Goenka, Hiroki Nariai, Mitchell Steinschneider, Alfred Spiro, Vimal Jain*

P5.136 Anti-N-methyl-D-Aspartate Receptor Encephalitis in 7-Month Old Infant Following Influenza Vaccination — *Teodora Cartisano, Jennifer Kicker*

P5.137 A Pediatric Patient with ANNA-1 Associated Opsoclonus Myoclonus and Epilepsia Partialis Continua —*Michael Sweeney, M. Paz Soldan, Amy Lowichik, Matthew Sweney, Stacey Clardy*

P5.138 Neuromyelitis Optica Spectrum Disorders (NMOSD) and AQP4-IgG in an Australian Pediatric Demyelination Cohort —*Ariel Dahan, Russell Dale, Fabienne Brilot, Andrew Kornberg, Eppie Yiu*

P5.139 Acute Disseminated Encephalomyelitis. A Fourteen Years Review —*Ainara Sanz Monllor, Miguel Alcaraz Saura, Carmen Martínez Fernández, Rosario Domingo Jiménez, Helena Alarcón Martínez, Alberto Cárceles Álvarez, Eduardo Martinez Salcedo, Alberto Puche Mira, Rocío Hernández Clares*

P5.140 AQP4 Antibody-Seropositive Neuromyelitis Optica in a Pediatric Patient Presenting with Severe Generalized Pruritus and Behavior Changes —*Elizabeth Ng, Shefali Karkare*

P5.141 Motor Deficits Mask Functional Integrity in Pediatric Anoxic Brain Injury with Nonfatal Drowning —*Mariam Ishaque, Janessa Manning, Crystal Franklin, Mary Woolsey, Peter Fox*

P5.142 Omega-3 Polyunsaturated Fatty Acids Attenuate Blood-Brain-Barrier Damage Induced by Neonatal Hypoxic-Ischemic Brain Injury —*Hui Zhang, Wenting Zhang, Jun Chen, Yanqin Gao, Qiang Dong*

Child Neurology and Developmental Neurology: Genetics

P5.143 Novel Homozygous Nonsense Mutation in the ROBO3 Gene Causing Torticollis and Horizontal Gaze Palsy with Progressive Scoliosis: A Tale of Two Brothers —*William Baek, Joanna Jen, Hafsa Mamsa*

P5.144 Dystonia in POLR3-related Leukodystrophy —*Ghalia Alyazidi, Luan Tran, Kether Guerrero, Adeline Vanderver, Raphael Schiffmann, Nicole Wolf, Genevieve Bernard*

P5.145 A 15 Year-old Girl with Progressive Epileptic Encephalopathy, Myoclonus, and Compound Heterozygous *FARS2* Mutations —*Melissa Walker, Kyle Mohler, Kyle Hopkins, David Sweetser, Michael Ibba, Matthew Frosch, Ronald Thibert*

P5.146 Exome Sequencing Identifies Dual Mutations in Calcium Signaling Genes GNAO1 and ATP2B3 in a Patient with Early Infantile Epileptic Encephalopathy (EIEE) —*Keisuke Ueda, Fatema Serajee, Ahm Huq*

P5.147 A Case Series Expanding the Phenotypic Variations in Spinal Muscular Atrophy Type I —*Michael Lopez, Meeta Wagle, Farida Abid*

P5.148 The Relationship Between BDNF and the Wnt Signaling Pathway in the Growth of Human Neural Stem Cell — *Liyan Li, Wei Ma, Jinwei Yang, Jin Ru, Zengfu Ren, Wei Gao, Xing tong Li, Tongtong Wang, Tao Luo, Dongyan Wang, Jingru Cheng, Jianhui Guo*

P5.149 Intrathecal Interferon Signaling Genes Expression in Leukodystrophies with Calcifying Microangiopathy on Neuropathology —*Guy Helman, Stephen Brooks, Heather Gordish-Dressman, Asako Takanohashi, Brennan Harmon, Yanick Crow, Gillian Rice, Pierre Lebon, Marjo Van Der Knaap, Brian Herron, Philip Brooks, Raphaela Goldbach-Mansky, Adeline Vanderver*

P5.150 Dopa-responsive Akinesia: Homozygous GCH1 Mutation —*Christina Lineback, Kristin Manteuffel Jensen, Sandra Wilcock, John Fink*

P5.151 Epilepsy and Cognition in Infants with Tuberous Sclerosis Complex:Can Early Identification of Epilepsy Severity Yield Better Cognitive Outcomes? —*Rujuta Bhatt, Gerhard Hellemann, Kandice Varcin, Charles Nelson, Shafali Jeste, Mustafa Sahin, Joyce Wu*

P5.152 Brain Lesions in Asymptomatic Patients with X-Linked Adrenoleukodystrophy —*Afonso Liberato, Patricia Musolino, Razina Aziz-Bose, Arne Lauer, Paul Caruso, Florian Eichler*

Epilepsy/Clinical Neurophysiology: Genetics

P5.153 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*

P5.154 Analysis of 141 Epilepsy Related Genes Using Next Generation Sequencing in 390 Patients —*Zhenyuan Wang, Malgorzata Jaremko, Sat Dev Batish, Marc Meservey, Michelle McCarthy, Adam Medeiros, John Walsh, Susan Allen, Norman Rochibaud, Christina DiVincenzo, Thomas Casiello, Martin Bazinet, Diem Doan, Michele McCarthy, Izabela Karbassi, Valerie Storozuk, Mariola Kacprzyk, Khalida Liaquat, Carol Hoffman, Meagan Krasner, Whitney Dodge, Matthew Evans, Christopher Elzinga, Michelle York, Corey Braastad, Joseph Higgins*

P5.155 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*

P5.156 Electroclinical Phenotypes and Outcomes in TBC1D24-Related Epilepsy —*Brian Appavu, Natalie Guido-Estrada, Kristin Lindstrom, Matthew Troester*

P5.157 Genetic Association with Ictal Cardiorespiratory Phenomena: SCN8A Case Series —*Ammar Hussain, Syndi Seinfeld, Lawrence Morton*

P5.158 Progressive Myoclonus Epilepsy Caused by SACS Mutations — *Fabio Nascimento e Silva, Mikko Muona, Danah Aljaafari, Mark Tarnopolsky, Anna-Elina Lehesjoki, Hanna Faghfoury, Mary Pat McAndrews, Berge Minassian, Samuel Berkovic, Danielle Andrade*

P5.159 Natural History of Succinic Semialdehyde Dehydrogenase Deficiency Through Adulthood —*Samuel Lapalme-Remis, Phillip Pearl, Evan Lewis, Christine De Meulemeester, Pranesh Chakraborty, K.M. Gibson, Carlos Torres, Alan Guberman, Gajja Salomons, Andre Ali-Ridha, Mahsa Parviz*

P5.160 Outcomes of Genetic Generalized Epilepsy at a Comprehensive Epilepsy Center —*Sarita Maturu, Tammam Dayyoub, Lonni Schultz, James Snyder, Vibhangini Wasade, Mona Elsayed, Shailaja Gaddam, Naznin Mahmood, Jules Constantinou, Gregory Barkley, Marianna Spanaki-Varelas, Andrew Zillgitt*

Wednesday, April 20

Poster Session 8:30 a.m.–7:00 p.m.

P5.161 Epilepsy Treatment Patterns Among Patients with Tuberous Sclerosis Complex —*Steven Sparagana, Elyse Swallow, Jinlin Song, Sarah King, Miranda Peeples, James Signorovitch, Zhimei Liu, Judith Prestifilippo, Michael Kohrman, Bruce Korf, Darcy Krueger, Michael Wong*

P5.162 A Rare Case of Progressively Expanding Total Hemimegalencephaly —*Jayson Rodriguez, Arun Asha Kalra, Eduardo Gonzalez-Toledo*

Aging and Dementia: Neurogenetics

P5.163 The Frequency of Damaging Genetic Variants in a Cohort of Over 1500 Patients with Early Onset Familial Alzheimer's Disease —*Alison Bright, Izabela Karbassi, Marc Meservey, Jennifer Yokoyama, Natasha Rabinowitz, Angela Bean, Khalida Liaquat, Matthew Gallen, Carol Hoffman, Meagan Krasner, Whitney Dodge, Joseph Higgins*

P5.164 A Rare Coding Variant in *TREM2* increases Risk for Alzheimer's Disease in Han Chinese —*Teng Jiang, Jin-Tai Yu, Ying-Dong Zhang, Lan Tan*

P5.165 The Questionable Role of GWA in Identification of Genetic Risk Factors for Alzheimer's Disease —*Rosanna Tortelli, Francesco Panza, Maria Rosaria Barulli, Antonio Daniele, Antonio Greco, Patrizia Mecocci, Carlo Masullo, Giancarlo Logroscino, Davide Seripa*

P5.166 Role of INPP5D, PTK2B, ZCWPW1 and TREM 2 in Predicting Risk of Progression in Cognitively Impaired Subjects to Alzheimer's Disease —*Connor Hawkins, Alice Fok, Howard Feldman, Dessa Sadovnick, Ging-Yuek Hsiung*

P5.167 Poor Cognitive Outcomes Are Associated with UNC5C Intronic Polymorphisms Independent of Pathologies —*Hyun-Sik Yang, Charles White, Lori Chibnik, Julie Schneider, David Bennett, Philip De Jager*

P5.168 Epigenetic Evidence That C9orf72 Promoter Hypermethylation Is Protective: A Blinded Replication —*Corey McMillan, Emma Devenney, Elaine Liu, Olivier Piguet, Lauren Bartley, John Hodges, Glenda Halliday, Edward Lee*

P5.169 Association of Genetic Variation and Neuropsychiatric Symptoms in 4-Repeat Tauopathies —*Kylie Ternes, Katya Rascovsky, Elisabeth Wood, Murray Grossman, Vivianna Van Deerlin, Corey McMillan*

P5.170 Literature Review of Genetic Disorders with Tau Pathology —*Pawel Tacik, Zbigniew Wszolek, Monica Sanchez-Contreras, Rosa Rademakers, Dennis Dickson*

P5.171 A Novel POLR1C Mutation Causing Autosomal Recessive Adult-Onset Leukodystrophy —*Michael Geschwind, Mee-Ohk Kim, Colleen Wahl, William Gahl, Camilo Toro*

Aging and Dementia: Biomarkers

P5.172 CSF and Plasma Aβ40 and Aβ42 Levels in Down Syndrome (DS) Persons with Alzheimer Disease (AD) [DS/AD+] and Those Without [DS/AD-] —*Pankaj Mehta, Juan Fortea, Maria Carmona Iragui, Mony De Leon, Warren Zigman*

P5.173 Plasma Aβ Levels Are Correlated with Cognitive and Motor Functions in Iwaki Health Promotion Project —*Takumi Nakamura, Mikio Shoji*

P5.174 The Role of Age on Beta-Amyloid1-42 Plasma Levels in Healthy Subjects —*Chiara Zecca, Simona Arcuti, Francesco Panza, Rosanna Tortelli, Vincenzo Brescia, Giancarlo Logroscino*

P5.175 Role of Hemostatic and Inflammatory Biomarkers in Alzheimer's and Vascular Dementia —*Venugopalan Vishnu, Manish Modi, Vivek Garg, Manju Mohanty, Manoj Goyal, Vivek Lal, Bhagwant Mittal, Sudesh Prabhakar*

P5.176 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*

P5.177 Optical Coherence Tomography As Potential Biomarker in Parkinson's Disease and Alzheimer's Disease —*Annabel Boeke, Darin Rosen, James Mastrianni, Tao Xie, Jacqueline Bernard*

P5.178 Myelin Basic Protein Is Associated with White Matter Integrity in 4-Repeat Tauopathies —*Kim Firn, David Irwin, Murray Grossman, Corey McMillan*

P5.179 Antibody-Free Detection and Quantitation of TDP-43 by Mass Spectrometry —*Yu Zi (Emma) Zheng, Mari DeMarco*

P5.180 Higher Levels of Hs-CRP Related to Corpus Callosum Volume in the Elderly —*Matthew Wynn, Shubir Dutt, Rowan Saloner, Joel Kramer*

Aging and Dementia: Atypical Dementia

P5.181 Biomarker Confirmed Alzheimer's Disease Presenting As Amnestic, 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*

P5.182 Development of a Diagnostic Decision Tree for Rapidly Progressive Dementia —*Jeffrey Gelfand, Carolyn Fredericks, Natasha Rabinowitz, Katherine Rankin, Christopher Hess, Matteo Paoletti, Joseph Higgins, Gary Williams, Bruce Miller, Howard Rosen, Michael Geschwind*

P5.183 Rapidly Progressive Alzheimer's Disease in Two Distinct Autopsy Cohorts —*Jagan Pillai, Brian Appleby, Jiri Safar, James Leverenz*

P5.184 Differentiating Individuals with Cognitive Complaints Due to Corticobasal Degeneration and Alzheimer Disease by Clinical Features —*Gregory Day, Tae Sung Lim, Jason Hassenstab, Alison Goate, Elizabeth Grant, Catherine Roe, Nigel Cairns, John Morris*

P5.185 A Case of Familial Prion Disease Caused by a Six-Octapeptide Repeat Insertion Mutation —*Christopher Doughty, Jennifer Lyons*

P5.186 Clinical Utility of Amyloid Imaging in Differential Diagnosis of Atypical/Unclear Dementias and Its Impact on Caregivers —*Robert Laforce, Mohamed Reda Bensaïdane, Remi Bouchard, Marie-Pierre Fortin, Michele Houde, Pedro Rosa Neto, Stephane Poulin, Louis Verret, Jean-Paul Soucy, Jean-Mathieu Beauregard*

P5.187 Definite Fatal Familial Insomnia (FFI) Disease with Voltage-Gated Potassium Channel (VGKC)-Complex Autoimmunity: A Rare Case of Molecular Mimicry or Incidental Finding? —*Sirisha Sanamandra, Teddy Youn, Carolina Maciel, Matthew Schrag, Duarte Machado, Emily Gilmore*

P5.188 Amyloid Beta-Related Angiitis (ABRA) with Rapidly Progressive Dementia and Myoclonia, Thus Mimicking CJD —*Wolfgang Heide, Viviane Heide, Michael Trauscheid, Oliver Pape, Walter Schulz-Schaeffer*

P5.189 Functional and Structural Brain Alterations in Patients with Posterior Cortical Atrophy —*Francesca Imperiale, Federica Agosta, Elisa Canu, Gorana Mandic-Stojmenovic, Tanya Stojkovic, Elka Stefanova, Vladimir Kostic, Massimo Filippi*

P5.190 Hickam's Dictum: Creutzfeldt Jakob Disease in a Patient with Concurrent Stage IV Esophageal Carcinoma —*Michael Lane, Sanjay Anandaram, Andrew Cichowski, Barbara Nye*

Aging and Dementia: Neuropsychology/Neuropsychiatry

P5.191 Dissociations in Socioemotional Test Performance Predict Neurodegeneration in Intrinsic Connectivity Networks —*Natanya Russek, Babu Adhimoolam, Suzanne Shdo, Peter Fonseca, Heaven Mesfun, Laura Bouvet, Clinton Mielke, Tal Shany-Ur, Bruce Miller, Katherine Rankin*

P5.192 Cognitive Symptoms Questionnaire. A Novel Reliable and Quick Survey in Spanish for the Assessment of Cognitive Impairment —*Marcos Fernandez Suarez, Griselda Russo, Yanina Sasson, Lucila Heredia, Ramon Leiguarda, Ricardo Allegri*

P5.193 Dissociable Substrates Underlie the Production of Abstract and Concrete Nouns —*Katheryn Cousins, Sharon Ash, Murray Grossman*

P5.194 Evidence of Social Norm Deficits in Progressive Supranuclear Palsy —*Amy Halpin, Katya Rascovsky, Lauren Massimo, David Irwin, Corey McMillan, Murray Grossman*

P5.195 Neuropsychiatric Symptoms in Early Autosomal Dominant and Late Onset Alzheimer's Disease —*Nicholas Olney, Edmond Teng, Yan Zhou, Liana Apostolova, Sarah Kremen, Ellen Woo, John Ringman*

P5.196 Indifference to Sweaty Feet: Reward Deficits in Behavioral Variant Frontotemporal Dementia Include Insensitivity to Negative Stimuli —*Samir Datta, Virginia Sturm, Kristie Wood, Jessica Zakrzewski, Bruce Miller, Joel Kramer, Howard Rosen, David Perry*

P5.197 The TabCAT Brain Health Assessment: A Highly Efficient and Sensitive Approach to Detecting Very Mild Cognitive Impairment —*Tacie Moskowitz, Natasha Rabinowitz, Erica Johnson, Edward Huey, Daniel Kaufer, Gary Small, Robert Stern, Bruce Miller, Katherine Rankin, Katherine Possin*

P5.198 It's Not Just How Much: The Effects of Night-to-Night Variability in Sleep Patterns on Working Memory —*Christine Walsh, Nihar Patel, Kathleen Walker, Leslie Ruoff, Jonathan Varbel, Matthew Wynn, Bruce Miller, Thomas Neylan, Joel Kramer*

P5.199 Now You See It; Now You Don't: One of the Best Established Age-related Changes in Neural Activity Vanishes After Controlling for Visual Acuity —*Fabio Porto, Erich Tusch, Anne Fox, Brittany Alperin, Phillip Holcomb, Kirk Daffner*

P5.200 Neuropsychological Profile in Carriers of E46K Mutation of the Alpha-Synuclein Gene —*Olaia Lucas-Jiménez, Rocío Del Pino, Marian Acera, Iñigo Gabilondo, Juan Carlos Gómez-Esteban, Beatriz Tijero, María Díez-Cirarda, Javier Peña, Naroa Ibarretxe-Bilbao, Natalia Ojeda*

Aging and Dementia: Disease Models and Mechanisms

P5.201 Zinc, Copper and Manganese Porphyrins Restore Mitochondrial Function and Improve Cognition Without Reducing Aβ Levels in Alzheimer's Mice and Cells —*Natasa Dragicevic, Kimberly Fields, Chuanhai Cao, Patrick Bradshaw*

P5.202 When Pigs Fly: Dynamic Susceptibility Contrast MRI for Cerebral White Matter Injury in a Hypobaric Swine Model —*Philippine Dana Peralta, John Sladky, Stephen McGuire*

P5.203 Role of an Endogenous Retrovirus in ALS Pathophysiology and Effect of Anti-Retrovirals In Vitro —*Avindra Nath, Myoung-Hwa Lee, Lisa Henderson, Muznabanu Bachani, Joseph Steiner, Gloria von Geldern, Katherine Pak, Andrew Mammen, Lyle Ostrow, Jeffrey Rothstein, Wenxue Li*

P5.204 Combination Therapy with Doxycycline, Chlorpromazine or Quinacrine Inhibits Prion Protein Replication in a N2A Model —*Adam Witt, Jody Campeau, Valerie Sim*

P5.205 Neuroprotective Effects of Ezetimibe Versus Simvastatin in Alzheimer's Induced Dementia: Perspectives from Female Rats. —*Mahmoud KhalafAllah, Mohamed Zalabia,*

Esraa Elsayed, Mohamed Elgamal, Mohamed Salama, Mohamed Ahdy, Mahmond Sobh, Wael Mohamed

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P5.207 Cognition, Plaques and PACAP in Aged APP Transgenic Mice-A Quantitative Evaluation —*Peng Cheng Han, Megan Nielsen, Melissa Song, Jiong Shi*

P5.208 Neuroprotective Properties of Apo6856, a Novel Hydroxypyridinone Iron Chelator, in Alzheimer's Disease —*Marina Premyslova, Jiejing Xu, Ling Wang, Huaqi Xiong, Thanyashanti Nitia-Nootan, Elizabeth Deosaran, Cai Peng, Deborah Callaghan, Wandong Zang, Vrajlal Rabadia, Chris Feeney, Jolanta Wodzinska, Michael Spino, John Connelly*

P5.209 Hypoxia Inducible Factor 1α Mediates Neuroprotective Role in Rat Model of Chronic Cerebral Hypoperfusion —*Ying Yang, Junjian Zhang*

P5.210 Intracranial and Extracranial Stenosis Interact with White Matter Disease in the Pathogenesis of Post Stroke Dementia —*Chu Ben Wee, Angeline Choong, Russell Chander, Nagaendran Kandiah*

Cerebrovascular Disease: Genetics and Risk Factor Variation

P5.211 WITHDRAWN

P5.212 Durability of Antiplatelet Effect of a Novel Extended-Release Formulation of Acetylsalicylic Acid, Durlaza, in Patients with Diabetes —*Jeff Patrick, Kevin Bliden, Udaya Tantry, Andrew Pennell, Paul Gurbel*

P5.213 Pharmacogenetics of CYP2C19 Genetic Polymorphism on Clopidogrel Response in Patients with Ischemic Stroke from Saudi Arabia —*Adel Ali Alhazzani, Murali Munisamy, Gauthaman Karunakaran*

P5.214 Angiotensin II Increases Glymphatic Flow Through a Norepinephrine-Dependent Mechanism —*Adam Russak, Benjamin Plog, Edward Vates, Maiken Nedergaard*

P5.215 Factors Affecting Blood Pressure Control Post-Stroke —*Julie McDaniel, James Conners, Vivien Lee, Sarah Song, Shawna Cutting, Laurel Cherian*

P5.216 Inconsistent Systolic Blood Pressure Management and Poor Documentation During Transfer to a Comprehensive Stroke Center Is Associated with Worsening Patient Outcomes —*Thomas Kodankandath, Jane Shaji, Sammy Pishanidar, Nina Kohn, Nadia Sotudeh, Paul Wright*

P5.217 Low HDL Cholesterol Levels (HDL-C) Associated with a Higher Risk of Infections in Patients Hospitalized for Acute Ischemic Stroke (iStroke) —*Santiago Pagano Ajolfi, Alejandra Alfonso, Juan Maiques, María Huerta, Pablo Sanz, Rolando Giannaula*

P5.218 Burden and Outcomes of Acute Ischemic Stroke in Patients with Cirrhosis —*Abhishek Lunagariya, Achint Patel, Harshil Shah, Sanjeeva Onteddu, Sonal Mehta*

P5.219 Risk Association Between TNF-308G>A and IL-6 -174 G/C Polymorphisms and Recurrent Transient Ischemic Attacks —*Hassan Salama, Enas Hamad*

P5.220 WITHDRAWN

Cerebrovascular Disease: Animal Models and In Vitro Models

P5.221 A Modified Method for Creating Elastase Induced Aneurysms and Characterization of Intra-Aneurysmal Flow —*Cyrus Safinia, Salam Bachour, Mario Hevesi, Afshin Divani*

P5.222 Proinflammatory Lipids Are Elevated, Serum Amyloid A Is Increased and Paraoxonase Activity Is Decreased Following Administration of Oxidized Phospholipids in a Mouse Model of Inflammation —*Samra Vazirian, Christopher DeGiorgio, Shrikant Mishra, Michelle Hough, Sepideh Madahian*

P5.223 Oxidized Phospholipids in the Brain of LDL Receptor Deficient Mice on a High Fat High Cholesterol Diet Are Significantly Reduced by the Anti Inflammatory Peptide F —*Samra Vazirian, Christopher Degiorgio, Shrikant Mishra, Farin Yazdani, Sara Mottahedan, Babak Jamazian*

P5.224 Effect of Rehabilitation on Oligodendrocyte Progenitor Cells in a Mouse Model of White Matter Stroke —*Candace Borders, Kwan Ng, S. Carmichael*

P5.225 Comparisons Between Different Rodent Stroke Scales: Optimizing Resource Allocation in Rat Models of Focal Middle Cerebral Artery Occlusion —*Salam Bachour, Mario Hevesi, Brian Sweis, Cyrus Safinia, Afshin Divani*

P5.226 Neurovascular Uncoupling in Acute Ischemic Stroke Correlates with Clinical Fluctuations in Acute Ischemic Stroke —*Jonathan Ong, Bharatendu Chandra, Amit Kalkarni, Philip Seow, Prakash Palliwal, Eric Ting, Leonard Yeo, Hock Luen Teoh, Bernard Chan, Vijay Sharma*

P5.227 Hepatic S1P Deficiency Reduces Atheroma Formation in LDLR-/- Mice —*Weijun Jin, Debapriya Basu*

P5.228 P38 Mitogen Activated Protein Kinase Alpha (MAPKα) Inhibition to Promote Neurologic Recovery in Rat Stroke Transient Middle Cerebral Artery Occlusion (t-MCAO) Model —*John Alam, Michael Krakovsky, Itschak Lamensdorf, Aharon Levy*

P5.229 Continuous Intra-Arterial Catheter Access of Ischemic Cerebral Tissue —*Pradeep Selvan, Frank Barone*

P5.230 FTY720 Preserves Blood-Brain Barrier Integrity Following Subarachnoid Hemorrhage in Rats —*Abdullah Muhammad, Jennifer Harris, Benjarat Changyaleket, Dale Pelligrino, Hao-liang Xu, Fernando Testai*

P5.231 Oligodendrocyte As a New Target of Cilostazol in Protection of the White Matter from Demyelination Caused by Chronic Cerebral Ischemia —*Ryo Ohtomo, Taro Bannai, Akihiro Shindo, Hidekazu Tomimoto, Shoji Tsuji, Atsushi Iwata*

P5.232 Expanding the Spectrum of Subacute Diencephalic Angioencephalopathy —*Elliot Dawson, Christopher Graffeo, Meghan Murphy, David Black, Joseph Parisi, Frederick Meyer, Brian Crum*

Cerebrovascular Disease: Biomarkers

P5.233 Fasting Serum Apolipoprotein B48 Is a Risk Factor for Large Artery Atherosclerotic Stroke —*Chen Yong, Liu Ping, Wang Chun*

P5.234 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*

P5.235 Neutrophils/Lymphocytes Ratio and Platelets/Lymphocytes Ratio and Its Relationship with Severity and Functional Prognosis in Patients with Acute Ischemic Stroke —*Andres Perez, Sebastian Casas, Martin Tourreilles, Claudia Gonzalez, Jorge Gimenez, Lorena Cabrera, Marcelo Mattiazzi*

P5.236 Association Between Serum Alkaline Phosphatase Level and Cerebral Small Vessel Disease —*Oh Seung-Hun, Byeong Su Yim, Ok-Joon Kim, Sang-Heum Kim*

P5.237 Modified SPAN-100 Index in Patients with Intracerebral Hemorrhage: Correlation and Outcomes —*Cyrus Escabillas, Kathreen Jane Lara, Jose Navarro*

P5.238 Serum-Albumin Level and Albumin/Globulin Ratio As Predictors of Short- Term Outcome of First Ever Ischemic Stroke —*Gharib Ibrahim, Al-Amir Bassiouny, Hassan El nady*

P5.239 Relationship Between Admission Serum Bilirubin and Severity of Acute Ischemic Stroke in a Nigerian Tertiary Hospital —*Babatunde Ademiluyi, Emmanuel Sanya, Kolawole Wahab*

P5.240 Von Willebrand Factor Plasmatic Levels and Multimeric Analysis in Patients with Atrial Fibrilation and Stroke in Mexican Population. It Is a Stroke Biomarker? —*Guillermo Punzo Bravo, Daniel Cardenas, Sandra Lopez Castaneda, Martha Viveros Sandoval*

P5.241 WITHDRAWN

Epilepsy/Clinical Neurophysiology: Basic Science and Devices

P5.242 Pathogenicity of Rasmussen Encephalitis CD8+ Lymphocytes Elucidated by Large-Scale Sequencing of the T-Cell Receptor Repertoire —*Tilman Schneider-Hohendorf, Hema Mohan, Johanna Breuer, Albert Becker, Christian Bien, Tanja Kuhlmann, Klaus Dornmair, Gerhard Kurlemann, Heinz Wiendl, Nicholas Schwab*

P5.243 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*

P5.244 Investigating the Involvement of GPR55 Signaling in the Antiepileptic Effects of Cannabidiol —*Michael Bazelot, Benjamin Whalley*

P5.245 Localization of Inflammation in the Epileptic Rat Brain by Bi-Functional Fluorescent and Magnetic Nanoparticles —*Sara Eyal, Emma Portnoy, Boris Polyak, Dorrit Inbar, Gilad Kenan, Ahmad Rai, Suzanne Wehrli, Ameer Bishara, Aniv Mann, Miri Shmuel, Gal Itzhak, Tamir Ben Hur, Dana Ekstein*

P5.246 Evidence for a Differential Interaction of Brivaracetam and Levetiracetam with the SV2A Protein —*Martyn Wood, Michel Gillard*

P5.247 Protective Effects of Choline Alfoscerate on Seizure-Induced Neuron Death and Cognitive Impairment —*Hongki Song, Jun Hong Lee, Im-seok Koh, Sung Hee Hwang, Jae Hyun Park, Jae Hyun Park, Seung Han Seok*

P5.248 A Pivotal, Phase III Trial of Detecting Generalized Tonic-Clonic Seizures with a Seizure Detection and Warning System in Epilepsy - Brain Sentinel® Device —*Jose Cavazos, Michael Girouard, Luke Whitmire*

P5.249 Circadian Patterns of Epileptiform Discharges Differ by Seizure Onset Location During Chronic, Long-Term Intracranial Monitoring —*David Spencer, Felice Sun, Sarah Brown, Barbara Jobst, Nathan Fountain, Victoria Wong, Emily Mirro, Mark Quigg*

P5.250 Long-Term Outcome of Adults with Medically Intractable Neocortical Seizures Treated with Brain Responsive Neurostimulation —*Barbara Jobst, Ritu Kapur, Martha Morrell*

P5.251 The Long-Term Outcome of Children with Refractory Epilepsy After a Vagal Nerve Stimulator Implantation: CHU Sainte-Justine Experience —*Matsanga Kaseka, Philippe Major, Anne Lortie, Paola Diadori, Lionel Carmant*

Neuro-oncology: Genomics and Basic Science

P5.252 Microenvironmental Regulation of Glioblastoma —*Angela Rugino*

P5.253 Assessing the Components of a Novel VEGF Signalling Cascade As Potential Prognostic Markers in Glioblastoma —*Michael Grant, Gary Grant, Georgia Mavria*

P5.254 Genomic Profile, Radiological and Clinical Features of IDH Wild-Type WHO Grades II and III Glioma —*Xuling Lin, Cameron Brennan, Ahmet Zehir, Michael Berger, David Solit, David Hyman, Marc Rosenblum, Jason Huse, Antonio Omuro*

Wednesday, April 20

Poster Session 8:30 a.m.–7:00 p.m.

P5.255 Impact of IDH-1 Mutation Status on Outcome in Clinical Trials for Recurrent Glioblastoma —*Jacob Mandel, David Cachia, Diane D. Liu, Kenneth Aldape, Gregory Fuller, John De Groot*

P5.256 Molecular and Clinical Characterization of Gliosarcomas —*Synphen Wu, Cameron Brennan, Ahmet Zahir, Michael Berger, David Solit, David Hyman, Jason Huse, Marc Rosenblum, Antonio Omuro*

P5.257 Clinical and Molecular Characterization of Glioneuronal Tumors —*Julie Miller, Corey Gill, Tracy Batchelor, Priscilla Brastianos*

P5.258 Using ACT1, a Connexin 43 Blocker, Against Glioblastoma Stem Cells —*Pratik Kanabur, Zhi Sheng*

P5.259 Ionizing Radiation Induces Autophagy in Human Microglial Cells —*Nizar Souayah, Hongxin Chen*

P5.260 Paraneoplastic Cerebellar Degeneration (PCD) Syndrome in Diffuse Large B-cell Lymphoma (DLBCL): Expanding the Spectrum of Malignancies Associated with Cerebellar Degeneration —*Vasu Saini, Ariana Weisz, James Hoffman*

P5.261 Ionizing Radiation Induces Cellular Senescence in Human Microglial Cells —*Hongxin Chen, Nizar Souayah*

General Neurology: Genetics

P5.262 Chronic Gastrointestinal Dysmotility in Adult M.3243A>G-Related Mitochondrial Disease: An Under-Recognised and Under-Treated Clinical Entity —*Yi Shiau Ng, Paula Hynd, Catherine Feeney, Andrew Schaefer, Carol Holmes, Charlotte Alston, John Grady, Mark Roberts, Robert Taylor, Yan Yiannakou, Robert McFarland, Doug Turnbull*

P5.263 Leukodystrophy and Neurogenic EMG Changes Associated with Variants in POLR3A and PMP22 —*Anand Venkatraman, J. Austin Hamm, Alexis Shaefer, John Rinker, Kenkichi Nozaki*

P5.264 Susceptibility to MELAS Exacerbations in a POLG1 Mutation Carrier —*Divya Nadkarni, Lucas Restrepo*

P5.265 Fhl1 W122S Mutant Female Mice Develop Late-Onset Cardiomyopathy —*Akatsuki Kubota, Valentina Emmanuele, Shingo Kariya, Martí Juanola, Fusako Sera, Shunichi Homma, Kurenai Tanji, Catarina Quinzii Hirano, Michio Hirano*

P5.266 A Novel Mutation of SPAST Gene in Family Members Presenting with Spastic Paraparesis —*Mohammed Elkider, Paul Crowley*

P5.267 Periventricular Heterotopia and Ehlers-Danlos Syndrome: An Underdiagnosed Association? —*Manuel Seijo-Martinez, Susana Mederer Hengstl*

P5.268 CSF Markers of Inflammation and Neurodegeneration in Two Hereditary Diffuse Leukoencephalopathy with Spheroids (HDLS) Families with Diverging Genotype and Phenotype —*Virginija Karrenbauer, Henrik Zetterberg, Christina Sundal, Oluf Andersen*

P5.269 Retinal Vasculopathy and Cerebral Leukodystrophy (RVCL) in a Spanish Family —*Leticia Alvarez, Maria Rodriguez Rodriguez, Robustiano Reigosa, Manuel Seijo-Martinez, Jose Antonio Cortes Laino*

P5.270 Identification of the Protective Role of DJ-1 in Hypoglycemic Astrocyte Injury Using Proteomics —*Deng Jiangshan, Zhao Yuwu*

P5.271 A Case of Tapia's Syndrome: Iatrogenic Hypoglossal and Recurrent Laryngeal Nerve Palsy —*Jared Noroozi, Brij Singh Ahluwalia*

MS and CNS Inflammatory Disease: Genetics and Therapeutics MOA

P5.272 The Retinoid X Receptor (RXR) Selective Agonist IRX4204 Promotes Differentiation of Human Treg Cells and Inhibits Differentiation of Human TH17 Cells —*Daniel Mielcarz, Alan Bergeron, John DeLong, Ryan Andreozzi, Elizabeth Nowak, Rosh Chandraratna, Martin Sanders, Randolph Noelle, Jacqueline Channon*

P5.273 MerTK As a Functional Regulator of Anti-Inflammatory Myelin Phagocytosis by Human Myeloid Cells —*Luke Healy, Gabrielle Perron, So-Yoon Won, Craig Moore, Amit Bar-Or, Jack Antel*

P5.274 The HLA-haplotype (DRB1*1501/DQB1*0602) is Not Primarily Responsible for Its Apparent Association with MS —*Douglas Goodin, Pouya Khankhanian, Pierre-Antoine Gourraud, Antoine Lizee*

P5.275 Variants Within the Leptin Receptor Gene (LEPR) on Chromosome 1p31 Are Associated with MS Susceptibility in a Model Adjusted for Known Disease Risk Factors —*Anna Barcellos, Milena Gianfrancesco, Xiaorong Shao, Brooke Rhead, Ling Shen, Cathy Schaefer, Lisa Barcellos*

P5.276 Anti-KIR4.1 Antibodies Do Not Differentiate Multiple Sclerosis Patients from Controls —*Anne-Katrin Proebstel, Jens Kuhle, Anne-Catherine Lecourt, Isabelle Vock, Nicholas Sanderson, Ludwig Kappos, Tobias Derfuss*

P5.277 Dynamics of Th17 Cells During and After Cessation of Natalizumab Therapy —*Brigitte Wildemann, Alexander Schwarz, Mirjam Korporal-Kuhnke, Juergen Haas*

P5.278 HLA-DRB1*1501 Is Associated with Retinal Deterioration in Multiple Sclerosis —*Dorlan Kimbrough, Kathryn Fitzgerald, Omar Al-Louzi, Julia Button, Marieme Dembele, Nikolaos Patsopoulos, Elias Sotirchos, Charles White, Shiv Saidha, Ellen Mowry, Philip De Jager, Peter Calabresi*

P5.279 IPhemap: An Atlas of Phenotype to Genotype Relationships of Human Induced Pluripotent Stem Cell Models of Neurological Diseases —*Jaime Imitola, Ethan Hollingsworth, Michael Racke, Jacob Vaughn, Fumihiro Watanabe*

P5.280 Finding Novel Candidate Genes for Human Cortical Neurons and Corpus Callosum in Obscure Regions of the Genome —*Jaime Imitola, Fumihiro Watanabe*

P5.281 Reversible Effects of Daclizumab HYP on Lymphocyte Counts in RRMS Patients: Data from the SELECT Trilogy Studies —*Sami Fam, Oksana Mokliatchouk, Devangi Mehta, Katherine Riester, James Sheridan, Peter McCroskery, Jacob Elkins, Lakshmi Amaravadi*

P5.282 TERI-DYNAMIC: Exploring the Impact of Teriflunomide on Immune Cell Population Size, Receptor Repertoire, and Function in Patients With RRMS —*Heinz Wiendl, Catharina Gross, Maren Lindner, Melanie Eschborn, Linda Weisser, Anita Posevitz-Fejfar, Andreas Schulte-Mecklenbeck, Bart Van Wijmeersch, Raymond Hupperts, Sandrine Brette, Timothy Turner, Amit Bar-Or, Luisa Klotz*

P5.283 Tecfidera Modulates Transcriptional Expression of Genes Involved in Regulation of the Immune Response and Antigen Processing —*Gafson Arie, James Porter, Yi-Fang Wang, Sanjay Khadayate, Richard Nicholas, Paul Matthews*

P5.284 A Proteomics Approach for the Identification of Cerebrospinal Fluid Proteins Associated with Conversion to Multiple Sclerosis —*Murat Kurtuncu, Recai Turkoglu, Erdem Tuzun, Cem Kucukali*

P5.285 Exosomal MiRNA As Biomarkers for Disease Activity in RR MS —*Igor Selmaj, Krzysztof Selmaj, Magdalena Namiecinska, Maria Cichalewska, Marcin Mycko*

P5.286 IFN-b-1a Therapy Induces the Expansion of TGF-β1-Producing B-Cells and FOXP3+ T-Regulatory Cells in Patients with Relapsing-Remitting Multiple Sclerosis (RRMS) —*Silva Markovic Plese, Yazhong Tao, Xin Zhang, Ming-Jeong Kim, Danny Bruce, Haibo Yang, Kaitlyn Townsend, Sarah Pruteanu-Malinici, Kinnari Buch, Julia Dunn, Beliz Kurtoglu, Dehan Kong, Jessica Craddock, Manisha Chopra, Hongtu Zhu, Valerie Jewells*

P5.287 The Melanocortin Receptor ACTH1-39 May Protect Oligodendroglia by Inhibiting Protein Kinase C —*Robert Lisak, Liljana Nedelkoska, Joyce Benjamins*

P5.288 Haematologic Modifications As Markers of Response to Treatment in Multiple Sclerosis Patients Treated with Natalizumab —*Nuala McNicholas, Hugh Kearney, Anita Krakar, Sinead Jordan, Deepti Sharma, Stephen Cox, Gillian O'Boyle, Niall Tubridy, Michael Hutchinson, Christopher McGuigan*

P5.289 Cell Type-Specific Gene Expression Changes in the Blood of Multiple Sclerosis Patients in the Early Phase of Interferon-beta Treatment —*Michael Hecker, Brit Fitzner, Dirk Koczan, Ina Schroeder, Hans-Juergen Thiesen, Uwe Zettl*

P5.290 Genomic Analysis of Co-Regulated Genes Associated with Neural Stem Cells Identifies Pathways for Self-Renewal Capacity and Oncogenic Potential in Neurospheres —*Maria Prieto Eibl, Josh Orack, Fumihiro Watanabe, Mark Zucker, Jaime Imitola*

P5.291 Additional Mode of Action? Fingolimod Inhibits the IL-33 Induced IFN-γ Formation in $CD8^+$ and Affects the Formation of Bioactive Sphingolipids in Patients with Multiple Sclerosis —*Florian Ottenlinger, Christoph Mayer, Christine Schuhmann, Nerea Ferreiros Bouzas, Anja Schwiebs, Joseph Pfeilschifter, Heinfried Radecke*

P5.292 Longitudinal Analysis of Natalizumab Treated Multiple Sclerosis (MS) Patients Using PK11195-PET Demonstrates Reduced CNS Inflammation —*Ulrike Kaunzner, Yeona Kang, Elizabeth Monahan, Paresh Kothari, Nancy Nealon, Jai Perumal, Claire Riley, Stephen Newman, Timothy Vartanian, Shankar Vallabhajosula, Susan Gauthier*

P5.293 Clinical and Biochemical Pictures of Anti-Neutral Glycolipids Antibody-Positive Central and Peripheral Nervous System-Involving Disorders —*Tatsuro Mutoh, Sayuri Shima, Akihiro Ueda, Kunihiko Asakura*

P5.294 Lymphocyte Dynamics During and After Fingolimod Therapy: Long-Term Data from the INFORMS Trial —*Fred Lublin, Mark Freedman, Bruce Cree, Jerry Wolinsky, Howard Weiner, Catherine Lubetzki, Hans-Peter Hartung, Xavier Montalban, Bernard Uitdehaag, Martin Merschhemke, Bingbing Li, Norman Putzki, Dieter Haering, Ludwig Kappos*

P5.295 Neuronal Uptake of Paraneoplastic IgG Autoantibodies Reactive with Intracellular Antigens Requires the Fc Portion of the IgG Molecule and Can Be Competitively Inhibited by Normal IgG —*John Greenlee, Susan Clawson, Blair Wood, Kenneth Hill, Stacey Clardy, Noel Carlson*

P5.296 Preferential Entrapment of Naive T Cells Associates with a Less Diverse T Cell Receptor Repertoire in MS Patients Treated with Fingolimod —*Clemens Warnke, Anne Mausberg, Thomas Dehmel, Kathleen Ingenhoven, Mark Stettner, Leslie Fitz-Gerald, Amit Bar-Or, Jack Antel, Manuel Comabella Lopez, Xavier Montalban, Hans Hartung, Bernd Kieseier*

P5.297 Metabolomic Networks Associated with Changes in Cytokine Expression Differ in Multiple Sclerosis Patients and Healthy Controls Following Vitamin D Supplementation —*Kathryn Fitzgerald, Pavan Bhargava, Sonya Steele, Sandra Cassard, Emmanuelle Waubant, Peter Calabresi, Ellen Mowry*

P5.298 LINGO-1 Negatively Regulates Oligodendrocyte Differentiation by Blocking the β-integrin Signaling Pathway —*Sha Mi, Guanrong Huang, Xinhua Lee, Zhaohui Shao*

P5.299 Transcriptome Profiles from Relapsing-Remitting Multiple Sclerosis Patients Show Aberrant Immunological Phenotypes Compared with Healthy Controls —*James Porter, Gafson Arie, Richard Nicholas, Paul Matthews*

P5.300 Medusa Head-Type Neuronal Autoantibody Inositol Triphosphate Receptor-1 (ITPR1)-IgG: Frequency, Clinical Phenotype and Cancer Associations — *Nora Alfugham, Vanda Lennon, Lars Komorowski, Christian Probst, Madeleine Scharf, Sean Pittock*

MS and CNS Inflammatory Disease: Neuromyelitis Optica Spectrum Disorders: Biomarkers and Animal Models

P5.301 Antibody Against Inward Rectifying Potassium Channel KIR4.1 in Turkish Patients with Neuromyelitis Optica —*Egemen Idiman, Derya Kaya, Zekiye Altun, Betül Tercan*

P5.302 Prospective Study of NMO Spectrum Disorder: Disease Pattern Based on Antibody Status —*Pranav Joshi, Shalin Shah, Mayank Patel, Sudhir Shah, Shailesh Darji*

P5.303 Expanding the Range of Immuno-pathology in Neuro-Myelitis Optica Spectrum Disorder —*Jennifer Watts, Ian Sutton, Michael Buckland, Michael Barnett, Yael Barnett*

P5.304 The Urine Proteome Profile Is Different in Neuromyelitis Optica Compared to Multiple Sclerosis —*Helle Hvilsted Nielsen, Hans Beck, Lars Kristensen, Niels Heegaard, Zsolt Illes*

P5.305 Increased IL-10-producing B-lymphocytes in the Peripheral Blood of Neuromyelitis Optica Treated Patients — *Dias Carneiro Rafael, Alliny Dionete, Adriel Moraes, Marilia Andrade, Vinicius Boldrini, Ana Leda Longhini, Benito Damasceno, Alfredo Damasceno, Fernando Pradella, Alessandro Farias, Charles Tilbery, Carlos Otavio Brandao, Roopali Gandhi, Leonilda Santos, Felipe Von Glehn Silva*

P5.306 Autoimmune AQP4 Channelopathy and Bradycardia: Expanding the NMOSD Spectrum — *Masoud Majed, Claudia Lucchinetti, Eduardo Benarroch, Jessica Sagen, Sean Pittock*

P5.307 Prospectively Tracking Disease Course and Treatment Changes in Neuromyelitis Optica Using NMOBase, a Global Online Registry. —*Ilya Kister, Tamar Bacon, Vahid Shaygannejad, Jyh Yung Hor, Raed Alroughani, Shannon Haas, Murat Terzi, Cavit Boz, Javier Olascoaga, Pamela McCombe, Yara Fragoso, Alessandra Lugaresi, Patrizia Sola, Steve Vucic, Eugenio Pucci, Talal Al-Harbi, Seyed Aidin Sajedi, Juan Ignacio Rojas, Liliana Patrucco, Edgardo Cristiano, Jose Alberto Suarez, Magdalini Tsolaki, Bruce Taylor, Gerardo Iuliano, Paschalis Devranis, Mark Marriott, Helmut Butzkueven*

P5.308 Combined VEPs and OCT Help Differentiating Multiple Sclerosis from NMOSD —*Letizia Leocani, Marco Vabanesi, Francesco Vitali, Marco Pisa, Simone Guerrieri, Giovanni Di Maggio, Lucia Moiola, Mariaemma Rodegher, Marta Radaelli, Stefania Medaglini, Ubaldo Del Carro, Vittorio Martinelli, Giancarlo Comi*

P5.309 Practical Experience with Animal Models for Translational Research in MS and NMO —*Melina Jones, Kateryna Schwartz, Michael Levy*

P5.310 Therapeutic Target of Memory B Cells Depletion Helps to Tailor Administration Frequency of Rituximab in Neuromyelitis Optica Spectrum Disorders Patients —*Christine Lebrun Frenay, Mikael Cohen, Gwendoline Romero, Alessandra Rosenthal-Allieri, Michel Ticchioni*

MS and CNS Inflammatory Disease: Treatment Mechanisms in Animal Models

P5.311 Effects of Siponimod (BAF312) on Inflammation-Driven Synaptopathy in Experimental Multiple Sclerosis — *Antonietta Gentile, Alessandra Musella, Silvia Bullitta, Diego Fresegna, Francesca De Vito, Eleonora Piras, Francesca Gargano, Giovanna Borsellino, Luca Battistini, Georgia Mandolesi, Anna Schubart, Diego Centonze*

P5.312 Effect of Teriflunomide (Aubagio®) on Cortico-Basal Ganglionic-Thalamo-Cortical Gray Matter Connectivity in Mouse Model of Multiple Sclerosis —*Claire Modica, Ferdinand Schweser, Nicola Bertolino, Trina Rudra, Michelle Sudyn, Michael Dwyer, Robert Zivadinov*

P5.313 Nebulization of RNS60 Attenuates the Adoptive Transfer of Experimental Allergic Encephalomyelitis in Mice: Implications for Multiple Sclerosis —*Susanta Mondal, Supurna Ghosh, Richard Watson, Kalipada Pahan*

P5.314 Pre-Clinical Studies and Evaluation of Treatment Need of Glatiramer Acetate Depot (Long Acting Injection) —*Nadav Bleich Kimelman, Shai Rubnov, Uri Danon, Ehud Marom, Ariel Miller*

P5.315 Treatment with the Retinoid X Receptor Agonist IRX4204 Ameliorates Active and Passive Experimental Autoimmune Encephalomyelitis in Mice —*Elizabeth Nowak, Petra Sergent, Rosh Chandraratna, Randolph Noelle*

P5.316 Ingested (Oral) Rituximab Inhibits EAE —*Staley Brod*

P5.317 Long-Term Fingolimod Treatment Does Not Impair Immune Memory in a Preclinical Immunization Model —*Paul Smith, Catherine Afatsawo, Cindy Schmid, Catherine Huck, Meike Hamburger, Marc Bigaud*

P5.318 Clinical Application of Frozen Vitamin D3-Tolerogenic Dendritic Cells — *Maria Jose Mansilla, Raian Contreras, Juan Navarro, Aina Teniente-Serra, Bibiana Quirant-Sanchez, Jose Vicente Hervas, Silvia Presas, Cristina Ramo, Eva Martinez-Caceres*

P5.319 WITHDRAWN

P5.320 Treatment of EAE and MS Subjects with Probiotic VSL#3 — *Stephanie Tankou, Kailyn Bailey, Keren Regev, Pia Kivisakk, Roopali Ghandi, Andrew Kirlis, Sandra Cook, Fiona Stuart, Bonnie Glanz, James Stankiewicz, Howard Weiner*

MS and CNS Inflammatory Disease: Neuroimmune Mechanisms and Biomarkers

P5.321 B Lymphocytes from MS Patients Induce CNS Pathology in a Murine Brain Slice Model —*Danielle Harlow, Kevin Blauth, Katherine Saul, Sean Selva, Tracy Niedzielko, Leila Jackson, Wendy Macklin, Timothy Vollmer*

P5.322 Attenuation of Optic Neuritis and Visual Pathway Dysfunction by an Estrogen Receptor Beta Ligand in a Mouse Model of Multiple Sclerosis — *Seema Tiwari-Woodruff, Maria Sekyi, Anna Khalaj, Joselyn Soto, Jonathan Hasselmann, Kelli Lauderdale, Steven Nusinowitz, John Katzenellenbogen*

P5.323 Characterization of a CD52 Knockout Mouse to Investigate the Function of CD52 —*Michael Turner, Evis Havari, Nathalie Chretien, Michael LaMorte, Carrie Garron, Nilesh Pande, Bruce Roberts, William Siders*

P5.324 The Gut Microbiome Affects the Progression of Disease in a Murine Model of Secondary Progressive MS — *Javier Ochoa-Reparaz, Sara Colpitts, Eli Kasper, Abby Keever, Caleb Liljenberg, Lloyd Kasper*

P5.325 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*

P5.326 Knock Out of Oligodendroglial FGFR1 Causes Increased TrkB Receptor Expression in C57Bl/6 Mice — *Ranjithkumar Rajendran, Mario Giraldo Velasquez, Martin Berghoff*

P5.327 CSF-1R Inhibition Results in Protection of Axonal Degeneration and Demyelination in the Experimental Autoimmune Encephalomyelitis Model of Multiple Sclerosis —*Andrea Edling, Amy Mahan, Lisa Woodworth, Tracy Garron, John Kane Jr, Bruce Roberts, William Siders*

P5.328 Neutrophil Derived A Proliferation-Inducing Ligand (APRIL) Potentiates an Inflammatory B-Cell Function in TH17-Induced Neuro-Inflammation —*Robert Axtell, Gaurav Kumar, Rose Ko*

P5.329 Fetuin-A, a CSF Biomarker of Multiple Sclerosis Disease Activity, Is Upregulated at the Blood-CSF Barrier — *Ruth-Anne Langan, Violaine Harris, Saud Sadiq*

P5.330 The Reduced Susceptibility to Develop CNS-Autoimmunity in the Absence of N-Glycosylation Is Associated to Impaired Differentiation and Function of Induced Regulatory T Cells —*Felix Bischof, Aleksandar Madjovski, Evelyn Dubois, Johannes Mörike*

P5.331 Astrocytic Tight Junctions Regulate Inflammatory CNS Lesion Size and Severity —*Sam Horng, Candice Chapouly, Azeb Argaw, Anthony Therattil, Gareth John*

P5.332 The Effect of Heat Shock Protein 70 (HSP70) on the Activity of Notch Signaling Pathway in Myelin-Reactive CD4 T Cells —*Jurynczyk Maciej, Przemyslaw Lewkowicz, Malgorzata Domowicz, Marcin Mycko, Krzysztof Selmaj*

P5.333 CNS Inflammasome Activation and Modulation in Multiple Sclerosis — *Brienne McKenzie, Manmeet Mamik, Jian Lu, William Branton, Christopher Power*

P5.334 CSF From Progressive-MS Patients Stimulates Microglial Activation Pathways in Vivo and in Vitro —*Kelsey McDermott, Jeffrey Jian, Jessie Huang, Massimiliano Cristofanilli, Saud Sadiq*

P5.335 Thromboxane A2 Levels Are Increased in the CSF of Active Multiple Sclerosis Patients —*Fozia Mir, Danielle Blemur, Donald Lee, Saud Sadiq*

P5.336 The Relevance of VGKC-Positivity in the Absence of LGI1 and Caspr2 Antibodies —*Agnes Sonderen, Marco Schreurs, Marienke De Bruijn, Sanae Boukhrissi, Mariska Nagtzaam, Esther Hulsenboom, Roelien Enting, Roland Thijs, Paul Wirtz, Peter Sillevis Smitt, Maarten Titulaer*

P5.337 IL-33 Expression in MS: Role in Remyelination and Repair —*Subramaniam Sriram, Chandramohan Natarajan, Song-Yi Yao, Charles Spurlock, John Tossberg, Thomas Aune*

P5.338 IL-11 Induces Th17-Cell Responses in Relapsing Remitting Multiple Sclerosis (RRMS) —*Silva Markovic Plese, Xin Zhang, Tabish Khan, Clara Zelasky, Beliz Kurtoglu, Stephanie Cohen, Ryan Miller, Raymond Sobel*

P5.339 Immune-Regulatory Role of Mucosal-Associated Invariant T Cells (MAIT) in Multiple Sclerosis —*Jorge Correale, Mauricio Farez*

P5.340 Oligoclonal IgM Status Identifies Two Different Immune Mechanisms in MS. Correlation with Age —*Luisa Villar, Carmen Picón, Susana Sainz de la Maza, Eulalia Rodriguez-Martin, Lucienne Costa-Frossard, Inmaculada Toboso, José Álvarez Cermeño*

P5.341 Quantification of Anti-KIR4.1 Antibodies in Multiple Sclerosis: Difficulties and Acceptance Criteria — *Antonio Bertolotto, Marzia Caldano, Paola Valentino, Fabiana Marnetto*

P5.342 Assessment of T Cell Lineage-Specific Transcription Factors and Cytokines Expression in Multiple Slcerosis and Neuro-Behçet Disease Patients — *Mariem Kchaou, Mariem Belguith, Nadia Ben Ali, Khadija Bahrini, Saloua Fray, Ridha Barbouche, Samir Belal*

Wed. April 20

Wednesday, April 20

Poster Session 8:30 a.m.–7:00 p.m.

P5.343 Lack of CerS2 Suppresses the Development of Experimental Autoimmune Encephalomyelitis by Impairing the Migratory Potential of Neutrophils —*Christoph Mayer, Julia Barthelmes, Yael Pewzner-Jung, Katja Schmitz, Anika Maenner, Christian Foerch, Max Eberle, Nadja Tafferner, Nerea Ferreiros, Kerstin Birod, Gerd Geisslinger, Anthony Futerman, Sabine Grösch, Susanne Schiffmann, Christine Schuhmann*

P5.344 The Antibody Response to Epstein-Barr Virus in Multiple Sclerosis Is Increased Only to Selected Antigens —*John Lindsey, Matthew Dooley*

P5.345 IL-17 and IL-22-Secreting Myelin-Specific CD4+ T Cells Corticosteroid Resistant Are Related to Active Brain Lesions in Multiple Sclerosis Patients —*Ana Cristina Dos Santos, Joana Hygino, Thais Ferreira, Taissa Kasahara, Priscila Barros, Priscila Sacramento, Regis Andrade, Solange Maria Das Gr Camargo, Fernanda Rueda, Soniza Alves-Leon, Regina Alvarenga, Cleonice Bento, Claudia Cristina Vasconcelos*

P5.346 Myelin Oligodendrocyte Glycoprotein (MOG) Autoimmunity. A Case Report —*Rocio Vazquez do Campo, Ramon Yarza, Sebastian Lopez Chiriboga, Kevin Barrett*

P5.347 Estrogen Receptor Alpha-Associated Genomic Regions Are Potential Core of T Cell Subtypes Identity —*Santina Cutrupi, Marinella Clerico, Ferrero Giulio, Andrea Iannello, Tamaddon Eliseo, Michele De Bortoli, Luca Durelli*

P5.348 Estrogen Receptor Alpha Regulates Key Genomic Regions of Thelper 17 and T Regulatory Cells in Multiple Sclerosis: A New Potential Biomarker of Disease Activity —*Marinella Clerico, Santina Cutrupi, Stefania De Mercanti, Simona Rolla, Andrea Iannello, Giulio Ferrero, Michele De Bortoli, Luca Durelli*

P5.349 CSF Neurofilament Light Chain Levels As a Biomarker for Pediatric Demyelinating Diseases —*Soe Mar, Laura Piccio*

P5.350 Early Identification of Interferon-beta Responders by Assessment of T Cell Lineage-Specific Transcription Factors and Cytokines Expression in Multiple Sclerosis —*Mariem Kchaou, Mariem Belguith, Nadia Ben Ali, Khadija Bahrini, Saloua Fray, Ridha Barbouche, Samir Belal*

Movement Disorders: Parkinson's Disease I

P5.351 Patients' Experience of Parkinson's Disease Following Treatment with Inhaled Levodopa: Results from a Phase 2b Study —*Peter LeWitt, Alexander Niyazov, Alexander Sedkov, Harald Murck, Amy Guo*

P5.352 Verbal Fluency Trends in Early Stage Parkinsons Disease Patients Following Deep Brain Stimulation: Analysis of Five-Year Extension of a Randomized Pilot Trial —*Katherine Panushka, Amanda Currie, Mallory Hacker, Michael Tramontana, Scott Wylie, Peter Konrad, Thomas Davis, Joseph Neimat, Fenna Phibbs, Peter Hedera, David Charles*

P5.353 MDS Research Criteria for Prodromal Pakrinson's Disease —*Ronald Postuma, Daniela Berg*

P5.354 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*

P5.355 Patient-Centered Outcomes of Deep Brain Stimulation in Parkinson's Disease —*Jessica Karl, Bichum Ouyang, Leonard Verhagen Metman*

P5.356 Phenotypic Differences Between African American and Caucasian Parkinson's Disease Patients —*Meagan Bailey, Bichum Ouyang, Glenn Stebbins, Lisa Shulman, Lisa Barnes, Deborah Hall*

P5.357 The Relationship Between Nutrient Status and Cognitive Performance in Persons with Parkinson's Disease —*Amie Hiller, Charles Murchison, Brenna Cholerton, Shu-Ching Hu, Cyrus Zabetian, James Leverenz, Kathryn Chung, Thomas Montine, Natasha Carney, Joseph Quinn*

P5.358 Correlates of Parkinsonism in African Americans in Chicago —*Deborah Hall, Bichun Ouyang, Joshua Shulman, Lisa Shulman, Lisa Barnes*

P5.359 Conjugal Parkinsonism in Autopsy Confirmed Cases —*Ali Rajput, Christopher Robinson, Leslie Ferguson, Matthew Farrer*

P5.360 Risk of Parkinson's Disease in Patients with Diabetes Mellitus and Other Comorbidities in Taiwan —*Chia-Ju Lee, Yi-Chun Yeh, Chun-Yu Liang, Yen-Yu Chen*

P5.361 Levodopa Carbidopa Infusion Gel to Treat Very Advanced Idiopathic Parkinson's Disease —*Jason Aldred, Anne Bergeleen*

P5.362 Efficacy and Safety of Levodopa-Carbidopa Intestinal Gel from an Open-Label Study in Japanese, Taiwanese, and Korean Patients with Advanced Parkinson's Disease —*Miho Murata, Masahito Mihara, Kazuko Hasegawa, Beomseok Jeon, Chon-Haw Tsai, Masayuki Yokoyama, Krai Chatamra, Janet Benesh*

P5.363 α-Synuclein Deposition in the Colon and Premotor Markers of Parkinson's Disease in Neurologically Normal Subjects —*Joong-Seok Kim, Su-Young Kim, Won-Kyung Kang*

P5.364 The Clinical Utility of Sudoscan As a Biomarker for Parkinson's Disease with Lewy Bodies —*Inigo Gabilondo, Beatriz Tijero Merino, Amaia Gonzalez, Marian Acera, Veronica Llorens, Jesus Gardeazabal, Maria Rosario Luquin, Mar Carmona, Juan Carlos Gomez Esteban*

P5.365 The Long and the Short of Survival in Parkinsonism —*Leslie Ferguson, Matthew Farrer, Christopher Robinson, Ali Rajput*

P5.366 Effect of Vibration on Motor Performance: A New Intervention to Improve Bradykinesia in Parkinson's Disease? —*Antonella Macerollo, Clare Palmer, Thomas Foltynie, Prasad Korlipara, Patricia Limousin, Mark Edwards, James Kilner*

P5.367 7,8-DHF Ameliorates L-DOPA-Induced Dyskinesia in a Parkinson's Disease Rat Model —*Junyan Zhao, Ti-Li Zhen, Hai-Yang Shu, Meng Si, Chunfeng Liu, Li-fang Hu, Yi-Xian Huang, Wei-Feng Luo*

P5.368 Higher LDL-Cholesterol Is Associated with Higher Gyrification During Parkinson's Disease Progression —*Nicholas Sterling, Eun Lee, Mechelle Lewis, Guangwei Du, Martin Styner, Lan Kong, Richard Mailman, Xuemei Huang*

P5.369 Interaction of Stretch Reflex Loop with Descending B-Oscillations and the Generation of Tremor in Parkinson's Disease: A Study of Motor Unit Firing Synchrony and Patterns —*Orsalia M. Agapaki, Dimitrios Anastasopoulos, Sophia Erimaki, Constantinos N. Christakos*

P5.370 GAITRite Comparison Between Parkinson's Disease Stages —*Wissam Deeb, Daniel Martinez-Ramirez, Juan Giugni, Michael Okun, Chris Hass*

P5.371 Genetic Etiology of Early-Onset Parkinsonism in Norway —*Emil Gustavsson, Joanne Trinh, McKenzie Marna, Stephanie Bortnick, Matthew Farrer, Jan Aasly*

P5.372 Effect of Patient Characteristics on Motor Function in Response to 35-50 Mg of Inhaled Levodopa (CVT-301) in Patients with Parkinson's Disease: Results from a Phase 2b Study —*Peter Lewitt, Martin Freed, Mika Leinonen, Alexander Sedkov, Harald Murck*

P5.373 Amantadine Alleviates the Motor and Dopamine Receptor Changes in a Levodopa-Induced Dyskinesia (LID) Model of C. Elegans —*Allison Kao, Ruifu Liu, Deepak Gupta, Zhaoyang Feng*

P5.374 Effect of Fatigue on Physical Versus Mental Health-Related Quality of Life in Parkinson Disease —*Laura Brosbe, Ann Gruber-Baldini, Erik Barr, F. Rainer Von Coelln, Stephen Reich, Lisa Shulman*

P5.375 Olfaction, Attention Performance, and Response Speed Variability in Early Parkinson's Disease —*Magdalena Wojtowicz, Kimberly Good, Roger McKelvey, Harold Robertson, John Fisk*

P5.376 Weight Changes in PD Patients Post-DBS: A Look at the Factors Involved —*Bilal Ahmed, Leonardo Almeida, Alberto Bona, Sol De Jesus, Daniel Martinez-Ramirez, Michael Okun*

P5.377 Advanced Therapy Referral in Parkinson's Disease Using Wearable Sensors —*Dustin Heldman, Joseph Giuffrida, Esther Cubo Delgado*

P5.378 Can Transcranial Magnetic Stimulation Improve Axial Symptoms in Parkinson's Disease? —*Milton Biagioni, Andre Son, Alberto Cucca, Katherine Sticklor, Shashank Agarwal, Geraldine Dacpano, Miroslaw Brys, Franziska Battenberg, Jamika Singleton-Garvin, Pawan Kumar, Rebecca Gilbert, Angelo Quartarone, Alessandro Di Rocco*

P5.379 Comparing Effects of Age of Onset and Disease Duration in Parkinson Disease —*Karl Maki, Ann Gruber-Baldini, Erik Barr, F. Rainer Von Coelln, Stephen Reich, Lisa Shulman*

P5.380 Success of Targeting Rationale in Deep Brain Stimulation for Parkinson's Disease —*Andra Farcas, Joohi Jimenez Shahed*

P5.381 Loss-of-Function Mutations of Cyclic Nucleotide Gated (CNG) Ion Channels Protect Dopaminergic Neurodegeneration and Loss of Motor Activity in C. Elegans Overexpressing Human α-Synuclein —*Allison Kao, Ruifu Liu, Deepak Gupta, Zhaoyang Feng*

P5.382 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*

P5.383 Statin Usage in Parkinson's Disease in Relation to Vascular Comorbidities and Risk Factors —*Kelvin Cheng, Diane Swallow, Katherine Grosset, Donald Grosset*

Movement Disorders: Ataxia

P5.384 Repeat Size and X-Inactivation in the Clinical Phenotype of Fragile X Premutation Carrier Sisters: A Familial Case Series —*Erin Robertson-Dick, Joan O'Keefe, Andrew Hadd, Lili Zhou, Elizabeth Berry-Kravis, Deborah Hall*

P5.385 The Role of Antisense FMR1 in Fragile X-Associated Tremor/Ataxia Syndrome —*Padmaja Vittal, Shrikant Pandya, Elizabeth Berry-Kravis, Lili Zhou, Kevin Sharp, Deborah Hall*

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 Liuzzi, 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 Friedreichs 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 —*Paul 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 Schmahmann*

P5.393 Neuropathology of Parkinsonism in Spinocerebellar Ataxia Type 6: a Case Report —*Diviya Kaul, Keith Morley, Marius Pakalniskis, William Hickey, Stephen Lee*

Movement Disorders: Ataxia and Dystonia

P5.394 A Mutation Causing Reduced BK Channel Activity Leads to Cognitive Inpairment 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 Ozelius, 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, Saunder 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.

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Stop by the new Experiential Learning Areas at the Annual Meeting to experience a new way of learning through interaction, engagement, and exploration.

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Ex Health & Wellness



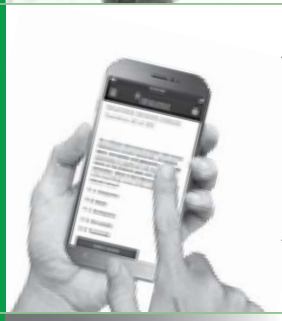
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AAN 2016 Annual Meeting

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

Wednesday, 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, Vivianna 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 Wolk, Anna Isenberg, Katya Rascovsky, 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 Montenigro, Patrick Kiernan, Lauren Murphy, Joshua Kriegel, Bobak Abdolmohamadi, 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 Jaafary*

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, Xhaoxia 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 Tobyne, 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, Sebastien 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 Hojnacki, 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 RRMS 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
SIP The course is part of a Subspecialty in Focus track
The program is one of the I Talk sessions
Ex 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

Health & Wellness

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

Wednesday, April 20

1:00 p.m.–5:30 p.m. Integrated Neuroscience Session

I11 SIP 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. **I11.001 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. **I11.002 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. **I11.003 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. **I11.004 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.

I11.001 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*

I11.002 Dynamics of Quantitative EEG Changes During Cerebral Hypoperfusion—*Babak Razavi, Kimford Meador*

I11.003 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*

I11.004 Frequency and Time-Course of Epileptiform Abnormalities in Subarachnoid Hemorrhage—*Jennifer Kim, Sydney Cash, Eric Rosenthal, M. Westover*

I11.005 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*

I11.006 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*

I11.007 Extended Clinical Spectrum of Anti-NMDA Receptor Encephalitis in Children—*Ajay Goenka, Hiroki Nariai, Mitchell Steinschneider, Alfred Spiro, Vimal Jain*

I11.008 Persistent EEG Patterns in Anti-NMDA Receptor Encephalitis: Implications for Pathophysiology—*Michelle Ubels Van Noord, Evelyn Tecoma, Leena Kansal, Navaz Karanjia, Vicente Iragui-Madoz*

I11.009 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*

I11.010 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*

I11.011 ApoE E3 Allele and DRS Outcome in Patients with Severe Traumatic Brain Injury (TBI)—*Lucido Ponce Mejia, Jovany Cruz Navarro, Goodman Jerry, Claudia Robertson*

I11.012 FTY720 Preserves Blood-Brain Barrier Integrity Following Subarachnoid Hemorrhage in Rats—*Abdullah Muhammad, Jennifer Harris, Benjarat Changyaleket, Dale Pelligrino, Hao-liang Xu, Fernando Testai*

I11.013 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. **I11.005 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. **I11.006 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. **I11.007 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. **I11.008 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 SIP **Neurocritical Care and Neuroscience Crossroads: From Bench To Bedside**

I12 SIP **Amyloid and Beyond: From Bench to Bedside** 128

C189 $ **Neuromuscular Bedside Rounds Skills Workshop**
(registration required)
Director: *Michelle L. Mauermann, MD, Rochester, MN*

3:00 p.m.–4:00 p.m.

Ex Health & Wellness **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.

1 **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
SIP The course is part of a Subspecialty in Focus track
1 The program is one of the I Talk sessions
Ex Learning Lab, Excitement of Discovery, Health & Wellness, Navigating Your Career, Real World of Neurology — The program is part of the Experiential Learning Area sessions

Invited Science: Multiple Sclerosis

ECTRIMS
EUROPEAN COMMITTEE FOR TREATMENT AND RESEARCH IN 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

Wednesday, April 20

1:00 p.m.–5:30 p.m. Integrated Neuroscience Session

I12 SIP 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. **I12.001**
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. **I12.002**
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. **I12.003**
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. **I12.004**
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. **I12.005**
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 Frosch, Keith Johnson*

3:10 p.m.–3:15 p.m. **I12.006**
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.

I12.001 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*

I12.002 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*

I12.003 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*

I12.004 Literature Review of Genetic Disorders with Tau Pathology —*Pawel Tacik, Zbigniew Wszolek, Monica Sanchez-Contreras, Rosa Rademakers, Dennis Dickson*

I12.005 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 Frosch, Keith Johnson*

I12.006 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*

I12.007 Prevalence of Amyloid Pathology in Primary Progressive Aphasia Variants: A Systematic Review and Meta-Analysis —*David Bergeron, Robert Laforce, Rik Ossenkoppele*

I12.008 Rapidly Progressive Alzheimer's Disease in Two Distinct Autopsy Cohorts —*Jagan Pillai, Brian Appleby, Jiri Safar, James Leverenz*

I12.009 Biomarker Confirmed Alzheimer's Disease Presenting As Amnestic, 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*

I12.010 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*

I12.011 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*

I12.012 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*

I12.013 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. **I12.007**
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. **I12.008**
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, Alyana 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 Gurol, 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 Stravropoulos, 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

6:30 a.m.–8:30 a.m.

C202 SIF 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.

I 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.

Ex Health & Wellness 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
Ex Real World of Neurology Ask the Expert

1:00 p.m.–5:30 p.m.

C223 $ Neuromuscular Ultrasound Skills Workshop *(registration required)*
I13 SIF 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

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142

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

Ex Learning Lab
Ex Excitement of Discovery
Ex Health & Wellness
Ex Navigating Your Career: At School
Ex Real World of Neurology
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.

Thursday, April 21

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 Pedroso, Chiara Terracciano, Carlo Caltagirone, Roberto Massa, Peter St George-Hyslop, Orlando Barsottini, Toshitaka Kawarai, Antonio Orlacchio*

7:00 a.m. S44.003
New Molecules for an Irreversible Disorder: MRNAs and MiRNAs in Experimental Diabetic Neuropathy — *Douglas Zochodne, 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 Pisciotta, 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 Miszkiel, 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 Outteryck, 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 Klistoner, 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 Molyneaux, 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
ApoE E3 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

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

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 SIP **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.

I **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.

Neurology Year in Review Plenary Session . . . 143

11:00 a.m.–3:00 p.m.

Exhibit Hall

1:00 p.m.–1:30 p.m.

Ex Health & Wellness **The Role of Exercise in Treatment of Peripheral Neuropathy**
Director: *A. Gordon Smith, MD, FAAN, Salt Lake City, UT*

Thursday, 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 —*Spozhmy Panezai, Florence Chukwuneke, 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 Votova, 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, Haimei 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 Sharrief, 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 Herial, 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 Tipirneni, 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 Piriyawat, Gustavo Rodriguez, Salvador Cruz-Flores*

P6.024 Collateral Changes in Various MR Sequences and Their Clinical Implcation 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 Bozorgui, Jignesh Patel, Malcolm Irani, Christy Ankrom, Tiffany Cossey, Anjail Sharrief, 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 Osteraas, James Conners, 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, Ramy 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 Sharrief, Hari Indupuru, Amber Jacobs, Maria DeGuzman, Paige Shoemake, 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 Sunbulli, 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 Sunbulli, 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 Merkler, 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 Multidisciplinar Team Ability to Decrease Door-To-Needle Time in Acute Ischemic Stroke - A Single Center Saudi Experience —*Ismail Khatri, Ali Khathaami, Ousaima Alhamoudeh, Ahmad Abulaban, Sarah Scriven, Maisoun Tarawneh, Deema Alrasheed, Sameerah AlSomali, Elmer Catangui, 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 Honig, Alexander Merkler, Soojin Park, E. Sander Connolly, Hooman Kamel, Jan Claassen*

P6.057 Amyloid-Beta Related Angitiis 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 Hemicraniectomy 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 Charvat, Tana Fadrna, Jana Zapletalova, Martin Valis*

P6.069 Flow-Diversion For Ophthalmic Segment Aneurysms. —*Norman Ajiboye*

Thursday, April 21

Poster Session 8:30 a.m.–5:30 p.m.

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 Rauf 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 Atchaneeyasakul, Pankaj Sharma, Nirav Shah, Dileep Yavagal*

P6.078 Cauda Equina Syndrome from Spinal Spinal Venous Congestion Secondary to Collateral Vein Enlargement from Occluded Interior 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 Atchaneeyasakul, 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-Arvizu, 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 Burshtein, 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 Lakkur, 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, Devrimsel 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 Kielbasa, 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 Potolicchio, 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, Stellios 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, Betul Baykan, Mehmet Zarifoglu, Mustafa Ertas, Derya Uludüz, Ugur Uygunoglu, Esme Ekizoğlu, 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 Yedigarova, 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 Yedigarova, 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 Pittock, Mark Keegan*

P6.110 Proposed Revised Criteria for the Diagnosis of CLIPPERS —*Guillaume Taieb, Thibaut Allou, Nadege Limousin, Cecilia Rousselot, Caroline Arquizan, 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 Kremenchutzky*

P6.114 Clinical and Radiological Presentation of Neurosarcoidosis: Single Center Cohort Study of 107 Cases —*Muhammad Affan, Loni Schultz, Mirela Cerghet, Stanton Elias*

P6.115 Long-Term Demyelinating Disease Activity Following Initial Diagnosis of Acute Disseminated Encephalomyelitis: Clinical Relapses, Flares, or No Evidence of Disease Activity? —*Diederik Koelman, Joshua Klein, Farrah Mateen*

P6.116 Rates of True Positives and False Positives in Paraneoplastic Antibody Testing in Neurological Diseases —*Hesham Abboud, Ian Rossman, Maureen Mealy, Michael Levy*

P6.117 Patterns of Spinal Cord Atrophy in Neuroinflammatory Diseases —*Shila Azodi, Emily Charlip, Winston Liu, Bridgette Billioux, Ashley Vellucci, Joan Ohayon, Govind Nair, Steven Jacobson*

P6.118 Spinal Cord Involvement in Neuro-Behçet Syndrome —*Burcu Zeydan, Ugur Uygunoglu, Emire Seyahi, Serdal Ugurlu, Sabahattin Saip, Orhun Kantarci, Aksel Siva*

P6.119 HTLV-I Associated Myelopathy Linked to Lower Gray Matter Volume —*Paba De Alwis, Shila Azodi, Daniel Reich, Steven Jacobson, Govind Nair*

P6.120 Pathologic-MRI Correlation in 6 Cases with Atypical Demyelinating Lesions —*Xavier Ayrignac, Sonia Hebbadj, Clarisse Carra-Dallire, Valerie Rigau, Thierry Vincent, Cedric Raoul, Guillaume Taieb, Jerome De Seze, Stephane Kremer, Pierre Labauge*

P6.121 Perivenular Distribution of White Matter Lesions Evaluated by MRI Can Differentiate MS Lesions from Inflammatory Small Vessel Diseases —*Luca Massacesi*

P6.122 DSC MR Perfusion Microvascular Abnormalities Can Predict Lesion Progression in Cerebral X-Linked Adrenoleukodystrophy —*Arne Lauer, Xuezhu Cai, Xiao Da, Razina Aziz-Bose, Yangming Ou, Jayashree Kalpathy-Cramer, Mikkel Bo Hansen, Kim Mouridsen, Bruce Rosen, Florian Eichler, Patricia Musolino*

P6.123 Double Dose Contrast in CLIPPERS: Key to Biopsy? —*Harsh Gupta, Rohan Samant, Ricky Lee, Kinshuk Sahaya, Tuhin Virmani*

P6.124 Anti-LGI1-Associated Cognitive Impairment: Clinical Profiles and Long-Term Outcome —*Helena Arino, Mar Petit-Pedrol, Thais Armangue, Albert Saiz, Josep Dalmau, Francesc Graus*

P6.125 Autoantibodies & Herpes Viruses Detected in Encephalitic CSF —*Jenny Linnoila, Matthew Binnicker, Christopher Klein, Andrew McKeon*

P6.126 Serologic Positivity for the Voltage Gated Potassium Channel (VGKC) Complex Antibody: Critical Analysis of 114 Cases —*Luay Shayya, Adham Jammoul, Karin Mente, Jianbo Li, Alexander Rae-Grant, Yuebing Li*

P6.127 Late-Onset Adrenoleukodystrophy Mimicking Primary Progressive Multiple Sclerosis —*Alice Schabas, Ana-Luiza Sayao*

P6.128 Clinical Characteristics, Laboratory Investigations and Response to Immunotherapy in Patients with Autoimmune Encephalopathy: An Observational Study —*Valentina Damato, Amelia Evoli, Raffaele Iorio*

P6.129 Transverse Myelitis in Veterans: Epidemiology and Outcomes —*Haley Carlson, Verena Haringer, Michael Sweeney, John Rose, Noel Carlson, John Greenlee, M. Paz Soldan, Stacey Clardy*

P6.130 Clinical Pictures and Paraneoplastic Antibody Repertoire of 17 Chinese Anti-GABAB Receptor Encephalitis Patients : A Retrospective Study —*Lei Liu, Jiawei Wang*

P6.131 Recoverin Antibody: Ophthalmologic & Oncologic Significance —*Alfonso Lopez, Andrew McKeon, Daniel Lachance, Sean Pittock, Jose Pulido, Lars Komorowski, Matthew Roforth, Raymond Iezzi, Wolfgang Meyer*

P6.132 Identification of Autoantibody Producing Plasma Cells in the CSF of Autoimmune Encephalitis (AIE) Patients —*Norbert Goebels, Manish Malviya, Sumanta Barman, Nico Melzer, Christian Elger, Heinz Wiendl, Hans-Peter Hartung*

P6.133 Severe Olfactory Dysfunction in Patients with Limbic Encephalitis —*Felix Schmidt, Rohat Geran, Harald Prüss, Hagen Kunte, Florian Cornelius Uecker, Lutz Harms*

P6.134 Bickerstaff's Brainstem Encephalitis in a Patient with Remote History of Guillain-Barre Syndrome: Case Presentation and Literature Review —*Preston Douglas, Ravi Garg, Michael Schneck*

P6.135 Anti-NMDA Receptor Encephalitis: A Review of Purely Psychiatric Manifestations —*Ashhar Ali, Alexander Rae-Grant*

P6.136 Diagnostic Outcomes of 'Optico-Spinal Demyelination': A 10 Year Prospective Cohort Study from the United Kingdom —*Shahd Hamid, Jay Panicker, Liene Elsone, Kerry Mutch, Kumar Das, Mike Boggild, Anu Jacob*

P6.137 Transverse Myelitis Secondary to Rickettsia Rickettsii Infection: A Case Report —*Vismay Thakker, Nadeem Khan, Rajesh Sadasivuni, Paula Rauschkolb*

P6.138 Stiff-Person Syndrome Exacerbated with Serotonin-Norepinephrine Reuptake Inhibitor Use —*David Benavides, Scott Newsome*

P6.139 A Retrospective Case Study Characterizing the Neurologic Spectrum of GAD65 Disease —*Patrick Chen, Sanjay Anandaram, Lara Ronan Kunschner*

P6.140 A Case of Dipeptidyl-Peptidase-Like Protein-6 (DPPX) Autoantibody Mediated Autoimmune Encephalitis with Prominent Abnormal Movements During Sleep —*Aaron Gusdon, Ulrike Kaunzner, Krithiga Sekar, Dara Jamieson*

P6.141 Case Report: Novel Histiocytosis with Primary Nerve and Muscle Autoimmunity —*Richa Tripathi, Ahm Huq, Huiyuan Jiang, Fatema Serajee*

P6.142 NEUROSARCOIDOSIS PRESENTING AS ACUTE INFLAMMATORY POLYNEUROPATHY —*Revathi Bhat, Roomana Ahad, Iftekhar Ahmed, Graham Lee, Shawn Khosla*

P6.143 Unihemispheric Cerebral Vasculitis: A Case Report —*Michael Johnson, George Jakubek, Jason Hawley*

P6.144 Susac Syndrome: A Case Series of 5 Argentinian Patients —*Mariano Marrodan, Lucas Alessandro, Francisco Varela, Marcela Fiol, Alejandro Kohler*

P6.145 Novel (Ovario) Leukodystrophy Related to a Mutation on Mitochondrial Alanine Amino Acyl TRNA Synthetase Gene Misdiagnosed As Multiple Sclerosis —*Dominique Rosales, Lauren Krupp*

P6.146 A Case of Primary Neurosarcoid Presenting As Foster-Kennedy Syndrome with Diabetes Insipidus —*Gary Ho, Kate Brizzi, David Meredith, Edward Laws, Aaron Berkowitz*

P6.147 Response to Immunotherapy in a Patient with Adult Onset Leigh Syndrome and T9176C MtDNA Mutation —*Miguel Chuquilin Arista, Raghav Govindarajan, Esperanza Font - Montgomery*

P6.148 A Rare Cause of Myelopathy: Anti-Ri (ANNA-2) Associated Paraneoplastic Myelopathy —*Kelly-Ann Patrice, Deanna Saylor, Tanya Williams, Ellen Mowry, Scott Newsome, John Probasco*

P6.149 A Case of Morvan Syndrome Associated with Thymic Carcinoma —*Alby Richard, Catherine Legault, Etienne De Villers-Sidani, Daniel Gendron*

P6.150 Endovascular Embolization of Hepatic Metastasis from Urothelial Carcinoma of Bladder Causes PRES —*Rajesh Sharma, Waqar Hafeez, Kushak Suchdev, Lakshmi Shankar, Wazim Mohamed*

P6.151 Erdheim Chester Disease: Report of a Case Limited to the Central Nervous System —*Lakhsman Arcot Jayagopal, McComb Rodney, Scott Koepsell, Dharani Mudugal, Kathleen Healey, Philip Bierman, Michael Summers, Neil Jouvenat, Rana Zabad*

P6.152 Central Nervous System Demyelination Secondary to Immunomodulating Therapy Mimicking Primary Central Nervous System Lymphoma: A Case Report —*Michael Nissenbaum, Mansoor Nasim, Alexis Demopoulos*

MS and CNS Inflammatory Disease: Neuromyelitis Optica Spectrum Disorders: Risk, Diagnosis, and Clinical Features

P6.153 Reclassification of a Large NMO Patient Cohort Using the 2015 NMO Spectrum Disorder Criteria —*Daniel Smith, Jeffrey Bennett, Augusto Miravalle, Teri Schreiner, John Corboy, Timothy Vollmer, Enrique Alvarez, Jace Blackburn*

P6.154 An Initial Study of Ethnic Differences in Clinical Characteristics of Neuromyelitis Optica Patients in British Columbia Canada —*Robert Carruthers, Eslam Shosha, Annie Kuan, Chantal Roy-Hewitson, Yinshan Zhao, Anthony Traboulsee*

P6.155 Pain, Fatigue and Depression in Patients with Neuromyelitis Optica Spectrum Disorder in Europe and USA —*Velina Chavarro, Maureen Mealy, Florence Pache, Anna Lacheta, Klemens Ruprecht, Alexandra Simpson, Friedemann Paul, Alexander Brandt, Michael Levy*

P6.156 Early Predictors of Relapses Versus Pseudorelapses in Neuromyelitis Optica Spectrum Disorder —*Remi Kessler, Maureen Mealy, Michael Levy*

P6.157 Risk of Venous Thromboembolic Events in Neuromyelitis Optica Patients Hospitalized for Acute Relapse —*Rebecca Straus Farber, Robert Gross, Elina Zakin, Michelle Fabian*

P6.158 NMDAR Encephalitis in a Patient with NMO: A Double Hit Without Cognitive Sequelae Following Treatment —*Janet Elgallab, Leigh Charvet, Anita Belman, Colleen Schwarz, Lauren Krupp*

P6.159 Delayed Neuromyelitis Optica Masqueraded As Post Viral Encephalomyelitis —*Ted Rothstein, Shahram Majidi*

P6.160 A Natural History Study of the Effect of Pregnancy on Aquaporin 4 Antibody-Positive Neuromyelitis Optica Spectrum Disorder —*Jyh Yung Hor, Han Bing Chow, Thien Thien Lim, Yuen Kang Chia, Kenny Tan, Chun Fai Cheah, Yee Ming Ching, Masita Arip, P. Easaw, Gaik Bee Eow*

P6.161 A Real-World Analysis of Relapses and Costs of Neuromyelitis Optica Spectrum Disorders Using a United States Administrative Claims Database —*Dana Stafkey-Mailey, Audra Boscoe, Mayank Ajmera, Josephine Mauskopf, Uchenna Iloeje, Michael Levy*

P6.162 Smoking and Disease Severity in Patients with Neuromyelitis Optica —*Francisco Varela, Fatima Pagani Cassara, Juan Ignacio Rojas, Junior Carnero, Marcela Fiol, Maria Gaitan, Celica Ysrraelit, Edgardo Cristiano, Vladimiro Sinay, Andres Villa, Jorge Correale, Mauricio Farez*

MS and CNS Inflammatory Disease: Switching and Comparator Studies II

P6.163 Comparative Efficacy and Adherence of Dimethyl Fumarate and Fingolimod in Clinical Practice at 12-Month Follow-Up —*Carrie Hersh, Samuel Cohn, Claire Hara-Cleaver, Robert Bermel, Robert Fox, Jeffrey Cohen, Daniel Ontaneda*

P6.164 Patients Who Had Highly Active RRMS and an Inadequate Response to Prior Therapy Demonstrated Durable Efficacy with Alemtuzumab: 5-Year Follow-Up of the CARE-MS II Study —*Barry Singer, Stephen Krieger, Regina Berkovich, Mark Freedman, Jan Lycke, David Margolin, Linda Kasten, Eva Havrdova*

P6.165 The Use of Autologous Haemopoietic Stem Cell Transplantation in Treating Patients with Rapidly Evolving Severe Multiple Sclerosis —*Simon Bell, Philippa Kelsey, Helen Jessop, John Snowden, Basil Sharrack*

P6.166 Rituximab Treatment of Highly Active Multiple Sclerosis (MS) After Natalizumab-Related Progressive Multifocal Leukoencephalopathy (PML) —*Cinzia Cordioli, Nicola De Rossi, Sarah Rasia, Giuseppe Santuccio, Ruggero Capra*

Thursday, April 21

Poster Session 8:30 a.m.–5:30 p.m.

P6.167 Real-World Patient Retention and Satisfaction on Fingolimod Versus Platform Injectable Disease-Modifying Therapies in Early Relapsing-Remitting Multiple Sclerosis; Results from PREFERMS —*Heidi Crayton, Brian Steingo, Deren Huang, Xiangyi Meng, Lesley Schofield, Kristen Johnson, Nadia Tenenbaum*

P6.168 Efficacy and Tolerability of Fingolimod, Dimethylfumarate, and Teriflunomide in Patients with Multiple Sclerosis: Real World Experience from a Single Center —*NgocHanh Vu, Michael Bradshaw, Harold Moses, Subramaniam Sriram, Siddharama Pawate*

P6.169 Early Clinical Efficacy of Fingolimod Compared with Interferon Beta-1a in Relapsing Multiple Sclerosis — *Barry Singer, Daniel Ontaneda, Xiangyi Meng, Kathleen Hawker*

P6.170 Comparison of Baseline Characteristics of Glatiramer Acetate Versus Fingolimod in Multiple Sclerosis Patients on Brain Volume, Cognition and Neuro-QOL Outcomes: Preliminary Analysis of a Longitudinal Observational Study —*Justin Honce, Kavita Nair, Brian Hoyt, Stefan Sillau, Brittany Wedeman, Eric Engebretson, Brandi Vollmer, Kristen Johnson, Nadia Tenenbaum, Vivian Herrera, Lisa Siconolfi, Augusto Miravalle, Jeffrey Bennett, John Corboy, Timothy Vollmer, Enrique Alvarez*

P6.171 Teriflunomide Exhibits Similar Results to Fingolimod in Number Needed to Treat Analysis —*Thomas Leist, Aaron Miller, Karthinathan Thangavelu, Steven Hass, Mark Freedman*

P6.172 Clinical Effectiveness and Impact on Patient-Reported Outcomes of Delayed-Release Dimethyl Fumarate in Relapsing Multiple Sclerosis Patients After Suboptimal Response to Glatiramer Acetate: Six-Month Interim Analysis of a Prospective, Multicenter, Open-Label, Single-Arm, Observational Study (RESPOND) —*Kiren Kresa-Reahl, Pavle Repovic, Derrick Robertson, Macaulay Okwuokenye, Leslie Meltzer, Monica Mann*

P6.173 Number Needed to Treat Analysis Comparing Teriflunomide and Injectable Disease-Modifying Therapies —*Thomas Leist, Aaron Miller, Karthinathan Thangavelu, Steven Hass, Mark Freedman*

P6.174 Predictors of Long-Term Interferon Discontinuation in Newly Diagnosed Relapsing Multiple Sclerosis — *Marcello Moccia, Raffaele Palladino, Roberta Lanzillo, Vincenzo Brescia Morra*

P6.175 Prevalence and Factors Leading to Unemployment in Immunomodulatory Treated and Untreated MS Patients in Poland - Preliminary Report —*Dorota Koziarska, Danuta Nocon, Slawomir Wawrzyniak, Alina Kułakowska, Monika Adamczyk-Sowa, Król Joanna, Małgorzata Szcześniak, Przemyslaw Nowacki*

P6.176 Differences in Work Productivity Activity Impairment in MS Patients Initiated on Oral DMF Versus Interferon Beta or Glatiramer Acetate in Europe and the US —*Ravi Iyer, Eddie Jones, Michael Edwards, Andrew Lee, James Pike*

P6.177 Is Severity of Adverse Events Affected by The Dose and Frequency of Glatiramer Acetate Treatment of Relapsing-Remitting Multiple Sclerosis? —*Francisco Zagmutt, Ying Wu, Augusto Grinspan, Scott Kolodny, Sanjay Gandhi*

P6.178 Real-World Assessment of Relapse Rates in Patients with Multiple Sclerosis Newly Initiating Subcutaneous Interferon β-1a Vs Oral Disease-Modifying Drugs —*Chris Kozma, Frederick Munschauer, Amy Phillips*

P6.179 Change in the Therapeutic Management of Multiple Sclerosis with Selective Immunosuppressants and Its Influence on the Clinical Course of the Disease —*Jose E Meca-Lallana, Rocio Hernandez-Clares, Ester Carreón-Guarnizo, María Cardán-Sánchez, Cristina Sánchez-Vizcaíno Buendía, Judith Jimenez-Veiga, Adelaida Leon-Hernández, Gema Salgado-Cecilia, Jose Javier Martín-Fernández*

P6.180 Natalizumab, First Therapy to Demonstrate a Significant Impact on Multiple Sclerosis Disease Severity — *Francois Jacques, Victorine Sikati Foko, Jacynthe Fortin*

P6.181 Real World Relapse Rates of Glatiramer Acetate Patients Switching to Fingolimod or Interferon Beta-1a Versus Remaining on Glatiramer Acetate — *Yunfeng Li, Tara Nazareth, Huanxue Zhou, Kristen Johnson, John Ko, Kathleen Hawker, Vivian Herrera, Rahul Sasane*

P6.182 Longitudinal Analysis of Anti-JCV Antibody Index in Natalizumab-Treated Multiple Sclerosis Patients —*Iain McGurgan, Andrew Lockhart, Michael Hutchinson, Christopher McGuigan*

P6.183 RRMS Patients Switching from SC IFNB-1a to Alemtuzumab in the CARE-MS I and II Extension Study Have a Reduced Rate of Brain Volume Loss — *Frederik Barkhof, Jeffrey Cohen, Alasdair Coles, Edward Fox, Hans-Peter Hartung, Eva Havrdova, Krzysztof Selmaj, David Margolin, Karthinathan Thangavelu, Douglas Arnold*

P6.184 Safety and Efficacy of Alemtuzumab After Switching from Fingolimod: A German Multi-Center Experienceover One Year —*Ralf Linker, Antonios Bayas, Anna Constantinidis, Sebastian Doerck, Kerstin Hellwig, Christoph Kleinschnitz, Ingo Kleiter, De-Hyung Lee, Mathias Maurer, Ralf Gold*

P6.185 Safety of Using Disease-Modifying Therapy Post-Alemtuzumab Treatment in Patients with Active Relapsing-Remitting Multiple Sclerosis in the Alemtuzumab Clinical Development Program —*Ann Bass, Keith Edwards, Bhupendra Khatri, Krzysztof Selmaj, David Margolin, Linda Kasten, Per Sørensen*

P6.186 Patients with RRMS Who Had an Inadequate Response to a Prior Therapy Demonstrated Durable Improvement in EDSS Functional Systems Scores Over 5 Years with Alemtuzumab — *Christopher LaGanke, Regina Berkovich, Oscar Fernandez, Edward Fox, Heinz Wiendl, David Margolin, Karthinathan Thangavelu, Gavin Giovannoni*

P6.187 Evaluating the Safety and Efficacy of Transitioning Multiple Sclerosis Patients from Natalizumab to Rituximab —*James Stark, Armistead Williams, Saud Sadiq*

P6.188 4 Years PANGAEA: Long Term Data on Effectiveness and Safety from Patients on Natalizumab Switching to Fingolimod in Real World —*Tjalf Ziemssen, Holger Albrecht, Judith Haas, Luisa Klotz, Michael Lang, Chrstoph Lassek, Stephan Schmidt, Bjorn Tackenberg, Christian Cornelissen*

P6.189 Predictive Value of Early MRI Measures for Long-Term Disease Activity in Patients with Relapsing-Remitting Multiple Sclerosis Receiving IFN β-1a SC Tiw or IFN β-1a IM Qw: Post Hoc Analyses of the EVIDENCE Study —*Patricia Coyle, Mark Freedman, Fernando Dangond, Juanzhi Fang, Anthony Reder*

P6.190 MRI Frequency and No Evidence of Disease Activity Status Among Patients with RRMS Receiving IFN β-1a SC Tiw or IFN β-1a IM Qw: Post Hoc Analyses of EVIDENCE —*Anthony Reder, Mark Freedman, Juanzhi Fang, Fernando Dangond, Patricia Coyle*

P6.191 Effects of Multiple Sclerosis Therapies on the Gut Immune System — *Katja Thomas, Tjalf Ziemssen, Judith Eisele, Heinz Reichmann*

P6.192 Dimethyl Fumarate-Associated Lymphopenia in Clinical Practice: Implications for Disease Modifying Therapy Selection —*Jessica Robb, Megan Hyland, Lawrence Samkoff*

Behavioral and Cognitive Neurology: Assessment Tools

P6.193 Cerebrovascular Risk Factors and Depression: Report from National Ambulatory Medical Care Survey 2002-2009 —*Hossam Egila, Basit Rahim, Muhammad Suri, Adnan Qureshi*

P6.194 Validation of the AWOL Tool: A Delirium Prediction Rule —*Ethan Brown, S. Josephson, Vanja Douglas*

P6.195 The Neuropsychiatric Inventory Questionnaire (NPI-Q2): Comparative Data in Alzheimer Disease, Lewy Body Dementia, and Frontotemporal Degeneration —*Lydia Hatfield, Jennifer Taylor, James Bateman, Matthew Harris, Daniel Kaufer*

P6.196 Effect of a Comprehensive Inpatient Delirium Care Pathway on Incidence and Length of Stay —*Ethan Brown, S. Josephson, Noriko Anderson, Mary Reid, Vanja Douglas*

P6.197 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*

P6.198 Perioperative Rivastigmine Patch Reduces Occurrence of Postoperative Delirium in Elderly at Risk for Dementia —*Youn Young Chul, Ha Yong-Chan, Byung-Sun Choi*

P6.199 Is Olanzapine Predicted to Have Antidepressant Effects on Juvenile Rats in the Forced Swim Test (FST)? — *Alicia Cho, Erica Stanley, David Middlemas*

P6.200 Lesion-Related Delusional Misidentification Syndromes: A Review of All Reported Cases —*Richard Darby, Sashank Prasad*

P6.201 Voxel-based Morphometry of Patients with Schizophrenia and Schizoaffective Disorders —*Johnathon Shaffer, Jeiran Choupan, Bryan Mowry, Zhengyi Yang, David Reutens*

P6.202 Involvement of Subthalamic Neurons in Valence Processing and Impulsivity in Parkinson's Disease —*Justin Rossi, Jonathan Shute, Rene Molina, Enrico Opri, Oscar Castellanos, Corinna Peden, Kelly Foote, Aysegul Gunduz, Michael Okun*

Behavioral and Cognitive Neurology: Brain-behavior Correlations

P6.203 Delayed Post Hypoxic Leukoencephalopathy Following Benzodiazepine and Opiate Overdose: A Case Report and Review of Disease Pathophysiology —*Dionne Swor, Frank Sharp, Glen Jickling, Benjamin Koo*

P6.204 Verbal Memory and Processing Speed Deficits in Middle-Aged Individuals with Type 2 Diabetes Mellitus — *María Beatriz Jurado, Michael Palacios, Ibeth Regato-Ugalde, Carlos Cevallos, Ximena Gamboa, Daniel Moreno-Zambrano, Carlos Peñaherrera, María Carolina Duarte, Leonardo Tamariz, Rocío Santibáñez*

P6.205 Cognitive Reserve in Primary Age-Related Tauopathy —*Kyra Jefferson-George, Edward Lee, David Wolk, Corey McMillan*

P6.206 Digital Versus Paper Self-Administered Gerocognitive Examination (SAGE) —*Douglas Scharre, Shu-Ing Chang, Haikady Nagaraja, Nicole Vrettos*

P6.207 Reduced Tactile Pressure Perception with Age —*Tigran Kesayan, Damon Lamb, John Williamson, Adam Falchook, Kenneth Heilman*

P6.208 Hyperfamiliarity in Dementia and Mild Cognitive Impairment —*Simon Kang Seng Ting, Wahab Hameed, Kathryna Kwok, Christopher Gabriel, Kinjal Doshi, Sze Yan Tay, Stephanie Fook-Chong, Sharon Koh, Way Inn Koay*

P6.209 Encephalitis in the Elderly: NMDA-R Encephalitis Mistaken for Dementia —*Ashhar Ali, Eric Baron*

P6.210 Knowledge Translation in Right Brain Rehabilitation: A Feasibility Study of Prism Treatment After Acute Stroke —*A. Barrett, Peii Chen, Kimberly Hreha, Florence Alban, Cynthia Gocon, Christopher Santos, Kevin Lawless, Jennifer LaRosa*

Behavioral and Cognitive Neurology: Clinical Syndromes

P6.211 Title: Neuropsychological Functions In People with Juvenile Myoclonic Epilepsy-A Hospital Based Study —*Kiran Bala, Preeti Singla, Vibha Sharma*

P6.212 Associations Among Rapid Bedside Anti-Saccade Assessment and Cognitive Function in Children with Craniopharyngioma —*Raja Khan, Heather Conklin, Ashford Jason, Kathryn Russell, Zsila Sadighi, Thomas Merchant*

P6.213 A Cognitive Screening Tool for ALS Patients: The ALS-FTD-Cog, Preliminary Results —*Emma Beeldman, Rosanne Govaarts, Joost Raaphorst, Rob De Haan, Yolande Pijnenburg, Ben Schmand, Marianne De Visser*

P6.214 Adjunctive Extended-Release Molindone (SPN-810) to Manage Impulsive Aggression in Children with Attention Deficit/Hyperactivity Disorder (ADHD) Receiving Optimized Stimulant Monotherapy and Behavioral Therapy —*Scott Brittain, Jennifer Stocks, Janet Johnson, Tesfaye Liranso, Robert Findling*

P6.215 A Pilot Study of Adaptive Brain Gaming in Cognitively Impaired Older Adults —*Jordan Stiver, Matt Wynn, Peter Pressman, Rowan Saloner, Shubir Dutt, Joel Kramer*

P6.216 Transient Global Amnesia: Clinical Features and Recurrence Prognostic Factors —*Lucas Alessandro, Ismael Calandri, Marcos Fernandez Suarez, Lucila Heredia, Mauricio Farez, Ricardo Allegri*

P6.217 Aphasia, Apraxia and Neglect Due to Stroke in the Light of the "Dual-Loop-Model" —*Cornelius Weiller, Lena-Alexandra Beume, Andrea Dressing, Dorothe Kümmerer, Markus Martin, Mariachristina Musso, Roza Umarova, Roza Umarova, Magnus Vry, Michel Rijntjes*

P6.218 An Elderly Woman Found Wandering Naked in the Street: Cerebral Amyloid Angiopathy-Related Inflammation Causing Acute Reversible Altered Mental Status (A Case Report) —*Rahul Shah, Li Xaingping*

P6.219 Cerebral Amyloid Angiopathy Presenting As New Onset Refractory Status Epilepticus(NORSE), Complicated by Psychosis, Dysautonomia and Posterior Reversible Encephalopathy Syndrome(PRES) —*Apoorv Prasad, Sameer Sharma, Elena Schmidt, Julius Latorre*

P6.220 Validation of a Nurse-Based Delirium Screening Tool for Hospitalized Patients —*Anita Hargrave, James Bourgeois, Jesse Bastiaens, S. Josephson, Julia Chinn, Melissa Lee, Jacqueline Leung, Vanja Douglas*

Aging and Dementia: Neuropathology

P6.221 High Prevalence of Co-Morbidity in Pathologically Confirmed Alzheimer Disease in a Canadian Regional Brain Biobank —*Michael Marnane, Shervin Mortazavi, Jennifer Li, Angela Kim, Connor Keller, Ian R.A. Mackenzie, Ging-Yuek Hsiung*

P6.222 Vascular Pathology Is Associated with Rate of Cognitive Decline Independent of AD Pathology (Einstein Aging Study) —*Ali Ezzati, Cuiling Wang, Richard Lipton, Dorothea Altschul, Mindy Katz, Dennis Dickson, Carol Derby*

P6.223 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*

P6.224 Pathologies Underlying Longitudinal Cognitive Decline in Old Age —*Madeline Nguyen, Nora Mattek, Hiroko Dodge, Randy Woltjer, Diane Howieson, Lisa Silbert, Scott Hofer, Jeffrey Kaye, Andrea Piccinin, Deniz Erten-Lyons*

P6.225 Neuropathological Influences on the Clinical Phenotype of Synucleinopathies —*David Irwin, Murray Grossman, Daniel Weintraub, Howard Hurtig, John Duda, Oscar Lopez, Julia Kofler, Peter Nelson, Randall Woltjer, Joseph Quinn, Jeffrey Kaye, James Leverenz, Debby Tsuang, Katelan Longfellow, Walter Kukull, C. Dirk Keene, Thomas Montine, Cyrus Zabetian, John Trojanowski*

P6.226 Globular Glial Tauopathy Presenting As Semantic Variant PPA —*Jonathan Graff-Radford, Keith Josephs, Joseph Parisi, Dennis Dickson, Caterina Giannini, Bradley Boeve*

P6.227 Neuroinflammation Promotes Reduced Neurogenesis in Patients with Amyotrophic Lateral Sclerosis (ALS) —*Sebastian Peters, Sabrina Kuespert, Eva Zitzelsperger, Rosmarie Heydn, Markus Riemenschneider, Ludwig Aigner, Tim-Henrik Bruun, Ulrich Bogdahn*

P6.228 Microglial Morphology Is Not Altered by the Presence of RAN Proteins in the Cerebellar Cortex of ALS Patients —*Matthew Cykowski, Suzanne Powell, Joan Appel, Ellen Chang, Stanley Appel*

P6.229 Quantitative Analysis of Detergent-Insoluble Brain Proteinaceous Aggregates and Their Correlation with Semi-Quantitative Staging —*Ho-Yann Jong, Deniz Erten-Lyons, Hiroko Dodge, Jeffrey Kaye, Lisa Silbert, Randall Woltjer*

Aging and Dementia: Lewy Body Dementia and Synucleinopathies

P6.230 Accuracy of Clinical Diagnosis of Dementia with Lewy Bodies: A Systematic Review and Meta-Analysis —*Simona Arcuti, Giovanni Rizzo, Massimiliano Copetti, Maria Alessandria, Rodolfo Savica, Giancarlo Logroscino*

P6.231 Clinical Features Predict Lewy Body Pathology and Differentiate Between Different Pathologies: A Clinical-Pathologic Prospective Study —*Rodolfo Savica, Thomas Beach, Hent Joseph, Geidy Serrano, Lucia Sue, Brittany Dugger, Holly Shill, Erika Driver-Dunckley, John Caviness, Sandra Jacobson, Shyamal Mehta, Christine Belden, Kathryn Davis, Marwan Sabbagh, Charles Adler*

P6.232 AD-Related Pathology and Gray Matter Atrophy Rates in Probable Dementia with Lewy Bodies —*Lidia Sarro, Matthew Senjem, Emily Lundt, Scott Przybelski, Timothy Lesnick, Bradley Boeve, Val Lowe, David Knopman, Giancarlo Comi, Massimo Filippi, Ronald Petersen, Clifford Jack, Kejal Kantarci*

P6.233 Olfactory Function in Amnestic and Non-Amnestic Mild Cognitive Impairment Compared with Alzheimer's Disease Dementia and Dementia with Lewy Bodies —*Erin Golden, Jeremiah Aakre, Emily Lundt, David Jones, Jonathan Graff-Radford, Rodolfo Savica, Tanis Ferman, Erik St. Louis, Michael Silber, Mary Machulda, Julie Fields, Neill Graff-Radford, David Knopman, Ronald Petersen, Bradley Boeve*

P6.234 Initial Patterns and Correlates of Quality of Life in Dementia with Lewy Bodies —*Melissa Armstrong, Erin Monari, Leonardo Almeida, Nikolaus McFarland, Irene Malaty, Michael Okun*

P6.235 An Investigation of White Matter Hyperintensities in Probable Dementia with Lewy Bodies —*Lidia Sarro, Christopher Schwarz, Jonathan Graff-Radford, Nirubol Tosakulwong, Robert I. Reid, Scott Przybelski, Timothy Lesnick, Samantha Zuk, Bradley Boeve, Tanis Ferman, David Knopman, Giancarlo Comi, Massimo Filippi, Ronald Petersen, Clifford Jack, Kejal Kantarci*

P6.236 Clinical-Imaging-Pathologic Analysis in Seven Patients with Dementia: Correlations with Ioflupane SPECT Findings —*Bradley Boeve, Val Lowe, Kejal Kantarci, Joseph Parisi, Dennis Dickson, Tanis Ferman, David Jones, Jonathan Graff-Radford, Rodolfo Savica, Mary Machulda, Julie Fields, Christina Dheel, Laura Allen, Daniel Drubach, Erik St. Louis, Michael Silber, Clifford Jack, David Knopman, Ronald Petersen*

P6.237 Autonomic Dysfunction in Dementia with Lewy Bodies, a Case Series —*Melissa Heiry, Melissa Cortez*

P6.238 Expression of Proteinopathies in the Skin: Alpha-synuclein in Cells Derived from the Neural Crest and in Parkinson Disease —*Ildefonso Rodriguez-Leyva, Maria Jimenez-Capdeville, Erika Chi-Ahumada, William Eng, Sami Saikaly, Juan Carrizales-Rodriguez, Juan Castanedo-Cazares, Robert Norman*

P6.239 Assistant Director —*Tracy Cole, Katrina Paumier, Hien Zhao, Andreas Weihofen, Holly Kordasiewicz, Eric Swayze*

Frontotemporal Dementia and Amyotrophic Lateral Sclerosis

P6.240 Clinical and Neuroanatomical Characteristics of Individuals with Frontotemporal Dementia and the C9orf72 Repeat Expansion —*Jaya Padmanabhan, Sara Makaretz, Christina Caso, Kathleen Kelly, Michael Brickhouse, Diane Lucente, Bradford Dickerson*

P6.241 Clinical Markers of Frontal Tau Pathology in 4-Repeat Tauopathies —*Jessica Weinstein, Corey McMillan, David Irwin, John Trojanowski, Murray Grossman*

P6.242 Emotion Network Breakdown Relates to Baseline Autonomic Dysfunction in Behavioral Variant Frontotemporal Dementia —*Virginia Sturm, Jesse Brown, Alice Hua, Sandy Lwi, Howard Rosen, Bruce Miller, Robert Levenson, William Seeley*

P6.243 Major Depression Disorder with a Late Age-of-Onset As a Biological Model to Detect the Brain Features of Depression in Alzheimer's Disease and Behavioral Variant of Frontotemporal Dementia —*Elisa Canu, Federica Agosta, Gorana Mandic-Stojmenovic, Ana Munitza, Tanja Stojkovic, Massimiliano Copetti, Elka Stefanova, Dusica Lecic Tosevski, Vladimir Kostic, Massimo Filippi*

P6.244 Cognition and Social Cognition in Amyotrophic Lateral Sclerosis in an Argentinean-Cohort. Preliminary Data —*Federico Nahas, Bruno de Ambrosi, Ismael Calandri, Fernanda Tapajoz, Patricia Zanuzo, Martin Nogues, Ricardo Allegri*

P6.245 Cognitive Reserve Is Protective of Cognition and Frontal Grey Matter in Amyotrophic Lateral Sclerosis —*Katerina Placek, Kylie Ternes, Christopher Olm, Lauren Massimo, John Woo, Lauren Elman, Leo McCluskey, David Irwin, Murray Grossman, Corey McMillan*

P6.246 Frontotemporal Dementia (FTD) with Late-Onset Obsessive-Compulsive Symptoms (OCs): An Individual-Patient Data Meta-Analysis —*Rodrigo Santibanez, Amir Sepehry, Howard Feldman, Ging-Yuek Hsiung*

P6.247 Progression of Brain Atrophy and Cognitive Impairment in Hereditary Frontotemporal Lobar Degeneration —*Salvatore Spina, Howie Rosen, Adam Staffaroni, Luke Bonham, Suneth Attygalle, John Kornak, Joel Kramer, Bruce Miller, Suzee Lee*

P6.248 Conversational Laughter in the Behavioral Variant of Frontotemporal Dementia —*Peter Pressman, Michaela Simpson, Maria Luisa Mandelli, Edoardo Spinelli, Suzie Shdo, Bruce Miller, Jennifer Merrilees, Maria Gorno Tempini, Robert Levenson*

P6.249 Myelin Oligodendrocyte Basic Protein and Longitudinal Decline in Behavioral-Variant Frontotemporal Degeneration —*Lauren Massimo, Lior Rennert, Sharon Xie, Vivianna Van Deerlin, David Irwin, Corey McMillan, Murray Grossman*

Electrophysiology in Neuromuscular Diseases

P6.250 Clinical and Electrophysiological Characteristics of MuSK-MG Patients in Korea —*Mun Kyung Sunwoo, Sook Young Roh, Hyun-Jeung Yu, Eun Hye Jeong, Byung-Su Kim, Hyun-soon Jang*

Thursday, April 21

Poster Session 8:30 a.m.–5:30 p.m.

P6.251 Cutaneous Silent Period in Inherited Disorders of Decreased Pain Perception —*Joel Gutierrez, Yamila Remon, Lucy Norcliffe-Kaufmann, A Leis, Horacio Kaufmann*

P6.252 Neuromuscular Consequences of Diabetic Neuropathy: Motor Unit Loss, Transmission Instability, and Alterations in Muscle Form and Function —*Matti Allen, Timothy Doherty, Charles Rice, Kurt Kimpinski*

P6.253 Contact Heat Evoked Potentials in Painful Autoimmune Neuropathy (PAIN) —*Camila Pupe, Eduardo Davidovich, Felipe Vianna, Caroline Amaral, Karina Pires, Carlos Bruno Nogueira, Nobuhiro Yuki, Osvaldo Nascimento*

P6.254 Lower Motor Neuron Involvement in ALS Assessed by Motor Unit Number Index (MUNIX): Long-Term Changes and Reproducibility —*Davood Fathi, Bahram Mohammadi, Reinhard Dengler, Sebastian Böselt, Susanne Petri, Katja Kollewe*

P6.255 Electrophysiological Characterization of Hereditary Neuropathy with Liability to Pressure Palsies (HNPP) —*Sachiko Takahashi, Marvin Chum, Kurt Kimpinski*

P6.256 Retrospective Study on the Electrophysiological Patterns of Immune-Mediated Vasculitic Neuropathies —*Joy Vijayan, Shivangi Pandya, Yee Cheun Chan*

P6.257 Electrical Impedance Myography in Duchenne Muscular Dystrophy: A Longitudinal Study —*Seward Rutkove, Kush Kapur, Jim Wu, Craig Zaidman, Amy Pasternak, Lavanya Madabusi, Heather Szelag, Tim Harrington, Adam Pacheck, Sung Yim, Basil Darras*

P6.258 Comparison of Skin Mechanoreceptor Function and Sensation After Nerve Repair —*Christian Krarup, Birgitta Rosen, Michel Boeckstyns, Allan Ibsen, Simon Archibald*

P6.259 Utility of Blink Reflex and Brain MRI for Microvascular Decompression Surgery for Trigeminal Neuralgia —*Nancy Bello, Mark Ross*

Electrophysiology in Normal Controls and CNS Disorders

P6.260 Physical Exam Findings Predict Poor Baseline Somatosensory Evoked Potentials During Intraoperative Monitoring: A Retrospective Chart Review —*Jonathan Chen, Andres Gonzalez*

P6.261 Qualitative Review of Quantitative EMG Results Can Improve Needle EDX Studies —*Divisha Raheja, Zachary Simmons, Daniel Stashuk*

P6.262 Role of Neuronavigation for Training and Improvement of Accuracy During Transcranial Magnetic Stimulation —*Rahul Remanan, Janki Panchal, Dale Lange*

P6.263 Discrepancy Between Behavioral and Electrophysiological Measurements in a Longitudinal Study of Motor Unit Recovery —*Christopher Wier, Kajri Sheth, Lisa Miller, Patrick Heilman, William Arnold, Stephen Kolb*

P6.264 Can the VEMP Score Predict a Disability Progression in Patients with Multiple Sclerosis? —*Tereza Gabelić, Magdalena Krbot, Ivan Adamec, Mario Habek*

P6.265 Superficial Peroneal Nerve (SPN) Study in Children —*Saahith Pochiraju, Sumit Verma*

P6.266 Electrical Impedance Myography of Face and Neck Muscles: Establishing Normative Values —*Courtney McIlduff, Sung Yim, Adam Pacheck, Tom Geisbush, Seward Rutkove*

P6.267 Utilization Rates of Transcranial Electric Motor Evoked Potential (tceMEP) Monitoring During Extradural Cervical, Thoracic and Lumbosacral Spine Surgery in Large and Small Centers —*Jeffrey Cohen, Anthony Sestokas, Eric Tesdahl, Ashwini Sharan, Bikash Bose, Jeremy McCallister, Samuel Weinstein*

P6.268 WITHDRAWN

Pain and Palliative Care

P6.269 Several Atypical Presentations of TS-HDS Associated Neuropathies — *Scott Lucchese*

P6.270 Developing and Evidence-Based Palliative Care Curriculum for Neurology Resident Trainees —*Jonathan Yeung Laiwah, Amrita Sarpal, Valerie Schulz, Teneille Gofton*

P6.271 The Severity Spectrum in Persistent Complex Regional Pain Syndrome (CRPS), Palliation with Ongoing Hyperbaric Oxygen Therapy (HBOT), and the Role of Serial Photo-Documentation —*Robert Knobler*

P6.272 Botulinum Toxin Type A in Severe Diabetic Neuropathy —*Mohamed Gomaa, Hossam Egila, Ayman Abd El-naby, Mohamed Shehab-Eldin*

P6.273 Pain As the Presenting Symptom of Primary Progressive Multiple Sclerosis —*Salman Zahoor, Hirsh Kaveeshvar, Vivek Loomba*

P6.274 Pilot Study of Elevated Plasma Renin As a Biomarker Towards the Precision Medicine of a Novel Pharmacotherapy for Patients with Neuropathic Pain/ Complex Regional Pain Syndrome (CRPS) —*Lei Zhou, Enrique Aradillas-Lopez*

P6.275 Multimodal Inpatient Treatment for Patients with Chronic Non-Cancer Pain and Co-Morbid Substance Use Disorder —*Peter Przekop, Mark Haviland, Allison Przekop, Keiji Oda*

P6.276 Treatment Initiation Timing and Healthcare Costs in Newly Diagnosed Patients with Fibromyalgia —*Feride Frech, Chunlin Qian, Mugdha Gore, Qiaoyi Zhang*

P6.277 WITHDRAWN

P6.278 A Novel Interdisciplinary Palliative Care Clinic for Advanced Parkinson's Disease and Parkinsonian Syndromes —*Keiran Tuck, Lisa Mann, Tony Borcich, Jenny Wilhelm, Linda Bryans, Julie Carter*

P6.279 Early Palliative Medicine Consultation Decreases Length of Stay in Hospitalized, Acutely Ill Neurologic Patients —*Caroline Ha, Kim Yen Thi Vu, Casey Vasta, Layne Lillie, Christina Luther, Jenna Snow, Angela Lauritano, Wamda Ahmed, Huimahn Choi*

Neuro-oncology: Primary CNS Lymphoma

P6.280 Treatment of Recurrent Primary Central Nervous System Lymphoma Patients with Anti-PD1 Antibody Nivolumab —*Lakshmi Nayak, Fabio Iwamoto*

P6.281 Incorporating Intra-Thecal Rituximab into Chemotherapy Regimens for CNS Lymphoma —*Yoshie Umemura, Antonio Omuro*

P6.282 Defining Relapse Patterns in Primary CNS Diffuse Large B-Cell Lymphoma: A Multicenter Study —*Nancy Wang, Camilo Fadul, Melissa Davis, Lakshmi Nayak, Tracy Batchelor*

P6.283 Recurrent Primary CNS Lymphoma Presenting with Central Neurogenic Hyperventilation —*Yazmin Odia, Teri Kreisl*

P6.284 Neurolymphomatosis and Anti-MAG Mononeuritis Multiplex in a Patient with Two Hematologic Malignancies — *Ahmad Daher, Jennifer Johnson, Carlos Kamiya-Matsuoka, Sheeba Thomas, Karin Woodman*

P6.285 The Effect of Chemotherapy on Peripheral Nervous System in Patients with Lympho/Myeloproliferative Disorders —*Slawomir Michalak, Marcin Rogoziewicz, Malgorzata Wiszniewska, Pawel Wiszniewski, Wojciech Kozubski*

P6.286 Central Nervous System Lymphoma in a Young Immunocompetent Adult with Active Mononucleosis —*Brian Honrahan, Jan Drappatz, William Delfyett*

P6.287 Retrospective Study of 48 Cases of Primary Central Nervous System Lymphoma (PCNSL) —*Lucas Alessandro, Jose Pastor Rueda, Federico Carpani, Juan Blaquier, Sofia Tognarelli, Francisco Varela, Naomi Arakaki, Blanca Diez, Alejandro Muggeri*

P6.288 Bing-Neel Syndrome in Waldenstrom's Macroglobulinemia Treated with Ibrutinib: The Central Nervous System As a Sanctuary Site? — *Amy Chan, Joachim Baehring, Kevin Becker*

P6.289 Are Serial Cerebrospinal Fluid Examinations Useful in Evaluating Hematological Malignancy in Neurological Disease? —*Eugene Scharf, Hanson Curtis, Mark Keegan*

P6.290 Rapidly Progressive Polyneuropathy from Leukimic Infiltration Mascarading As Cervical Disc Herniation —*Supriya Mahajan, Hatim Attar, Fajun Wang, Steven Gunzler*

Neuro-oncology: Gliomas

P6.291 Chemoradiotherapy with Concomitant and Adjuvant Temozolomide As Initial Treatment for Low Grade Gliomas —*Elizabeth Neil, Kathryn Beal, Antonio Omuro*

P6.292 Salvage Therapy with Bendamustine for Temozolomide Refractory Bevacizumab Naïve Recurrent Anaplastic Gliomas: A Prospective Phase II Trial —*Marc Chamberlain, Howard Colman, Jeffrey Raizer*

P6.293 Bevacizumab in Recurrent High-Grade Gliomas: A Canadian Perspective —*Mary Jane Lim Fat, Manjula Maganti, Catherine Maurice, Warren Mason*

P6.294 PD-1 Inhibitors for Recurrent High Grade Glioma (HGG) —*Laura Donovan, Lauren Schaff, Andrew Lassman, Tony Wang, Richard Carvajal, Naiyer Rizvi, Alyson Fox, Fabio Iwamoto*

P6.295 Malignant Glioma with Leptomeningeal Metastasis: A Case Series —*Sunhee Kim, Christina Amidei, Roberto Sica, Martin Nicholas*

P6.296 Is More Chemotherapy Better? Prolonged Survival in Patients with Newly Diagnosed Glioblastoma Receiving More Than Six Cycles of Adjuvant Temozolomide. —*Jacob Ruzevick, Emily Silgard, Carrie Graham, Maciej Mrugala*

P6.297 Clinical Course of Adult Patients with Thalamic Gliomas —*Karan Dixit, Jessica Schulte, Priya Kumthekar, Benjamin Liu, Borko Jovanovic, Irene Helenowski, Jeffrey Raizer*

P6.298 Extracranial Glioma - A Rare Complication of High-Grade Glial Tumors (HGG) —*Martha Neagu, Deborah Forst, Tracy Batchelor, Scott Plotkin*

P6.299 Gliomatosis, to Be or Not to Cerebri? —*Na Tosha Gatson, Carlos Kamiya Matsuoka, Yvo Rodriguez-Linares, Clement Pillainayagam, David Cachia, Ahmad Daher, Tzehping Chi, Jeffrey Weinberg, Ivo Tremont, Gregory Fuller, John De Groot, Monica Loghin*

P6.300 Extraneural Metastasis of High-Grade Gliomas: Systematic Review of Literature and a Discussion of the Roles of Circulating Tumor Cells and Immune System in Gliomagenesis —*Ahmad Daher, Rimas Lukas, Na Tosha Gatson, Martin Nicholas, John De Groot*

P6.301 Glioblastoma Multiforme Following HIV and WNV Infections —*Alyx Porter, Scott Spritzer, Marie Grill*

P6.302 Sensitivity Analysis of Permittivity and Conductivity on Tumor Treating Fields Therapy for Recurrent Glioblastoma —*Edwin Lok, Van Hua, Eric Wong*

Neuro-ophthalmology/Neuro-otology

P6.303 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*

P6.304 Diffuse Color Discrimination As a Marker of Afferent Visual System Dysfunction in Amyotrophic Lateral Sclerosis —*Lindsay Boven, Qin Li Jiang, Heather Moss*

P6.305 Ocular Coherence Tomography Macular Volume Predicts Walking Speed in Patients with Multiple Sclerosis — *Meagan Seay, Youran Fan, Robert Bermel*

P6.306 New Digital, Psychophysical Flicker Test for the Diagnosis of Acute Optic Neuritis —*Gorm Pihl-Jensen, Susanne Trauzettel-Klosinski, Jette Frederiksen*

P6.307 Effect of Venous Sinus Stenting on Intracranial Pressure in Patients with Idiopathic Intracranial Hypertension — *Marc Dinkin, Cristiano Oliveira, Alexandra Vagasi, Athos Patsalides*

P6.308 Intrasubject Longitudinal Change in Topographic Visual Evoked Potentials in Patients with Relapsing Multiple Sclerosis —*Martin Hardmeier, Florian Hatz, Yvonne Naegelin, Christian Schindler, Ludwig Kappos, Margitta Seeck, Christoph Michel, Peter Fuhr*

P6.309 The Dizziness Handicap Inventory (DHI) Does Not Correlate with Vestibular Dysfunction —*Chun Wai Yip, Michael Strupp*

P6.310 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*

P6.311 Cortical Functional Modifications Following Optic Neuritis — *Netta Levin, Noa Raz, Tamir Ben-Hur, Tal Benoliel*

P6.312 Characteristics of Benign Positional Vertigo Tested on the Epley Omniax Chair —*Miriam Welgampola, Corinna Lechner, Michael Halmagyi*

P6.313 Proposed Diagnostic Criteria for Cerebellar Ataxia with Neuropathy and Vestibular Areflexia Syndrome (CANVAS) —*David Szmulewicz, Leslie Roberts, Catriona McLean, Hamish MacDougall, Michael Halmagyi, Elsdon Storey*

P6.314 Ocular Myasthenia Gravis Onset: Diagnosis, Treatment and Course of the Disease —*Jose Diaz Perez, Cristina Sanchez-Vizcaino Buendia, Rocio Hernandez Clares, Ester Carreon Guarnizo, Maria Cerdan Sanchez, J. Javier Martin Fernandez, Jose Meca Lallana*

P6.315 Clinicopathologic Correlation in Lateral Medullary Stroke with Transient Ocular Motor Findings Mimicking Peripheral Vestibular Dysfunction —*Jorge Kattah, Ali Saber Tehrani, Meena Gujrati, Sigrun Roeber, David Newman-Toker, Anja Horn-Bochtler*

P6.316 Comparison of the Measurement of Optic Nerve Sheath Diameter(ONSD) with B Scan and MRI As a Surrogate for Patients with Idiopathic Intracranial Hypertension(IIH) —*Mohamed Kilji, Avathvadi Srinivasan, Kesavamurthy Bhanu, Balasubramanian Samivel, Lakshmi Ranganathan*

P6.317 Capturing the Efferent Side of Vision in Multiple Sclerosis: New Data from a Digitized Rapid Number Naming Task —*Clotilde Hainline, John-Ross Rizzo, Todd Hudson, Weiwei Dai, Birkemeier Joel, Rachel Nolan, Lisena Hasanaj, Laura Balcer, Steven Galetta, Ilya Kister, Janet Rucker*

P6.318 REM Behavior Disorder - A Longitudinal Investigation of Contrast Sensitivity Visual Acuity in Individuals with and Without Parkinson's Disease — *Ziyan Song, Marvin Dieujuste, Elliot Merin, Garrett Barr, David Huang, Charles Maitland*

P6.319 An Unexpected Case of Biopsy-Proven Amyloid-Beta Related Angiitis — *Clotilde Hainline, Janet Rucker, David Zagzag, Yvonne Lui, Laura Balcer, Steven Galetta*

P6.320 Idiopathic Intracranial Hypertension - Demographics, Presenting Symptoms and Management —*Sheena Murdoch, Catriona Gribbin, Sarah Martin, Dawn Buchan, Pushkar Shah*

P6.321 Geotropic Direction Changing Positional Nystagmus: Canalolithiasis Vs Light Cupula —*Ana Bisonni, Guillermo Videla, Jorge Norscini, Edgardo Cristiano*

P6.322 What Are the Differences Determined by Optic Coherence Tomography and Neuroopthalmological Parameters in Optic Neuritis Due to Neuromyelitis Optica and Multiple Sclerosis? —*Fethi Idiman, Mahmut Kaya, Egemen Idiman, Derya Kaya, Onur Bulut, Hatice Limoncu*

Child Neurology and Developmental Neurology: Other

P6.323 Atypical Mitochondrial Encephalopathy Mimicking Pediatric Onset Demyelinating Disease: The Role of Next Generation Sequencing Panels — *Tamara Castillo-Trivino, Miguel Lafuente, Thais Armangue, David Otaegui, Itxaso Marti*

P6.324 Arachnoid Cyst with Intracystic Hemorrhage in a Child: Need For Vigilance and Prompt Treatment —*Imama Naqvi, Angelos Katramados, Rajkumar Agarwal*

P6.325 Clinical Factors That Predict Optimal Neurodevelopment in Very Preterm Infants —*Gabrielle Salmers, Vann Chau, Ruth Grunau, Anne Synnes, Kenneth Poskitt, Steven Miller*

P6.326 Age of IndependentSitting Posture Acquisition for Children with Myelomeningocele —*Caroline Amaral, Marco Orsini, Camila Pupe, Bruno Pessoa, Raquel Custodio Da Silveira, Ana Carolina Andorinho, Olivia De Souza, Karina Pires, Osvaldo Nascimento*

P6.327 Treatment of Leukoencephalopathy with Cerebral Calcifications and Cysts with Bevacizumab: A Case Report —*Alexander Fay, Allison King, Janice Brunstrom*

P6.328 Quantitative EMG in Duchenne Muscular Dystrophy —*Jenny Lin, Durga Shah, Courtney McCracken, Sumit Verma*

P6.329 Gait Assessment in Children with Known Genetic Neurodevelopmental Disorders with and Without Autism Spectrum Disorders —*Sylvie Goldman, Sally Dunaway, Carly Mueller, Amelia Boehme, Greysi Sherwood, Adrianna Stahl, Audrey Zoeller, Laurel Abbruzzese, Ashwini Rao, Jacqueline Montes*

P6.330 Trends in Cerebral Palsy in Saskatoon, Canada in the Last Four Decades —*Katherine Sawicka, Katie Rooks, Anne Dzus, Jonathan Norton*

P6.331 Not All Generic Concerta Is Created Equal: Comparison of OROS Versus Non-OROS Methylphenidate ER for the Treatment of ADHD —*Michelle Lally, Mary Kral, Andrea Boan*

P6.332 Prevalence and Relative Timing of Autism Diagnosis in Children with Common Pediatric Genetic Disorders — *Rahe Hiraldo-Delgado, William Young, Apryl Susi, Cade Nylund, Gregory Gorman, Elizabeth Hisle-Gorman, Christine Erdie-Lalena*

P6.333 Cranial Ultrasonography in Term Infants and Stroke: When Is It Useful? —*Lileth Joy Mondok, Neil Friedman*

P6.334 Effects of Vagal Nerve Stimulation in Alternating Hemiplegia of Childhood —*Ashley Helseth, Lyndsey Prange, Sujay Kansagra, Carrie Muh, Mohamad Mikati*

P6.335 Patient Predictors of Hospitalization for Pediatric Migraine — *Payal Patel, Dylan Thibault, Allison Willis*

P6.336 Clinical and Radiographic Features of a Pediatric Case of Tumefactive Demyelination —*Michael Lopez, Timothy Lotze*

P6.337 Transabdominal Insonation of Fetal Basilar Artery: A Feasibility Study — *Muhammad Shah Miran, Adnan Qureshi, Jan Degenhardt, Roland Ax-Fliedner, Thomas Kohl*

P6.338 Early Presentation of Familial Cerebral Cavernous Malformation (FCCM) in an Infant - A Case Report — *Gurcharanjeet Kaur, Mary Andriola, Louis Manganas*

P6.339 C19orf12 Gene Related Neurodegeneration Mimicking Juvenile ALS —*Gyula Acsadi, Cristian Ionita, Basil Darras*

P6.340 Medically Unexplained Symptoms Associated with Adverse Childhood Events —*Jorina Elbers, Bianca Batista*

Clinical Epilepsy

P6.341 Orbitofrontal Epilepsy: Case Series and Review of Literature —*Imane Chibane, François Dubeau, Olivier Boucher, Yen Tran Phuoc, Rick McLachlan, Mark Sadler, Richard Desbiens, Lionel Carmant, Dang Nguyen*

P6.342 Aura As a Predictor of Prognosis in Mesial Temporal Sclerosis Surgery —*Joana Parra, Pedro Correia, Ana Gouveia, Rute Teotónio, Conceição Bento, Francisco Sales*

P6.343 Burden of Seizure Clusters on Patients with Epilepsy and Caregivers — *Joseph Sirven, James Wheless, Patricia Penovich, Janice Buelow*

P6.344 Evaluation of Positive and Negative Predictors of Clinical Outcomes Among Patients with Autoimmune Epilepsy: Meta-Analysis —*Divyanshu Dubey, Zehra Farzal, Ryan Hays, Steven Vernino*

P6.345 Study of Adult Patients with Refractory Seizures of Focal Onset in a Tertiary Care Hospital —*Shalin Shah, Priyank Shah, Mayank Patel, Pranav Joshi, Sudhir Shah*

P6.346 Early Electroencephalogram (EEG) Findings in Posterior Reversible Encephalopathy Syndrome (PRES) — *Nicholas Child, Jeffrey Britton*

P6.347 Reasons for Prolonged Length of Stay in the Epilepsy Monitoring Unit — *Shannon Seals, Sandra Dewar, Zulfi Haneef, Dawn Eliashiv, John Stern, Brian Moseley*

P6.348 Ictal and Postictal Clinical Assessment by a Registered Nurse in the Epilepsy Monitoring Unit:"How Well Do They Do? What Should We Do Differently to Improve the Clinical Assessment?" — *Thandar Aung, Laura Lehnhoff, Tin Aung, Madona Plueger*

P6.349 Surgery for Epilepsy Patients with Encephalocele; a Case Series and Review of Literature —*Sana Ghafoor, Michael Sperling, Ashwini Sharan*

P6.350 Time to Switch or Add on of an AED in Newly Diagnosed Epilepsy Populations: A US Database Analysis — *Linda Kalilani, David Thurman, Sandra Helmers, R Faught, Hyunmi Kim, Tracy Durgin*

P6.351 Hypothermia Associated with Clobazam Use in Adult Epilepsy —*Angela Gauthier, Imran Quraishi, Richard Mattson*

P6.352 The Treatment Journey in Epilepsy: Part 2:Tipping Points in Surgical Decision-Making —*Sandra Dewar, Lizza Ranit, Huibrie Pieters*

P6.353 Status Epilepticus: A Comparative Analysis of Second Line Treatment —*Agustina Tamargo, Alejandro Thomson, Mara Gonzalez Toledo, Analia Calle, Fatima Pagani Cassara, Jos Molina Melendres, Blas Couto, Patricia Acosta, Maria Elena Fontela, Alfredo Thomson*

P6.354 Clinical Course of Patients with Epileptiform Discharges on Electroencephalogram: Experience from a Tertiary Referral Centre —*Albi Chalissery, Grace Crotty, Brian McNamara*

P6.355 How Safe Is Pre-Admission Fast Antiepileptic Drug Taper? —*Praveen Vemuri, Aashka Shah, Deepti Zutshi, Aashit Shah, Maysaa Basha*

P6.356 Baclofen Neurotoxicity: A Metabolic Encephalopathy Susceptible to Exacerbation by Benzodiazepine Therapy —*James Triplett, Nicholas Lawn, John Dunne*

Thursday, April 21

Poster Session 8:30 a.m.–5:30 p.m.

P6.357 A Pilot Double-Blind Trial Using Verapamil As Adjuvant Therapy for Refractory Seizures —*Felippe Borlot, Robert Wither, Anfal Ali, Nicky Wu, Flavia Verocai, Danielle Andrade*

P6.358 Budget Impact of Perampanel for Adjunctive Treatment of Primary Generalized Tonic Clonic Seizures (PGTCS) and Partial-Onset Seizures (POS) in Patients with Uncontrolled Epilepsy in the US —*Gabriel Tremblay, Victoria Barghout, Vardhaman Patel, Wan Tsong, Anna Forsythe, Jiyoon Choi*

P6.359 Comparing Perceptions of the Impact of Seizure Clusters Among Clinicians, Patients, and Caregivers —*James Wheless, Patricia Penovich, Janice Buelow, Joseph Sirven*

P6.360 Characteristics of Clobazam and Non-ClobazamTreated Lennox-Gastaut Syndrome Patients: A Retrospective Cohort Study —*John Stern, Clement Francois, Augustina Ogbonnaya, Tasneem Lokhandwala, Pamela Landsman-Blumberg, Amy Duhig, Vivienne Shen*

Epilepsy/Clinical Neurophysiology: SUDEP and Clinical Case Reports

P6.361 Experiences with Premorbid SUDEP Discussion Among Participants in the North American SUDEP Registry (NASR) —*Kyra Doumlele, Jeffrey Buchhalter, Laura Crandall, Orrin Devinsky, Elizabeth Donner, Tracy Dixon-Salazar, David Fowler, Dale Hesdorffer, Cyndi Wright, Daniel Friedman*

P6.362 The SUDEP Risk Inventory: Association with Postictal Generalized EEG Suppression —*Joshua Martin, Christopher DeGiorgio, Brian Moseley*

P6.363 Heart Rate Variability Changes and SUDEP in Treatment Resistant Epilepsy —*Leyla Baysal Kirac, Nail Guven Serbest, Erdi Sahin, Hava Ozlem Dede, Lale Mehdikanova, Candan Gurses, Aysen Gokyigit, Nerses Bebek, Ahmet Kaya Bilge, Betul Baykan*

P6.364 Knowlegde About Sudden Unexpected Death in Epilepsy and First Aid for Seizures Among Health Personnel, Non-Epilepsy Patients, Persons Related to Epilepsy Patients, and General Population in Olancho, Honduras —*Gabriela Guifarro, Reyna Duron, Allan Caceres, Eduardo Nunez, Amy Lagos, Julia Bailey*

P6.365 Two Definite Sudden Unexpected Deaths in Epilepsy in a Family with a DEPDC5 Mutation —*Fabio Nascimento e Silva, Felippe Borlot, Patrick Cossette, Berge Minassian, Danielle Andrade*

P6.366 Case Report: Gelastic Seizures Arising from the Parietal Lobe —*Anna-Marieta Moise, Linda Leary, Lola Morgan, Alexander Papanastassiou, Charles Szabo*

P6.367 Eating Epilepsy, a Rare and Under-Recognized Reflex Epilepsy —*Yu-Ting Chen, Kinshuk Sahaya, Ricky Lee, Jay Hinkle, L Greenfield*

P6.368 Electroencephalographic Observations of Medical Marijuana for Idiopathic Generalized Epilepsy: A Case Report —*Sanjeev Sivakumar, Deepti Zutshi, Navid Seraji-Bozorgzad, Aashit Shah*

P6.369 Cefepime-Related Encephalopathy and Associated EEG Activity —*Emily Johnson, Nirma Carballido Martinez, Eva Ritzl*

P6.370 Juvenile Myoclonic Epilepsy and Narcolepsy: A Series of Three Cases —*Puja Joshi, Annapurna Poduri, Sanjeev Kothare*

Movement Disorders: Parkinson's Disease II

P6.371 Cancer in Parkinsons Disease in a Collection of the Mayo Clinic —*Pawel Tacik, Sadie Curry, Zbigniew Wszolek, Audrey Strongosky, Shinsuke Fujioka, Michael Heckman*

P6.372 Comparing Quality of Parkinson Disease Care in a Comprehensive Clinic to Specialist Care —*Camille Vaughan, Lindsay Prizer, Felicia Goldstein, Lynn-Marie Trotti, Adriana Hermida, Stewart Factor*

P6.373 Genetic Risk of Parkinson Disease in the General Population —*Sirwan Darweesh, Vincentius Verlinden, Hieab Adams, André Uitterlinden, Albert Hofman, Bruno Stricker, Cornelia Van Duijn, Peter Koudstaal, Mohammad Ikram*

P6.374 PR Prolongation Is Correlated with Reduced Cardiac 123I-MIBG Uptake in Parkinson's Disease —*Hitoshi Mochizuki, Nobuyuki Ishii, Yoshikazu Ugawa, Akitoshi Taniguchi, Kazutaka Shiomi, Masamistu Nakazato*

P6.375 Pulmonary Function Tests in Patients with Parkinson's Disease: A Case Control Study —*Lukman Owolabi, Mansur Nagoda, Musa Babashani*

P6.376 Delaying Aging Is Neuroprotective in Parkinson's Disease —*Jason Cooper, Dylan Dues, Katie Spielbauer, Emily Machiela, Megan Senchuk, Jeremy Van Raamsdonk*

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 Leichliter*

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, Síle 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 McDonell, 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 Staufen1 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*

AAN 2016 Annual Meeting

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

Thursday, 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, Urvish Patel, Vishal Jani, Syed Hussain, Sonal Mehta*

S48: Neuro-ophthalmology/ Neuro-otology

1:00 p.m. S48.001
Perioperative Ischemic Optic Neuropathy (polON) 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, Iacopo 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, Lisena 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, Véronique 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 Heinzlef, Jerome De Seze, Gilles Defer, Frederic Sedel, Olivier Gout*

2:15 p.m. S49.006
Evidence That the Anti-LINGO-1 Monoclonal Antibody BIIB033 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 Antilepileptic 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

2:20p.m.–3:00 p.m.
Issues in the Pediatric Patient
Elaine C. Wirrell, MD

Meeting Schedule

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

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*

Ex Real World of Neurology **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 SIP **Sports-related Concussion: Vision and Vestibular Insights** 146

I14 **Practical Approaches to Narrowing the Epilepsy Treatment Gap** 147

1:00 p.m.–5:30 p.m. Integrated Neuroscience Session

I13 SIP 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, MSECE, 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. **I13.001 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. **I13.002 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. **I13.003 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. **I13.004 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.

I13.001 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*

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I13.003 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*

I13.004 Evaluating Concussion Recovery Through Oculomotor Testing —*Melissa DiFabio, Jessie Oldham, Ryan DeWolf, Thomas Kaminski, Thomas Buckley*

I13.005 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*

I13.006 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*

I13.007 Initial Validation of a Novel Neuro-Ophthalmologic Set-Shifting Saccade Task —*Adam Simon, Stephen Martino, David Devilbiss*

I13.008 No Changes in Postural Control or Near-Point Convergence Following an Acute Bout of Soccer Heading —*Jaclyn Caccese, Thomas Buckley, Thomas Kaminski*

I13.009 To Study Risk of Seizures After Mild Traumatic Brain Injury in General Population —*Suresh Kumar, Pooja Shah, Martin Bringham*

I13.010 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*

I13.011 Multivariate Models of Biosensor Data to Actively Assess Sports Concussion and Mild Traumatic Brain Injury —*Adam Simon, David Devilbiss*

I13.012 Changes in Balance Error Scoring System (BESS) Scores and Center-of-Pressure Following Concussion —*Jaclyn Caccese, Thomas Buckley, Ryan DeWolf, Thomas Kaminski*

I13.013 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. **I13.005 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. **I13.006 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. **I13.007 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. **I13.008 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**

I14 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. **I14.001 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. **I14.002 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. **I14.003 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. **I14.004 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.

I14.001 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*

I14.002 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*

I14.003 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*

I14.004 Use of a Digital Self-Management Platform for Improving Access in Epilepsy Patients —*John Hixson*

I14.005 Prediction of Incident Epilepsy After First Seizure in Children with HIV/AIDS in Botswana —*David Bearden, Dennis Dlugos*

I14.006 Healthcare Resource Utilization Among Persons with Epilepsy Treated by Different Healthcare Providers —*Sandra Helmers, Shaloo Gupta, Russell Knoth*

I14.007 Stigma Reduction Efforts: Evaluating a Multi-Faceted Intervention Aimed at Teachers in Zambia — *Masharip Atadzhanov, Natalie Thornton, Elwyn Chomba, Edward Mbewe, Gretchen Birbeck*

I14.008 Epilepsy Prevalence, Treatment Gap, and Stigma in Western Kenya —*Dilraj Sokhi, Monica Diaz, Anthony Ngugi, Tom Solomon, Eric Fevre, Ana-Claire Meyer*

I14.009 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*

I14.010 Comparing Anti-Epileptic Drug Preferences Between Neurologists and Patients: Results from a National Survey and Discrete Choice Experiment —*Alan Ettinger, Fulton Velez, John Carter*

I14.011 Factors Contributing to Diagnostic Delay in Psychogenic Non-Epileptic Spells —*Jessie Grewal, Jacquelyne Cios*

I14.012 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*

I14.013 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. **I14.005 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. **I14.006 Data Blitz**
Healthcare Resource Utilization Among Persons with Epilepsy Treated by Different Healthcare Providers —*Sandra Helmers, Shaloo Gupta, Russell Knoth*

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. **I14.007 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. **I14.008 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**

Thursday, April 21

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-Naive 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 Traboulsee*

4:00 p.m. S51.003
Treatment-Naive 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-Naive 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 Limmroth, 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 Limmroth, 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 Lubetzki, Hans-Peter Hartung, Xavier Montalban, Bernard Uitdehaag, Martin Merschhemke, Bingbing Li, Norman Putzki, 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, Arezou Bayat, Mark Skopin, Mittilesh 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 Sorets, 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, Kan 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 Arehart, 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-IFNα)—*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 Asahchop, 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, Sukalaya Lerdlum, Jared Narvid, Mantana Pothisri, Isabel Allen, Shelly Krebs, Bonnie Slike, Peeriya Prueksakaew, 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*

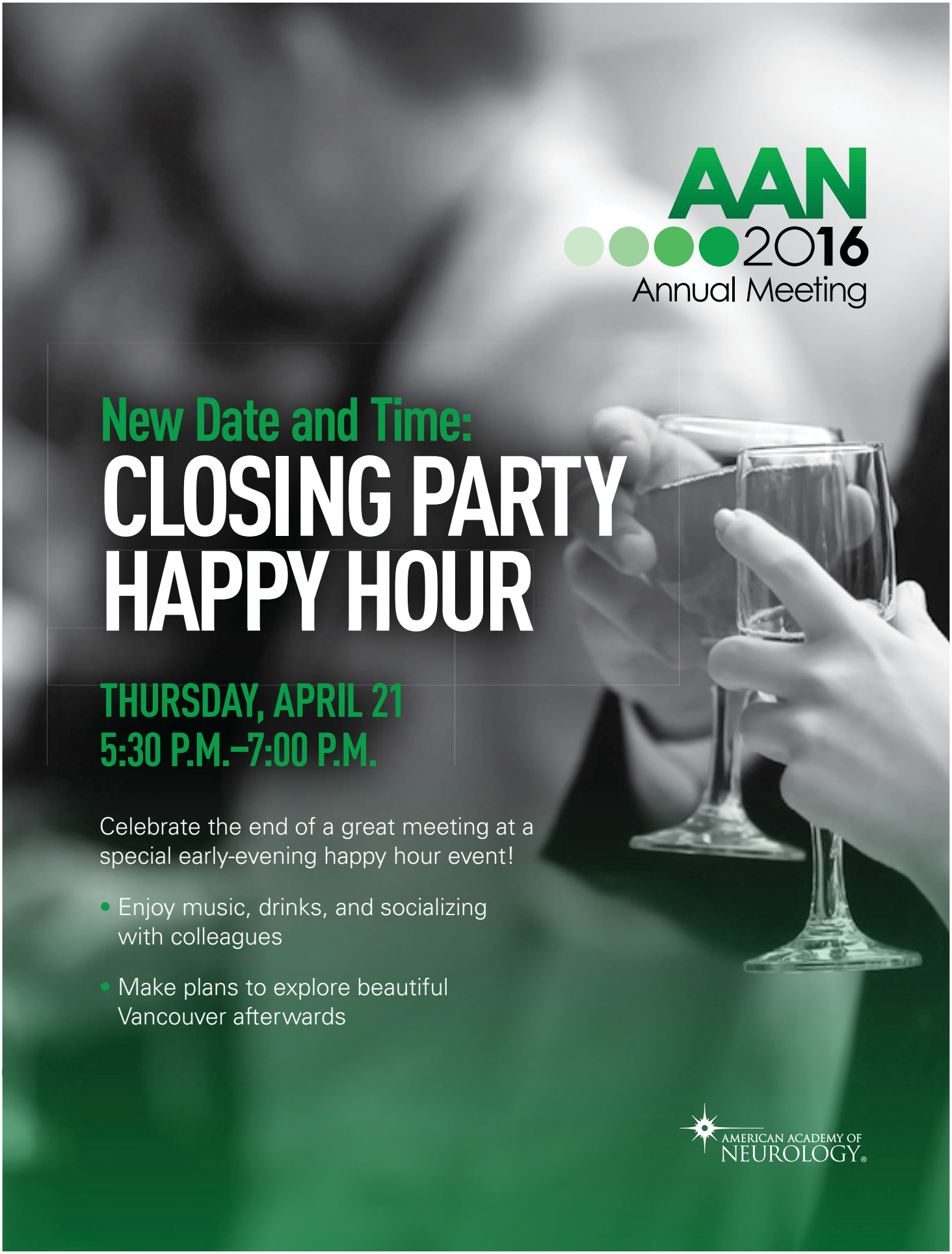
5:15 p.m. S53.008
Clinical, Biological and Radiological Characteristics of Patients with Rocky Mountain Spotted Fever Encephalitis—*Michael Bradshaw, Kelsey Ivey, Francesca Bagnato, NgocHanh Vu, Sumit Pruthi, Karen Bloch*

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


AAN
2016
Annual Meeting
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
AMERICAN ACADEMY OF NEUROLOGY®

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

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

Ex Learning Lab
Ex Excitement of Discovery
Ex Health & Wellness
Ex Navigating Your Career: #Next
Ex Real World of Neurology
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 SIP Neurocritical Care and Neuroscience Crossroads: From Bench To Bedside 126
C207 Stroke in Young Adults and Women

Epilepsy/Clinical Neurophysiology (EEG)

C11 $ 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 $ 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 SIP 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 $ 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

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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

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I8 Emerging Technologies for Neurological Research and Care: #Emerging-Tech #Neurologist @AAN 85
I9 SIF Sleep, Clocks, and Alzheimer's Disease 104
C201 Neurocysticercosis and Globalization
I14 Practical Approaches to Narrowing the Epilepsy Treatment Gap 147

Headache

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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 SIF Interventional Treatment of Migraine and Other Headache Disorders
I3 SIF 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 SIF Redefining Parkinson's Disease: Challenging the Past and Preparing For the Future
C17 Paroxysmal Movement Disorders
C31 Hyperkinetic Movement Disorders: Videodiagnosis and Treatment
S5 Movement Disorders: Parkinson's Disease and Atypical Parkinsonian Syndromes: Biomarkers 37
I1 SIF Redefining Parkinson's Disease: Novel Approaches to Understanding Its Mechanisms and Developing Treatments 38
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

S27 Movement Disorders. Essential Tremor and Tardive Dyskinesia . . . 90
C147 $ Clinical Usefulness of Botulinum Toxin for Spasticity Skills Workshop *(registration required)*
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 $ Clinical Uses of Botulinum Toxin for Headache Skills Workshop *(registration required)*
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C212 Overview of Parkinson's Disease
C215 Deep Brain Stimulation Management I
C226 Deep Brain Stimulation Management II

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C32 Multiple Sclerosis Overview: Clinical Advances I
C44 Multiple Sclerosis Overview: Clinical Advances II
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C61 Morning Report: Multiple Sclerosis
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C101 Controversies in Multiple Sclerosis Therapy
C109 Pediatric MS: Diagnosis and Treatment
I7 The Human Connectome: Implications for Clinical Neurology . . . 84
I8 Emerging Technologies for Neurological Research and Care: #Emerging-Tech #Neurologist @AAN . . . 85
S24 Clinical Outcomes and Treatment Strategies in Multiple Sclerosis . . . 86
S29 Pediatric Multiple Sclerosis . . . 90
C144 Multiple Sclerosis Therapy: Symptom Management
I10 Remyelination and Repair in Multiple Sclerosis . . . 106
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S41 Advanced Neuroimaging in Multiple Sclerosis . . . 124
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C206 Neuro Flash: MRI and Multiple Sclerosis
S45 MRI and OCT Outcomes in Multiple Sclerosis . . . 132
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S49 Clinical Trials in Multiple Sclerosis I . . . 144
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Neuro Trauma, Critical Care, and Sports Neurology

C38 $ Sports Concussion Skills Workshop I *(registration required)*
C49 $ Sports Concussion Skills Workshop II *(registration required)*
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S11 Neuro Trauma and Sports Neurology . . . 44
C79 Emergency Neurology Topics: Status Epilepticus and Pediatric Neurology Emergencies
C92 Emergency Neurology Topics: Acute/Subacute Weakness and Subarachnoid Hemorrhage
C97 Severe TBI: From ICU to Rehabilitation
S23 Section Topic Controversies: The Role of Rest vs. Active Intervention Following Concussion . . . 80
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C138 Neurologic Intensive Care II
C149 Sports Neurology: Non-concussion Overview I
C153 Neurologic Intensive Care III
C165 Sports Neurology: Non-concussion Overview II
C166 SIF Acute Neurological Emergencies
C179 Sports Concussion and Other Mild Concussive Injuries I
I11 SIF Neurocritical Care and Neuroscience Crossroads: From Bench To Bedside . . . 126
C192 Sports Concussion and Other Mild Concussive Injuries II
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C222 Critical Care EEG Monitoring
I13 SIF Sports-related Concussion: Vision and Vestibular Insights . . . 146

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I9 SIF Sleep, Clocks, and Alzheimer's Disease . . . 104

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C45 Peripheral Neuropathy III

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C67 Therapy of Neuromuscular Disease
C78 Evaluation and Management of Autonomic Disorders I
I4 Advances in Acquired and Genetic Muscle Diseases . 60
C91 Evaluation and Management of Autonomic Disorders II
S18 Autonomic Disorders 66
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
S36 Update in Muscle Disorders 110
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
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C228 Neuromuscular Junction Disorders II

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C20 The Palliative Care Guide in Neurology: What You Must Know About Neuro-oncology
C34 Case Studies: Neurologic Consultations in Cancer Patients I
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C102 Neuro-oncologic Emergencies
S34 Neuro-oncology 107
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C199 Navigating Primary Brain Tumors for the Neurologist II

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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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C119 Common Spine Disorders II: Treatment
C187 Rehabilitation in Neurology

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

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

Ex Learning Lab
Ex Excitement of Discovery
Ex Health & Wellness
Ex Navigating Your Career: #Neuro
Ex Real World of Neurology
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 $ 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 $ 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 $ 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 $ Research Career Development Symposium: How to Be Successful in Academic Neuroscience *(registration required)*
C5 $ 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 SIF New and Emerging Therapeutic Options in Migraine and Other Headache Disorders 58
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, and the Role of Education
C115 $ 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 $ 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 $ The Most Important Tool in Your Black Bag: Gallup StrengthsFinder™ Assessment II *(registration required)*

Sleep

C16 How to Interpret Sleep Studies
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 SIF Sleep Across the Lifecycle: What Neurologists Need to Know
C145 Circadian Rhythm Disorders
I9 SIF 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

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, PPNP-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 Deacones 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...™

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... 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... 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... 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... 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/NeuroscienceIs

AMERICAN ACADEMY OF NEUROLOGY®

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.

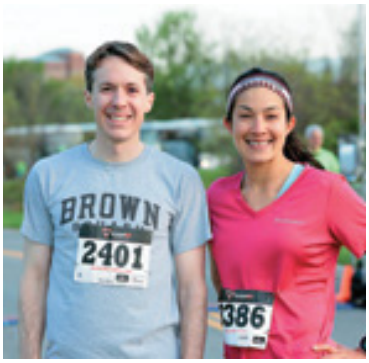
Attend the opening reception to mingle with fellow attendees and preview the latest products and services available in the neurologic industry. Light hors d'oeuvres and beverages will be served. The exhibits will be open at this time.

Sponsored by: ACADIA® Pharmaceuticals

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 »*

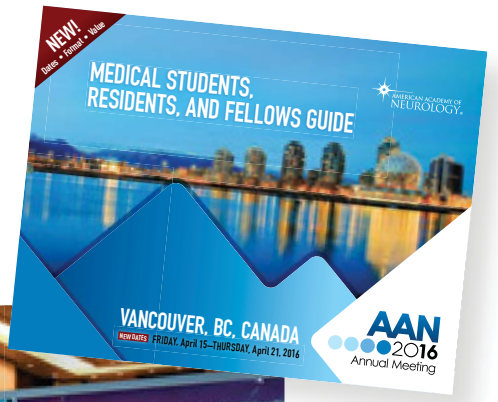
**Skills Workshops, Maintenance of Certification Exam Preparation Course, Between Venus and Mars: How Great Leadership Adopts Traits from the Best of Both Genders, Improving Your Leadership Skills: A Practical Approach, Women in Leadership, Research Career Development Symposium, The Most Important Tool 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

AAN 2016 Annual Meeting | On Demand

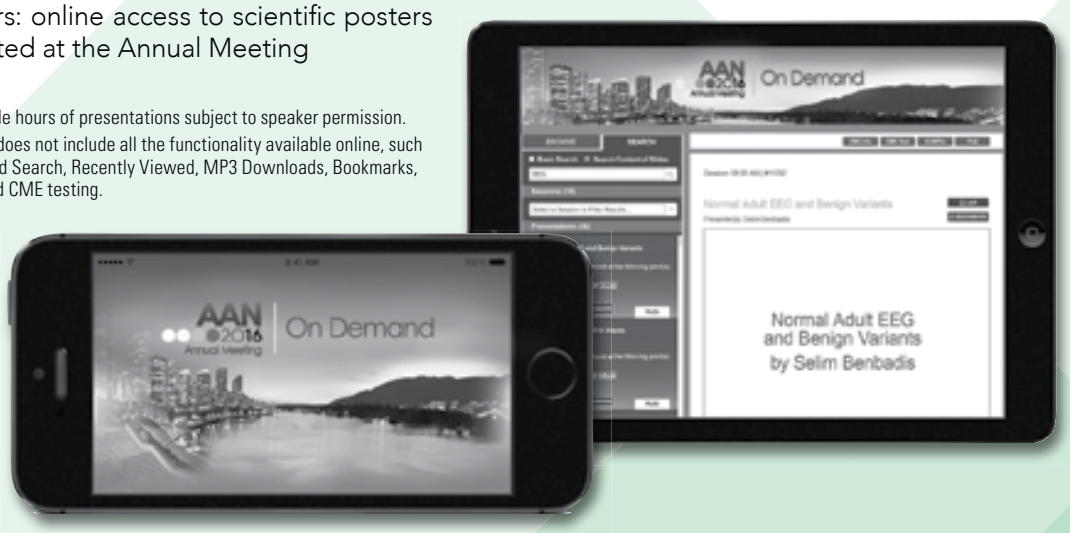
Enhance your Annual Meeting experience with Annual Meeting On Demand.

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!

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

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*

Syllabi USB Pricing

	Syllabi On Demand (USB upgrade)
MEMBER, SENIOR, & HONORARY	$39
NONMEMBER	$59
JUNIOR AND NON-NEUROLOGIST MEMBER	$29

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.

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

AMERICAN ACADEMY OF NEUROLOGY®

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.

For more information, visit *AAN.com/view/AMinfo*.





Thank You

AMERICAN ACADEMY OF NEUROLOGY®

2016 Industry Roundtable Members*

Industry Roundtable support enables the American Academy of Neurology to improve patient care through their support of neuroscience research, education, and patient outreach.

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*Commitments as of February 13, 2016

68th Annual Meeting Exhibitors

as of February 4, 2016

AbbVie
AbbVie Inc
ACADIA Pharmaceuticals Inc.
Accredo Specialty Pharmacy
ACTRIMS
Acumed Medical Ltd.
Alexion Pharmaceuticals
Allergan, Inc.
Alnylam Pharmaceuticals
Alzheimer's Association
Ambry Genetics
American Board of Psychiatry & Neurology
American Association of Neuromuscular & Electrodiagnostic Medicine
American Headache Society
American Professional Agency, Inc.
American Society for Apheresis (ASFA)
Amgen
Aprecia Pharmaceuticals Company
Athena Diagnostics, Inc.
Avanir Pharmaceuticals Medical Affairs
Avanir Pharmaceuticals, Inc
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Carle Physician Group
Catalyst Pharmaceuticals
CEFALY Technology
Centura Health
Cleveland Clinic
Clinical Neurology News.Com
Community Health Systems
CompHealth
ContextMedia:Health
Corinthian Reference Lab
CorTechs Labs
CoxHealth
Cytokinetics Inc.
Decker Intellectual Properties
Demos Medical Publishing
DENT Neurologic Institute
DriveABLE
Duke Clinical Research Institute
Dystonia Medical Research Foundation
Eisai, Inc.
Electrical Geodesics. Inc. (EGI)
Elsevier
EMD Serono
European Academy of Neurology (EAN)
g.tec medical engineering GmbH
GE Healthcare
Geisinger Health System
GeneDx
Genentech
Genzyme - a Sanofi Company
Global Neuro-Diagnostics
Hayes Locums
HCPLive
Hospital Corporation of America (HCA)
Houston Methodist Neurological Institute
Hydrocephalus Association
icometrix
Impax Pharma
Impeto Medical
INSYS Therapeutics
Intermountain Healthcare
International Essential Tremor
International Parkinson and Movement Disorder Society (MDS)
International Society for Frontotemporal Dementias
Ipsen
Jackson & Coker
Jan Medical Inc.
Jari Electrode Supply
Johns Hopkins EpiWatch
KabaFusion LLC
KEGO Diagnostic Solutions
KRONUS, Inc.
LearningRx
Lewy Body Dementia Association
Lilly for Better Health
LivaNova / Cyberonics
LocumTenens.com
Lundbeck
Magstim, Inc.
Mallinckrodt Pharmaceuticals
Marathon Pharmaceuticals
Mayo Clinic
Mayo Medical Laboratories
MedDay
Medical Motion, LLC
MediMaxTech
MedLink Corporation
Medtronic
Merz Neurosciences
Mitsubishi Tanabe Pharma
MNG Laboratories
Monteris Medical
MotherToBaby Pregnancy Studies Conducted By OTIS
Mount Sinai Health System
Mountain States Health Alliance
Multigon Industries, Inc.
Multiple Sclerosis Foundation
Mylan Inc.
National ALS Registry
National Ataxia Foundation
National Headache Foundation
National Institute of Neurological Disorders and Stroke (NINDS)
Natus Neurology Incorporated
Neurocrine Biosciences
Neuro-Immunology Laboratory-UBC
Neurology Reviews
Neuronetrix
Neurovirtual
Nihon Kohden America
Novartis Pharmaceuticals Corporation
Novocure
Ochsner Health System
Optovue
Otometrics/Audiology Systems
Oxford University Press
Parkinson Voice Project
Pikeville Medical Center, Inc.
Piramal Imaging
Practical Neurology
PracticeLink
Prevention Genetics
ProtoKinetics Gait Analysis Walkways
Providence Health & Services
RDL Reference Laboratory, Inc
Receptos, Inc.
Riverside Health System
Rochester Regional Health
RosmanSearch, Inc.
RSC Diagnostic Services
Safe Passage Diagnostics
Sage Therapeutics
SCIM— Stratified Care Initiative for Migraine
SoutheastHEALTH
Spectrum Health
Springer
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February 24, 2016

Early Registration Deadline:
March 24, 2016

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LEADERSHIP UNIVERSITY

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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69th AAN Annual Meeting
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EXHIBIT 1013

Ganaxolone Administered Intravenously Prevents Behavioral Seizures and Promotes Survival in the Rat Lithium-Pilocarpine Model of Status Epilepticus

Michael S. Saporito,[1] Donna Henry,[1] Melissa L. Barker-Haliski,[2] Cameron S. Metcalf,[3] Julia Tsai,[1] Albena Patroneva,[1] and Steve White.[2]

[1]Marinus Pharmaceuticals, Radnor, PA [2]University of Utah, Salt Lake City, UT [3]Neuroadjuvants, Inc. Salt Lake City, UT.

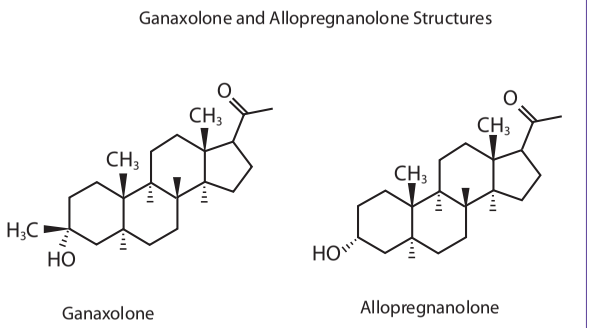
OVERVIEW

- Convulsive status epilepticus (CSE) can be modeled in experimental animals by administration of lithium and pilocarpine. Rats subjected to experimental CSE are refractory to benzodiazepine if treatment is initiated ≥ 15 min after seizure onset; thus modeling a treatment resistant form of CSE. This treatment resistant form of the disease is considered to be a clinically translatable model of the disease.
- Ganaxolone (GNX) is a CNS-selective modulator of gamma-aminobutyric acid A ($GABA_A$). It acts as a positive allosteric modulator of the $GABA_A$ receptor with anticonvulsant and anxiolytic effects **(Figure 1).**
- The current studies were conducted to evaluate the dose- and time-dependent therapeutic potential of intravenously, (IV) administered GNX for the treatment of CSE in this clinically translatable rodent model. Moreover, these studies measured behavioral seizures and survival, and complement studies that measured seizures by EEG activity.

METHODS

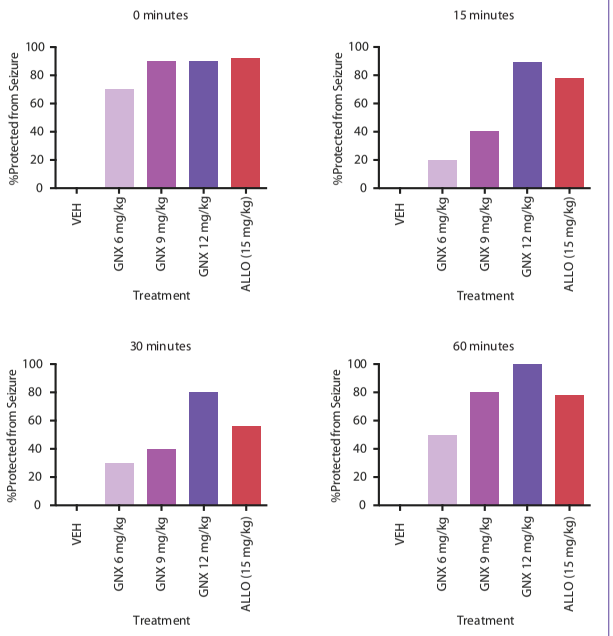
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- GNX and ALLO were formulated to a concentration of 2.5 mg/mL in 30% Captisol. Dose volumes were adjusted so that animals received GNX dose-levels of 6, 9, 12 mg/kg and an ALLO dose-level of 15 mg/kg.

Figure 1. Ganaxolone is a synthetic analog of the endogenous neurosteroid GABA modulator allopregnanolone



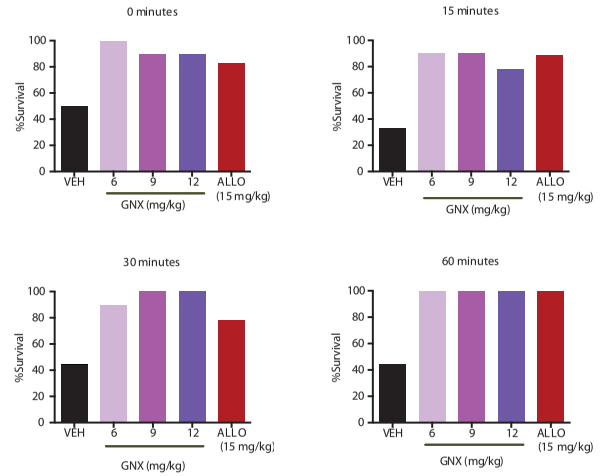
- Compounds were administered via IV administration at time of CSE onset (time 0) and 15, 30, and 60 minutes after onset.
- After compound administration, animals were observed for the presence or absence of convulsive seizures (stage 3 or greater) for an additional 2 hours. Animals that did not exhibit a convulsive seizure during that time period were considered protected **(Figure 2).**
- All animals were retained for 24 hours following onset of CSE for assessment of weight change and survival. The number of rats that survived the treatment paradigm in each group was also recorded and compared between study groups and time points. All surviving rats were euthanized 24 hours after CSE onset **(Figure 3).**

Figure 2. Ganaxolone blocks Convulsive Status Epilepticus (CSE)



Convulsive Status Epilepticus was induced by administration of lithium followed by pilocarpine. Vehicle, ganaxolone or allopregnanolone were adminstered by IV bolus injection at time of CSE (time 0) and 15, 30 or 60 minutes after CSE.

Figure 3. Ganaxolone increases survival in rats subjected to Convulsive Status Epilepticus (CSE)



Status epilepticus was induced by administration of lithium followed by pilocarpine. Vehicle, ganaxolone or allopregnanolone were adminstered by IV bolus injection at time of CSE (time 0) and 15, 30, or 60 minutes after CSE. The study was terminated 24 hours after CSE onset and the number of surviving animals were quantitated.

CONCLUSIONS

- Lithium-pilocarpine administration produced a convulsive status epilepticus.
- This CSE is reported to be resistant to diazepam administration when initiated after 15 minutes and thus represents a treatment resistant form of CSE and is considered a clinically translatable model of the affliction.
- GNX IV halted CSE and produced a dose-dependent reduction in seizures associated with CSE when administered at 3 different doses over four separate time points after the first observed convulsive seizure.
- Significant activity of GNX was observed at a dose of 6 mg/kg and maximal protection at dose levels between 9 and 12 mg/kg.
- GNX IV promoted survival at rates similar to those observed with administration of allopregnanolone as measured at 24 hours after CSE onset in CSE induced rats.

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EX1013

Ganaxolone Administered Intravenously P
Survival in the Rat Lithium-Piloca

Michael S. Saporito,[1] Donna Henry,[1] Melissa L. Barker-Haliski,[2] Car
[1]Marinus Pharmaceuticals, Radnor, PA [2]University of Utah,

MARINUS PHARMACEUTICALS

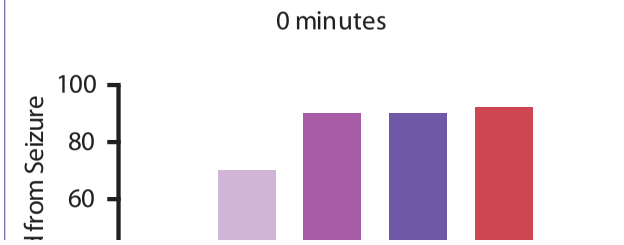
OVERVIEW

- Convulsive status epilepticus (CSE) can be modeled in experimental animals by administration of lithium and pilocarpine. Rats subjected to experimental CSE are refractory to benzodiazepine if treatment is initiated ≥ 15 min after seizure onset; thus modeling a treatment resistant form of CSE. This treatment resistant form of the disease is considered to be a clinically translatable model of the disease.
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- Juvenile male Sprague-Dawley rats 5 weeks of age and weighing between 100 and 125 grams were used for these studies.
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meron S. Metcalf,[3] Julia Tsai,[1] Albena Patroneva,[1] and Steve White.[2]
Salt Lake City, UT [3]Neuroadjuvants, Inc. Salt Lake City, UT.

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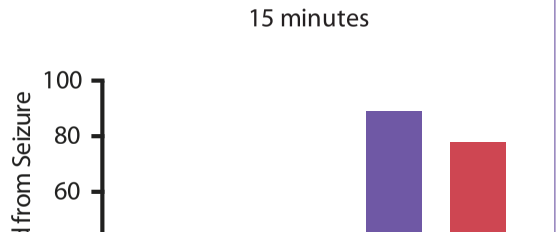
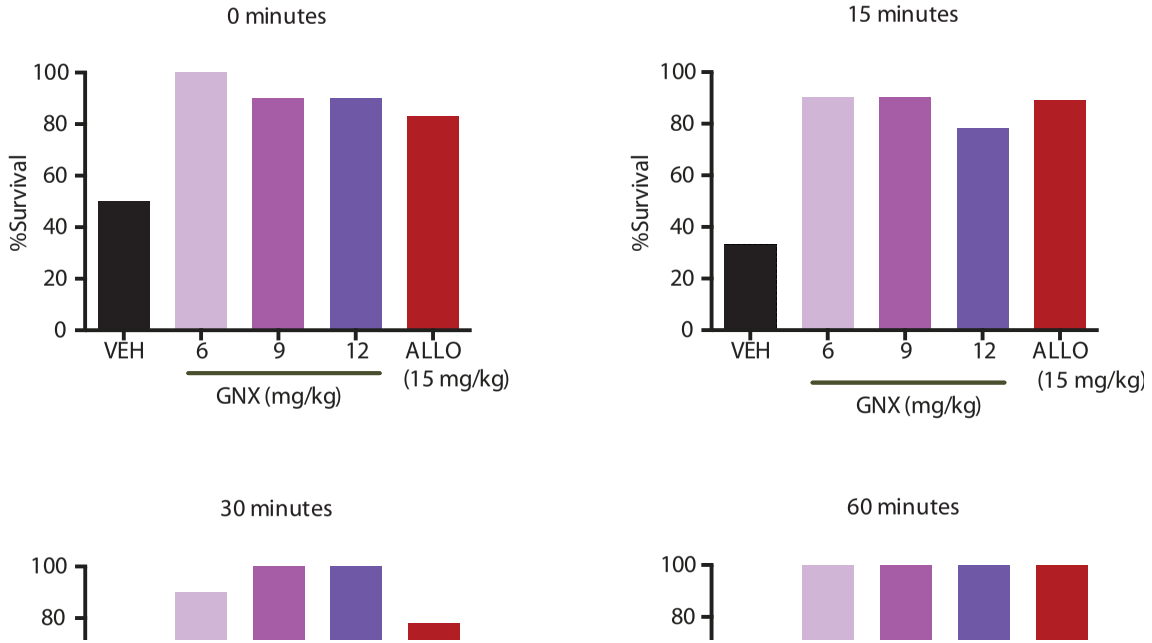
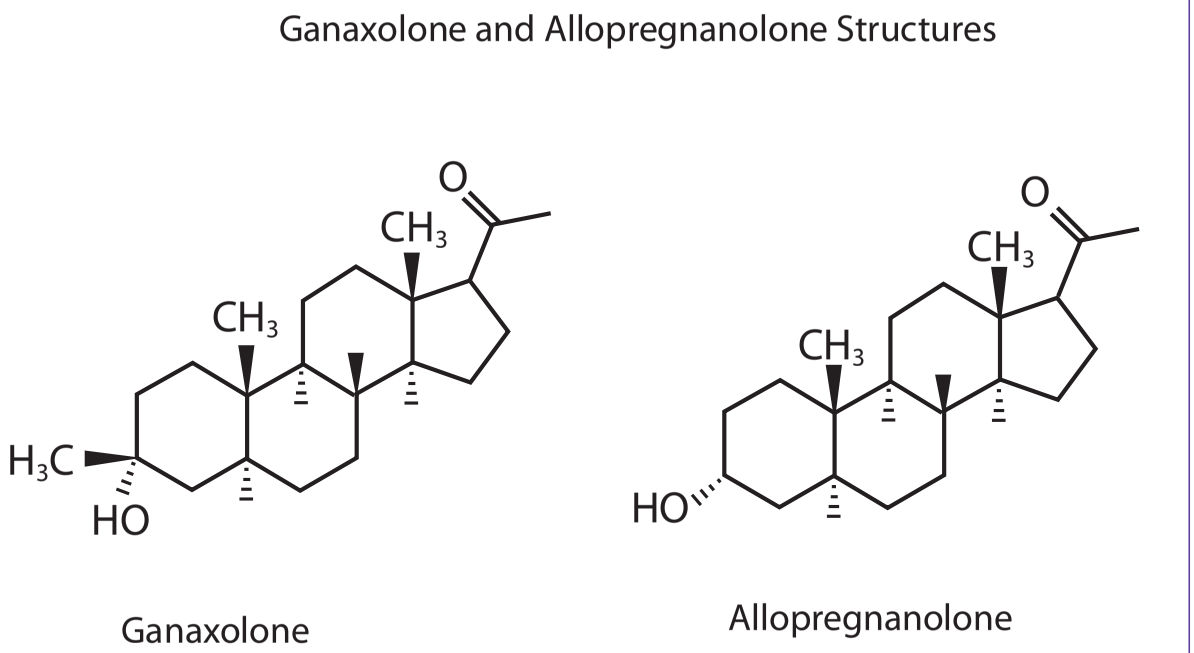


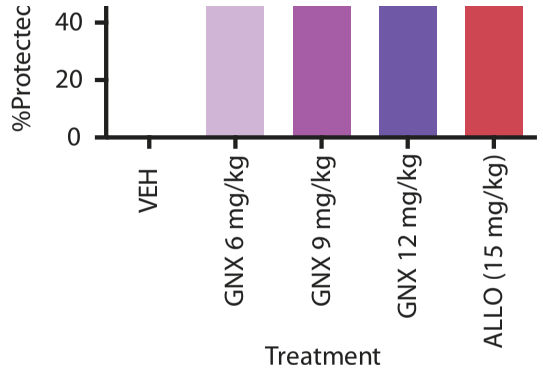
Figure 3. Ganaxolone increases survival in rats subjected to Convulsive Status Epilepticus (CSE)



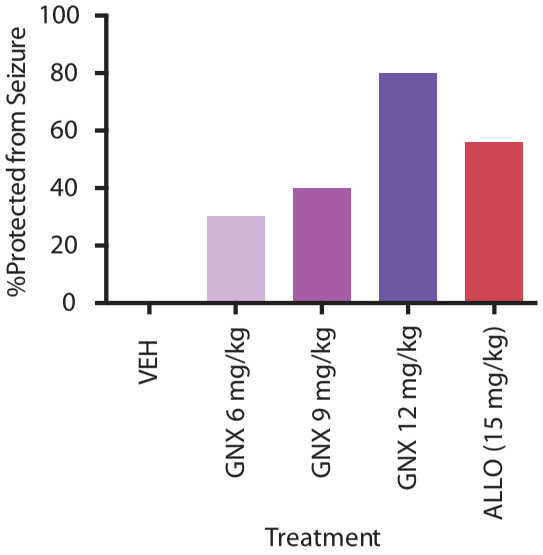
- CSE was induced by the administration of lithium chloride (127 mg/kg, intraperitoneal (i.p.), 24 hours prior to the study day) and pilocarpine (50 mg/kg, i.p.).
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Figure 1. Ganaxolone is a synthetic analog of the endogenous neurosteroid GABA modulator allopregnanolone

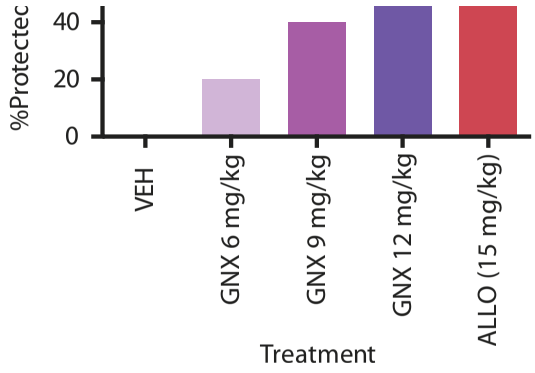


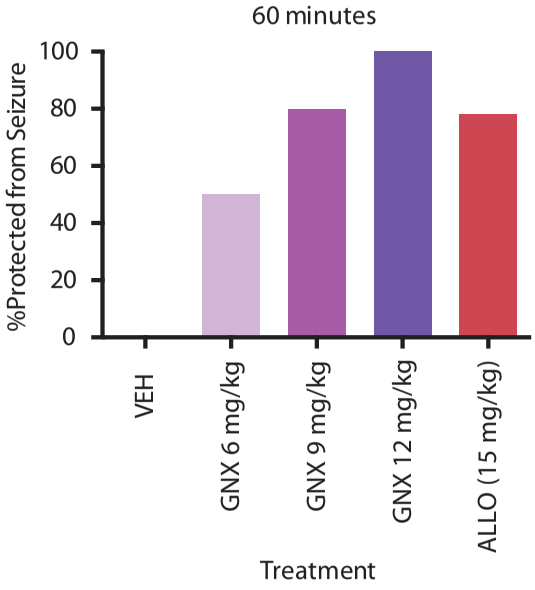


30 minutes

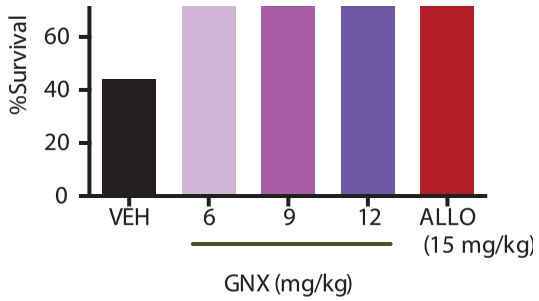


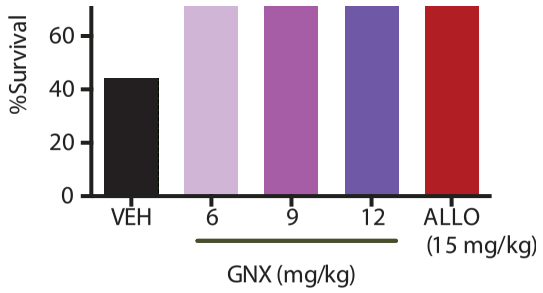
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Status epilepticus was induced by administration of lithium followed by pilocarpine. Vehicle, ganaxolone or allopregnanolone were adminstered by IV bolus injection at time of CSE (time 0) and 15, 30, or 60 minutes after CSE. The study was terminated 24 hours after CSE onset and the number of surviving animals were quantitated.

CONCLUSIONS

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- GNX IV promoted survival at rates similar to those observed with administration of allopregnanolone as measured at 24 hours after CSE onset in CSE induced rats.

EXHIBIT 1014

Intravenous Administration of Ganaxolone Attenuates Electroencephalographic Seizures in a Diazepam Resistant Model of Status Epilepticus

MARINUS PHARMACEUTICALS

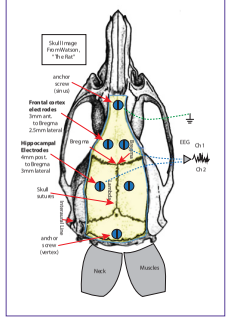
OVERVIEW

- Status epilepticus (SE) is a severe, life-threatening epileptic condition.
- The current treatment paradigm for SE is initial treatment with benzodiazepines to control SE followed by standard antiepileptic drugs such as phenytoin or valproic acid and then administration of general anesthetics such as propofol.
- Patients with SE become progressively refractory to treatment over time. Moreover, more than 30% of SE patients are resistant to aggressive benzodiazepine administration. Thus, treatments that block treatment resistant forms of SE are needed to adequately treat these severe forms of SE.
- Allopregnanolone (ALLO) and ganaxolone (GNX) exhibit anti-convulsant activity in various preclinical models of epilepsy. These compounds elicit their anti-epileptic activity through positive allosteric modulation of both the synaptic and, unlike benzodiazepines, the extrasynaptic gamma-aminobutyric acid ($GABA_A$) receptor.
- Status epilepticus can be modeled in experimental animals by administration of lithium and pilocarpine. Rats subjected to experimental SE are refractory to benzodiazepine if treatment is initiated ≥ 15 min after seizure onset; thus modeling a treatment resistant form of SE.
- The current studies were designed to compare the anti-epileptic activity of GNX and ALLO in this treatment resistant model of SE.

METHODS

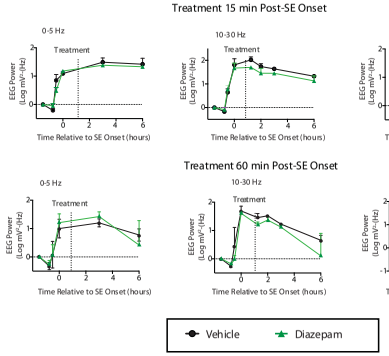
- Adult male Sprague-Dawley rats (10 weeks of age) were pre-implanted with cortical electrodes (**Figure 1**).
- Rats were administered lithium chloride (127 mg/kg) followed by pilocarpine (50 mg/kg) to induce SE. Scopolamine was administered prior to pilocarpine to dampen peripherally mediated pilocarpine actions.
- SE was first identified by presence of large amplitude slow wave EEG activity and then behaviorally using the Racine scale. Racine stage 3 seizures were used as the time-marker for SE onset and subsequent treatment.
- GNX, ALLO, or diazepam were administered via intravenous (IV) bolus injection 15 or 60 minutes after detection of SE onset.

Figure 1. Electrode Placement



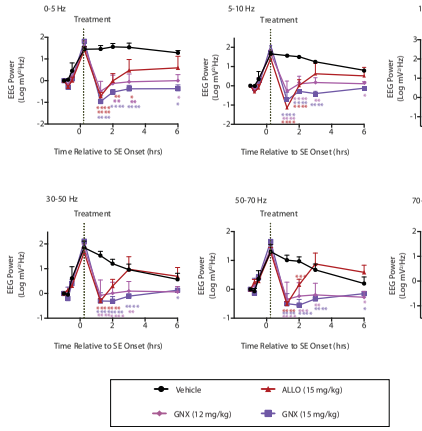
- Seizure magnitude and duration were measured by EEG recordings. EEG power (mV2/Hz) was calculated by fast Fourier Transform (FFT) in 1 Hz frequency bins from 1 to 96 Hz using ICELUS software. Frequency ranges analyzed:
  - Delta 0 – 5 Hz
  - Theta 5 – 10 Hz
  - Beta 10 – 30 Hz
  - Gamma-1 30 – 50 Hz
  - Gamma-2 50 – 70 Hz
  - Gamma-3 70 – 96 Hz
- EEG power values for each animal were normalized by subtracting the baseline value from all subsequent values.
- EEG power data were evaluated by 2-way ANOVA (treatment and time period) at each frequency range using Prism Graphpad (version 6). Post-hoc analysis consisted of Holms-Sidak multiple comparison tests, with significance set at $P < 0.05$.

Figure 2. Experimental Status Epilepticus is Resistant to Diazepam Treatment



Status epilepticus (SE) was induced by administration of lithium and pilocarpine. Diazepam (10 mg/kg; IV) was administered 15 or 60 minutes after SE onset. SE was measured for an additional 5 hrs. Seizures were measured by EEG response. Data were subjected to fast Fourier transformation (FFT) and are expressed as a EEG power (Log mV^2/Hz) over pre-determined frequency ranges. Data were analyzed by two-way ANOVA followed by a post-hoc Holms-Sidak test. Diazepam administration did not produce a statistically significant reduction in EEG power.

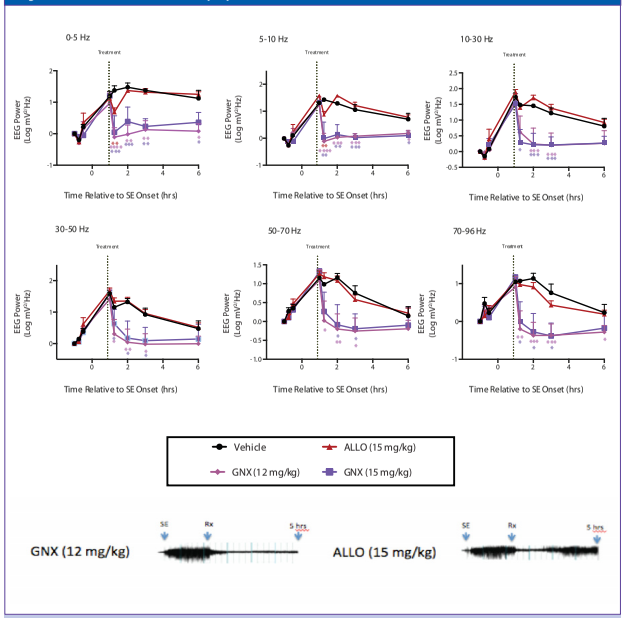
Figure 3. Ganaxolone Elicits a Durable Anti-Epileptic Effect when Administered IV 15 minutes after SE Onset



Ganaxolone (GNX) (12 and 15 mg/kg) or allopregnanolone (ALLO) (15 mg/kg) were administered 15 minutes after status epilepticus (SE) onset and EEG seizure response measured for 5 additional hours. GNX at both dose-levels produced a durable reduction in seizure response (≥ 5 hrs). ALLO produced a shorter duration response (≤ 1 hr).

Statistical analysis: Data analyzed by two-ANOVA followed by post-hoc Dunnett's test. *P<0.05, **P<0.01, **P<0.001, ****P<0.0001

Figure 4. Ganaxolone Blocks Status Epilepticus when Administered IV 1 hr after SE Onset



GNX (12 and 15 mg/kg) or ALLO (15 mg/kg) were administered 60 minutes after SE onset and EEG seizure response measured for 5 additional hours. GNX at both dose-levels produced a durable reduction in seizure response (≥ 5 hrs). ALLO produced a shorter duration response (≤ 1 hr).

Statistical analysis: Data analyzed by two-ANOVA followed by post-hoc Dunnett's test. *P<0.05, **P<0.01, ***P<0.001, ****P<0.001

CONCLUSIONS

- Lithium-pilocarpine administration produces an electrophysiological status epilepticus response.
- This SE is resistant to diazepam administration when initiated 15 or 60 minutes after SE onset.
- GNX administration elicits a sustained (≥ 5 hrs) block of SE independent of treatment time after SE onset.
- In comparison, (ALLO) administration produced only a short term ≈ 1 hr block of SE when administered 15 min after onset, and only a partial block when administered 60 min after onset.
- GNX is also available as an oral formulation allowing the possibility that GNX can be administered orally after SE to prevent subsequent seizure activity.

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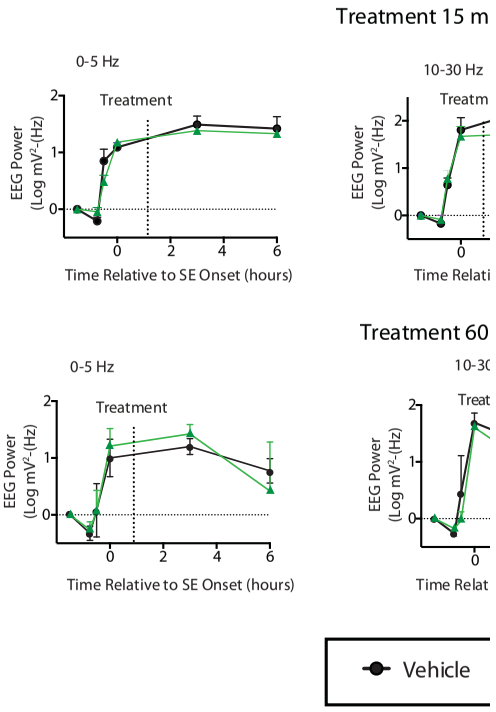
Intravenous Administration of Ganaxolo
Seizures in a Diazepam Resista

MARINUS PHARMACEUTICALS

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Treatment

EEG Power (Log mV²-(Hz)

Time Relative to SE Onset (hours)

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ive to SE Onset (hours)

70-96 Hz

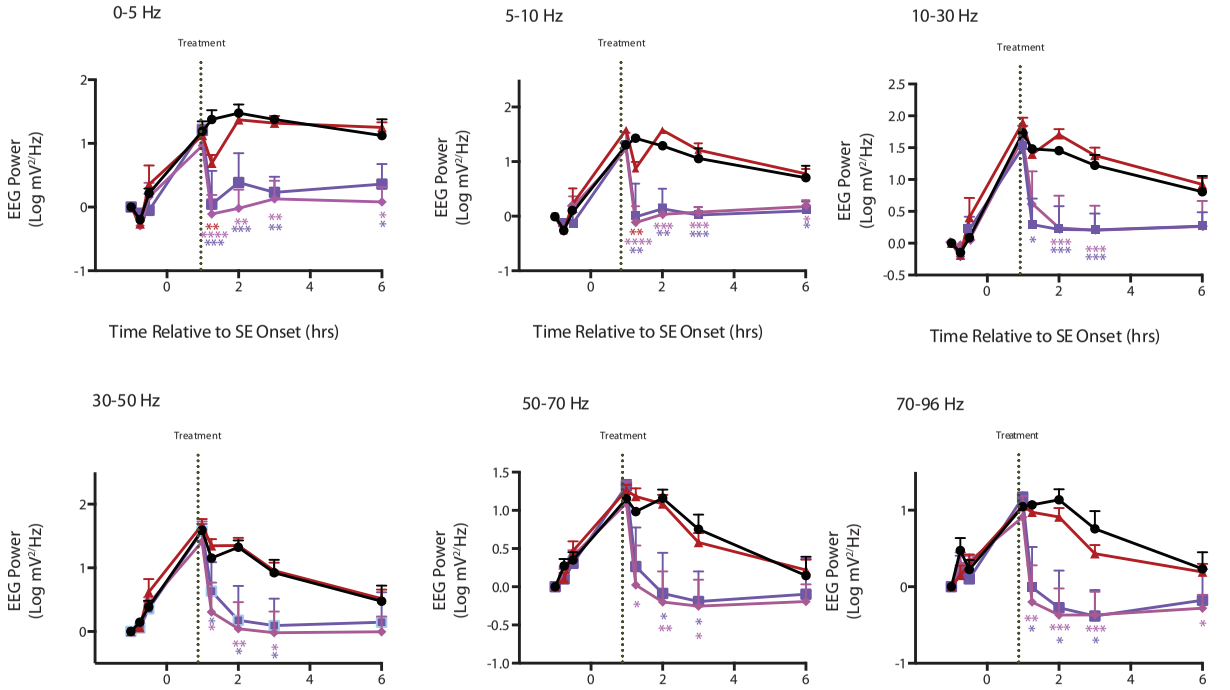
Treatment

EEG Power (Log mV²-(Hz)

Time Relative to SE Onset (hours)

Diazepam

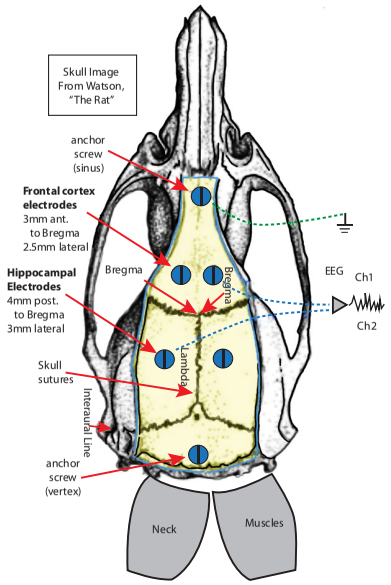
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METHODS

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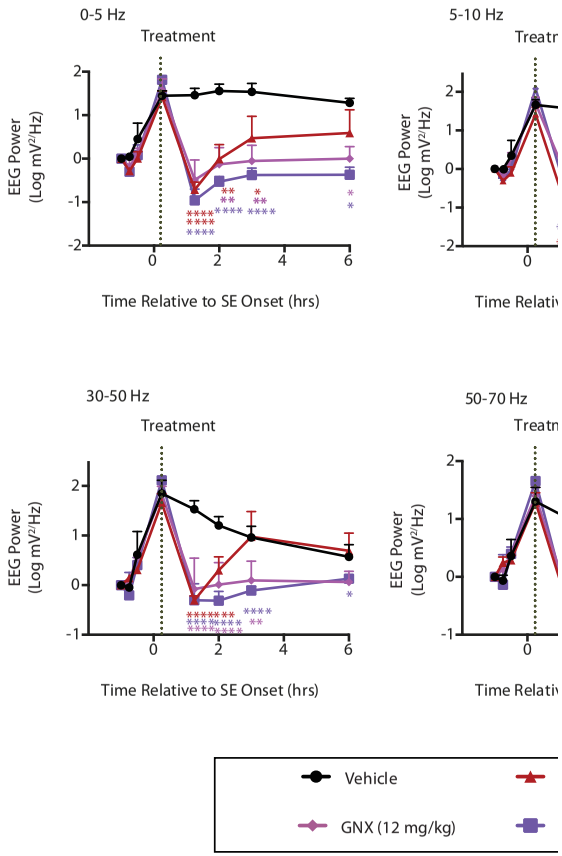
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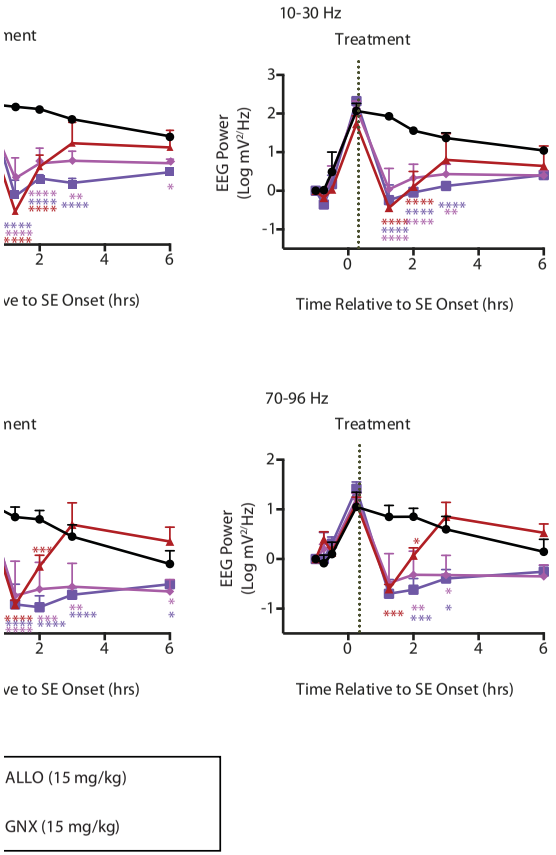


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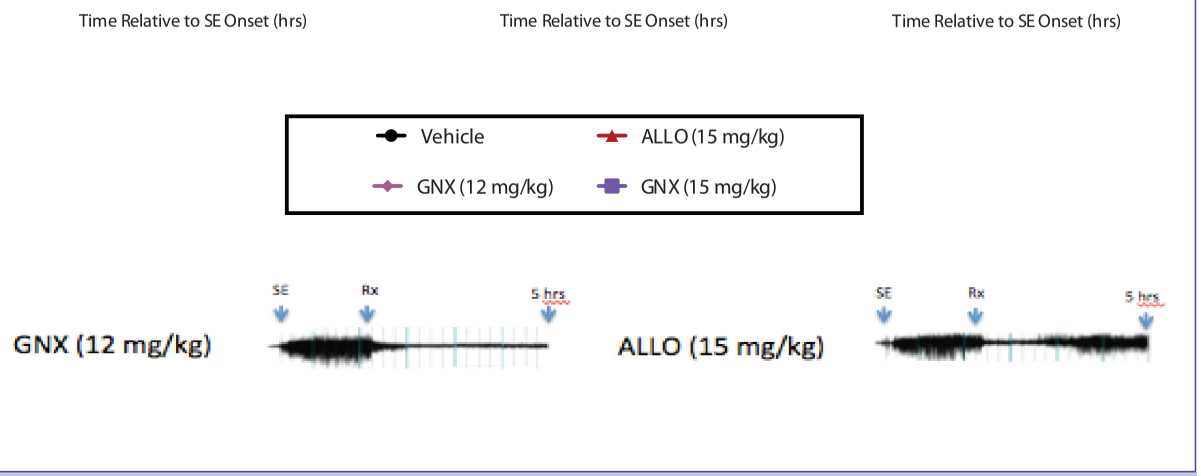
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EXHIBIT 1016



MARINUS PHARMACEUTICALS

Ganaxolone Administered IV Blocks Experimental Status Epilepticus

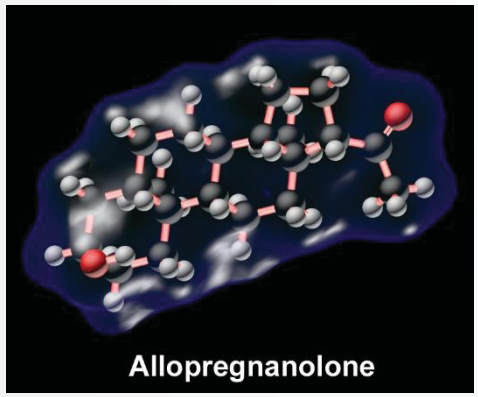
Michael S. Saporito, Donna Henry, Melissa L. Barker-Haliski, Cameron S. Metcalf, Julia Tsai, H. Steve White and Albena Patroneva

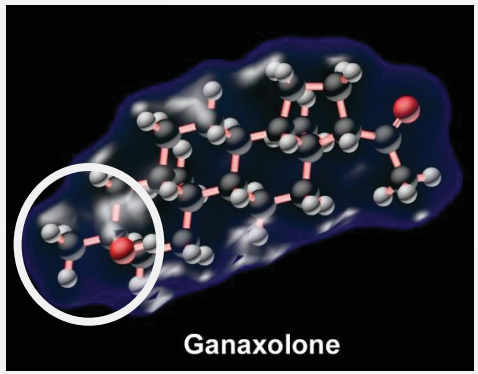
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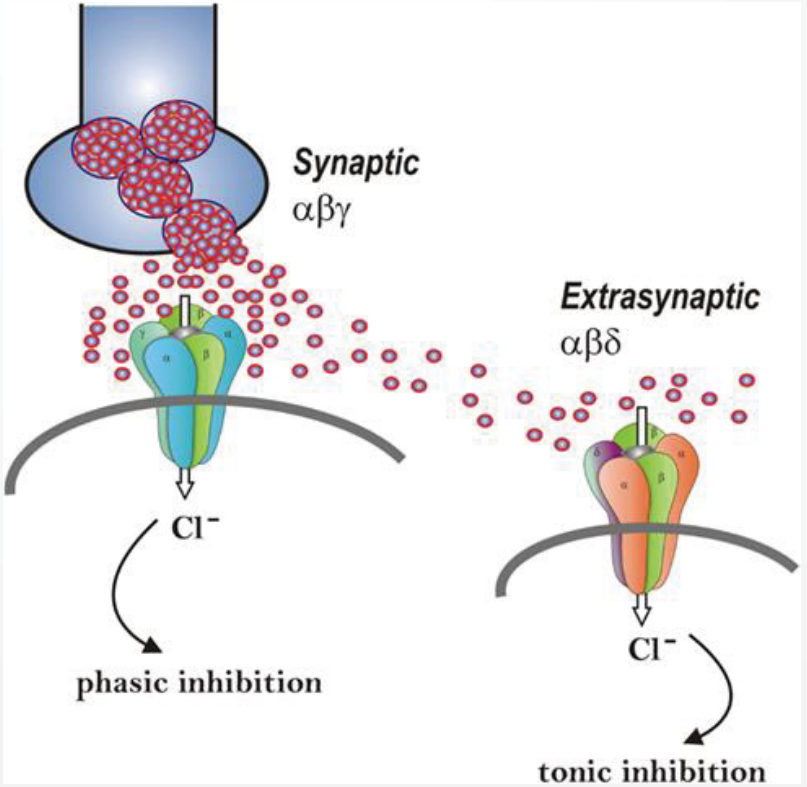
Ganaxolone Targets Synaptic and Extrasynaptic $GABA_A$ Receptors

GNX is a synthetic analog of allopregnanolone





GNX is designed to modulate both synaptic and extrasynaptic $GABA_A$ receptors to calm over-excited neurons

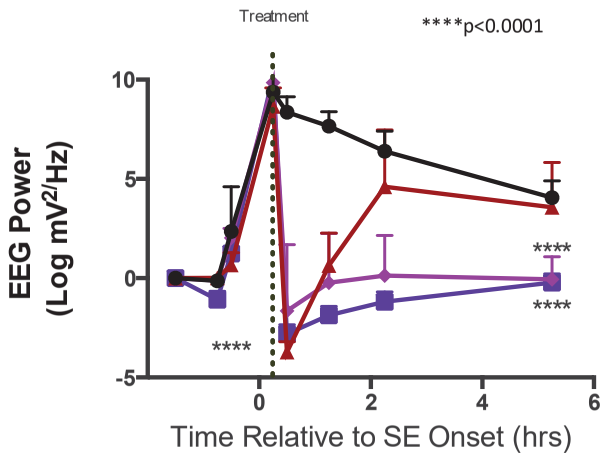


MARINUS PHARMACEUTICALS

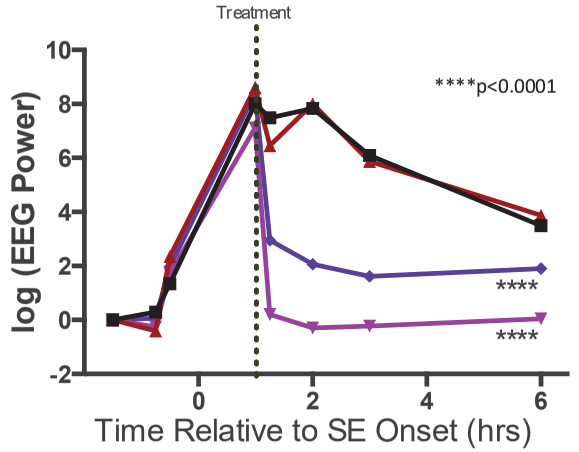
Ganaxolone IV Blocked Benzodiazepine Refractory Status Epilepticus

- **Preclinical Rat Model of Benzodiazepine-refractory SE**
  - SE induced by lithium + pilocarpine
  - GNX or Allopregnanolone administered 15 or 60 min after SE onset
  - Seizures measured by EEG response via preimplanted cortical electrodes

GNX Administered IV 15 min After Seizure Onset

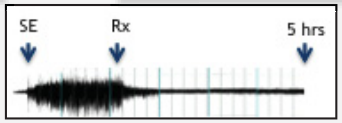


GNX Administered IV 60 min After Seizure Onset

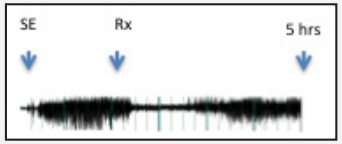


Raw EEG Trace

GNX



ALLO

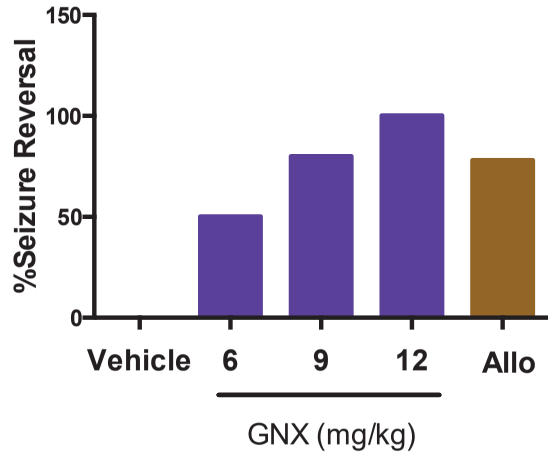


MARINUS PHARMACEUTICALS

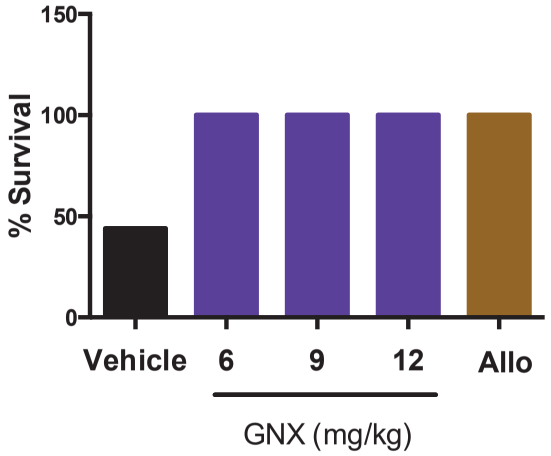
Ganaxolone IV Blocked Behavioral Convulsions and Increased Survival in Experimental Status Epilepticus

- Preclinical Rat Model of Benzodiazepine-refractory SE- Behavioral Convulsions
  - SE induced by lithium + pilocarpine
  - GNX or Allopregnanolone administered 60 min after SE onset
  - Convulsive seizures measured by Racine scale

GNX Administered IV Blocks Convulsive Seizures



GNX Administered IV Increases Survival



MARINUS PHARMACEUTICALS



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