Experts Convey Clinically Relevant and Translational Research in Today’s Plenary Sessions

At today’s plenary sessions, experts will cover topics ranging from advances in epilepsy, multiple sclerosis in children, and what deep brain stimulation has taught us about the neurology of depression to therapeutics in neuromuscular disease, RNA-targeted therapies for neurologic disease, and the role of the gut microbiome in CNS demyelinating disease.

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

Presidential Lecture
Timothy A. Pedley, MD, FAAN, Columbia University, New York, NY

H. Houston Merritt Lecture
“Advances in the World of Epilepsy: Really?!?!?”
Daniel H. Lowenstein, MD, University of California San Francisco, San Francisco, CA

Learn About Free Programs to Help Fulfill MOC Requirements at Academy Central

Stop by the Research & Education Booth in Academy Central each day between the hours of 8:00 a.m. and 6:00 p.m. to find out how AAN membership recently got even more valuable with the addition of FREE* access to online learning programs designed specifically to help you take the necessary steps toward fulfilling your MOC.

Press Conference Features New Guideline on Treatment for First Seizure

The AAN, in full collaboration with the American Epilepsy Society (AES), has published “Evidence-based Guideline on the Management of an Unprovoked First Seizure in Adults” to help patients who have experienced a first unprovoked seizure to work with physicians to weigh risk of seizure recurrence against risk of side effects from antiepileptic drugs (AEDs). This will help patients to determine what is best for them individually.

Continued on page 10

Continued on page 29

Continued on page 8

Continued on page 10
Join us at an Industry Therapeutic Update sponsored by Sunovion Pharmaceuticals Inc. An optional dinner will be available

Featured speakers welcome you to Aptiom® (eslicarbazepine acetate) with an interactive panel discussion sponsored by Sunovion Pharmaceuticals Inc.

Tuesday, April 21, 2015, Marriott Marquis Ballroom Salons 7–10

| 7:00 PM | Steve Chung, MD, Barrow Neurological Institute |
|         | Barry Gidal, PharmD, University of Wisconsin-Madison |

Please note that this is a non-CME program and no CME credits will be given for attendance. This is not an official event of the 2015 AAN Annual Meeting, and it is not sponsored or endorsed by AAN.

Register for this informative event at the APTIOM exhibit, Booth 1929, or visit www.SunovionITU.com
PLEASE JOIN US FOR THE

Industry Therapeutic Update
from Biogen

An informative presentation led by expert faculty
offered during the American Academy of Neurology
2015 annual meeting

Tuesday, April 21, 2015
7:00 PM – 10:00 PM
Marriott Marquis
Independence Ballroom A-E
Washington, DC

CME credits will not be given by any accredited
organizations for attendance at this program

FOR MORE INFORMATION
please visit
Biogen Booth #1029
Catch These Q&As at Interview Central

Watch live podcast interviews as they happen during the 2015 AAN Annual Meeting at “Interview Central.” Join distinguished recipients of the Merritt, Wartenberg, and Cotzias Lectures given at the Presidential Plenary Session for more in-depth insights on their topics. Scheduled interviews include:

**TUESDAY**

9:30 a.m. Neurology® Resident & Fellow Interview: Founders Award Winner: Impaired Motor Learning in a Disorder of the Inferior Olive: Is the Cerebellum Confused?
Aasef Shaikh, MD, is interviewed by Raphael Schneider, MD

10:15 a.m. Neurology Resident & Fellow Interview: S. Weir Mitchell Award Winner: Acetate Metabolism Prevails Over Glucose Oxidation in Brain PDH Deficiency
Isaac Marin-Valencia, MD, MS, is interviewed by Raphael Schneider, MD

1:00 p.m. H. Houston Merritt Lecture: Advances in the World of Epilepsy: Really?!?
Daniel H. Lowenstein, MD, is interviewed by Alberto J. Espay, MD, MSc, FAAN

2:00 p.m. Robert Wartenberg Lecture: What Has Deep Brain Stimulation Taught Us About the Neurology of Depression?
Helen S. Mayberg, MD, is interviewed by Alberto J. Espay, MD, MSc, FAAN

2:30 p.m. Plenary Session Interview: Presidential Lecture
AAN President Timothy A. Pedley, MD, FAAN, is interviewed by Alberto J. Espay, MD, MSc, FAAN

3:30 p.m. Hot Topics Session Interview: Digesting the Gut Microbiome: Role in CNS Demyelinating Disease
Lloyd H. Kasper, MD, is interviewed by Alberto J. Espay, MD, MSc, FAAN

**WEDNESDAY**

9:30 a.m. Neurology Resident & Fellow Interview: 2014 Writing Award Winner: Clinical Reasoning: An Unusual Case of Transverse Myelitis
Pavan Bhargava, MD, is interviewed by Carla M. Francisco, MD

10:15 a.m. Neurology Resident & Fellow Interview: Poster Presentation: Lack of Exacerbation of Neurodegeneration in a Double Transgenic Mouse Model of Mutant LRRK2 and Tau
Fadi Mikhail, MD, is interviewed by Sarah F. Wesley, MD, MPH

11:00 a.m. Neurology Resident & Fellow Interview: Poster Presentation: Predicting the Network Effects of Focal Brain Lesions
Aaron Boes, MD, is interviewed by Sarah F. Wesley, MD, MPH

11:30 a.m. Neurology Clinical Practice Interview: Do Efforts to Decrease Door-to-needle Time Risk Increasing Stroke Mimic Treatment Rates?
Ava Leigh Lberman, MD, is interviewed by David C. Anderson, MD, FAAN

1:20 p.m. George C. Cotzias Lecture: Degenerative Ataxias: From Genes to Therapies
Stefan M. Pulst, MD, FAAN, is interviewed by Alberto J. Espay, MD, MSc, FAAN

2:00 p.m. Neurology Resident & Fellow Interview: Poster Presentation: Defining the Expanding Clinical Spectrum of Pediatric Onset Stiff-Person Syndrome (p-SPS): A Case Series
Anusha Yeshokumar, MD, is interviewed by Sara Stern-Nezer, MD

Interview Central is located near Academy Central in the L Street Lobby South. Visit AAN.com/view/AM15 for updates on additional interviews and topics. •
Visit Exhibit Hall to See Latest Advances in Patient Care

Be sure to stop by Exhibit Hall AB of the convention center between 11:30 a.m. and 5:00 p.m. today to preview the latest products and services available in the neurologic industry from more than 250 exhibitors including some 50 pharmaceutical companies; around 100 medical device, equipment, and technology companies; and scores of voluntary health associations dedicated to helping people live with neurologic disease.

While it is widely known that industry exhibits at the meeting, attendees and AAN members might not be familiar with the particular support industry provides, especially from the AAN Industry Roundtable (IRT). Founded in 1994, the IRT is comprised of representatives from 25 pharmaceutical and medical device companies that provide therapies and diagnostic technologies to neurology patients. The IRT provides a unique opportunity to share vision, intellect, and financial resources with the neurology community to support research programs and other initiatives that help neurologists succeed in an ever-changing health care environment. Through their generous assistance, Industry Roundtable partners make possible many invaluable AAN initiatives, including:

- **Annual Meeting**
  - 5K Run/1K Walk for Brain Research
  - In-Kind and General Support

- **Conferences**
  - Breakthroughs in Neurology
  - Fall Conference

- ** Continuing Medical Education**
  - Mobile App
  - Neuro Film Festival
  - Opening Reception
  - Posters Online

- ** Sports Concussion Conference**

- ** Member Development Programs**
  - **Diversity in Leadership Program**
    This new and unique program seeks to identify, orient, and cultivate AAN members of underrepresented ethnicities into future Academy leaders.
  - **Women in Leadership Program**
    This successful program focuses on identifying and building the capacity of women at various skill levels to become influential leaders for their patients and profession.
  - **Emerging Leaders Forum**
    This premier program is designed to identify, orient, and cultivate talented, highly motivated individuals into the next generation of Academy leaders.
  - **Palatucci Advocacy Leadership Forum**
    In this weekend that changes participants’ lives, neurologists learn how to promote state and federal legislation, be more confident in front of the camera, develop coalitions, organize and reinvigorate state neurologic societies, lobby for fair reimbursement, help draft position statements that affect future legislation, and more.

- **Clinical Research Training Fellowships**
  The well-established American Brain Foundation clinical research training fellowship program funds research across many institutions. The Foundation works with AAN members and our organizational partners to identify and fund research with the highest potential to deliver new diagnostic tests, therapies, and other tools to prevent or mitigate the effects of brain disease.

Relax for a coffee break between 2:30 p.m. and 4:30 p.m., sponsored by Sunovion Pharmaceuticals, Inc. And don’t forget to join in the fun with the Passport Program and the chance to win one of many exciting prizes. Visit participating booths to get your Exhibit Hall “passport” stamped to be entered into a drawing for exciting prizes, including Apple® iPad® Air2 devices, future free AAN conference registration, free one-year AAN membership, a Continuum® subscription, and a special Grand Prize. The Grand Prize winner of the Passport Program will be drawn at the Eisai Inc. booth at 2:45 p.m. on Thursday, and you must be present to win.
Fight back with GILENYA

See what's new at Booth 2129

- Immerse yourself in a GILENYA virtual reality experience powered by Oculus Rift
- Learn about GILENYA@Home, a new option for getting patients started

Power Your Practice with Stroke and Epilepsy Model Episodes of Care

Due to increasing interest from public and private payers and providers to deliver care more efficiently, the AAN began exploring episodes of care in 2013. An episode is all of the services needed by a patient during a defined period of time (e.g., all of the inpatient and outpatient care they need after having a stroke).

As the payment system transitions from a fee for service payment model to value-based payments, neurologists will need to think differently about care delivery. The AAN is encouraging neurologists to think about care delivery in terms of episodes of care, population management, and care coordination.

The AAN episodes of care serve as a framework in which evidence-based services ought to be considered when negotiating with payers for an episode-based payment. The Stroke Model Episode of Care was developed by stroke neurologists and Epilepsy Model Episode of Care was developed by experts in epilepsy and vetted by the American Epilepsy Society and Child Neurology Society.

For more information on episodes of care, visit AAN.com/practice/new-payment-and-delivery-models/episodes-of-care. Additional information can be found at AAN.com/practice/new-payment-and-delivery-models/bundled-payments.
Reveal LINQ™
INSERTABLE CARDIAC MONITORING SYSTEM

Reveal Atrial Fibrillation in Your Cryptogenic Stroke Patients

84 Days Median Time to AF Detection in Cryptogenic Stroke Patients

Are You Looking Long Enough to Find AF?

The Reveal LINQ™ Insertable Cardiac Monitor continuously monitors every heartbeat for up to three years, ensuring that you can detect or rule out atrial fibrillation as a condition that needs to be treated to prevent a second stroke.

Learn more about the Landmark CRYSTAL AF Study Results at CRYSTAL-AF.com

Reference

Brief Statement: Reveal LINQ™ LINQ11 Insertable Cardiac Monitor and Patient Assistant
Indications: Reveal LINQ™ LINQ11 Insertable Cardiac Monitor. The Reveal LINQ™ Insertable Cardiac Monitor is an implantable, patient-activated and automatically-activated monitoring system that records subcutaneous ECG and is indicated in the following cases: patients with clinical syndromes or situations at increased risk of cardiac arrhythmias - patients who experience transient symptoms such as dizziness, palpitations, syncope, and chest pain, that may suggest a cardiac arrhythmia. Patient Assistant: The Patient Assistant is intended for unsupervised patients who are away from a hospital or clinic. The Patient Assistant activates the data management feature in the Reveal Insertable Cardiac Monitor to initiate recording of cardiac event data in the implanted device memory. Contraindications: There are no known contraindications for the implant of the Reveal LINQ™ Insertable Cardiac Monitor. However, the patient’s particular medical condition may dictate whether or not a subcutaneous, chronically implanted device can be tolerated.
Warnings/Precautions: Reveal LINQ™ LINQ11 Insertable Cardiac Monitor. Patients with the Reveal LINQ™ Insertable Cardiac Monitor should avoid sources of diathermy, high sources of radiation, and electrocautery external defibrillation. Indwelling, therapeutic ultrasonic, and radiofrequency ablation should be kept away from the device, and/or inappropriate sensing as described in the Medical Procedure and EMI precautions manual. MRI scans should be performed only in a specified MR environment, under specified conditions as described in the Reveal LINQ MRI Technical Manual. Patient Assistant: Operation of the Patient Assistant near sources of electromagnetic interference, such as cellular phones, computer monitors, etc., may adversely affect the performance of this device. Potential Complications: Potential complications include, but are not limited to, device rejection phenomena (including local tissue reaction), device migration, infection, and erosion through the skin. See the device manual for detailed information regarding the implant procedure, indications, contraindications, warnings, precautions, and potential complications/adverse events. For further information, please call Medtronic at 1 (800) 328-2514 and/or consult Medtronic’s website at www.medtronic.com. Caution: Federal law (USA) restricts this device to sale by or on the order of a physician.
The guideline was announced yesterday at a press conference here at the Annual Meeting. It was published online yesterday and in today's print issue of the Neurology® journal. The AES will publish it in the May/June issue of Epilepsy Currents.

The guideline, which reviewed all available evidence, found that taking AEDs immediately after a first seizure may reduce the risk of having a seizure recurrence. The decision to treat after a first seizure is complex because physicians must consider the risks and benefits for each individual patient.

“This is a valuable new guideline that could change the approach many physicians take to treating a first seizure and could improve patients’ lives,” said guideline author Allan Krumholz, MD, with University of Maryland School of Medicine and Fellow of the American Academy of Neurology. “About 150,000 adults have an unprovoked first seizure in the United States each year. Even one seizure is traumatic and affects a person’s life in many social ways, such as driving a car, employment options, falling risks, and the fear of having another seizure in public. This guideline clarifies when risk factors put individuals at greater risk.”

Seizures that are “unprovoked” occur for no acute symptomatic cause.

The guideline shows there is strong evidence that for adults who have had a first seizure, the risk of another seizure is greatest within the first two years. The risk ranges from about a one-in-five chance, or 21 percent, to nearly a one-in-two chance, or 45 percent.

The guideline also found strong evidence that the risk of a second seizure is greatest in people with a previous brain insult, such as head injury, stroke, or brain tumor and in those with an EEG test result that shows signs of epilepsy. The analysis shows moderate evidence that the risk is increased in people with a significant abnormality on imaging tests of the brain and in those who had a seizure during sleep.

The guideline also states that seizures that are “unprovoked” occur for no acute symptomatic cause.

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Jacqueline (Jackie) French, MD, FAAN, and Allan Krumholz, MD, FAAN, at Monday’s press conference.

Department of Neurological Sciences Chairperson
Rush Medical College/Rush University Medical Center

Rush University Medical Center, a nationally recognized clinical and academic institution, invites nominations and applications for the position of Chairperson of the Department of Neurological Sciences. The Department has a long tradition of excellence in clinical care, teaching and research. The Rush medical staff includes nationally respected neurologists and researchers. Many have international reputations for their contributions to research, most notably in movement disorders, Alzheimer’s disease, epilepsy, multiple sclerosis, neurocritical care, brain tumor and stroke. The Department has a highly competitive residency program including 24 total Neurology residents who are integrated with John H. Stroger Jr. Hospital of Cook County. The department also offers several sub specialty fellowships including: Clinical Neurophysiology, Epilepsy, Vascular Neurology, Neurocritical Care, Movement Disorders, Multiple Sclerosis, and Advanced General Neurology Fellowship.

The successful candidate will demonstrate a commitment to research achievement, clinical service and is a creative leader with a strong record of collaborative leadership and commitment to academic excellence and community engagement. The successful candidate will have an established national/international reputation in their neurological sub-specialty and research. In addition, credentials that merit appointment of Professor or senior level Associate Professor, have an MD or equivalent degree, board certification in Neurology, possess a demonstrated commitment to innovation, and have the leadership skills necessary for guiding faculty development and advancement within both research, clinical and academic missions. As a department leader, the Chairperson will provide an energetic and inventive vision for maintaining and growing educational and research programs, developing strategic interdisciplinary teams for furthering research, and continuing faculty development. This leadership opportunity is responsible for a Neurological Sciences department which includes both clinical and laboratory translational programs.

Rush Medical College was established in 1837 and is one of the oldest medical colleges in the U.S. Rush University Medical Center (RUMC) is one of the largest private academic medical centers in Illinois. RUMC has completed the most comprehensive construction and facilities renovation program in its history. The “Rush Transformation” process has invested in new technology and facilities, culminating in a new Tower hospital that opened in January 2012, uniquely designed to deliver patient care safely and efficiently. The stroke program has been certified by the Joint Commission as a comprehensive stroke center and supported by a 28 bed state-of-the-art Neuro Critical Care unit. Rush University has over 2,000 students and offers more than 30 degree or certificate options throughout its four colleges. Rush is consistently ranked as one of the nation’s top hospitals by U.S. News & World Report, and is one of the two top ranked hospitals in Illinois.

We encourage women and minorities to apply. Applications will be accepted until the position is filled. Nominations or letters of interest that include a curriculum vitae should be sent to Courtney Kammer:
Courtney_Kammer@rush.edu, Director Faculty Recruitment
Robert A. Balk, MD, Chair, Neurological Sciences Search Committee
Rush Medical College at Rush University Medical Center
Rush is an equal opportunity / Affirmative Action employer
The guideline found moderate evidence that immediate treatment with an AED can lower this risk.

However, moderate evidence also suggests that over the longer term of more than three years, immediate treatment with an AED, rather than waiting for a seizure recurrence before treating, is unlikely to increase or decrease the likelihood of long-term improvement or seizure freedom.

The guideline notes that aside from affecting lifestyle choices, AEDs carry risks of side effects ranging from seven to 31 percent.

“This guideline does not give a simple, black-and-white recommendation whether an adult should immediately be started on an AED,” said Krumholz. “What is most important is that the decision whether to immediately treat a first seizure requires meaningful conversation between patient and physician so that the patient’s individual circumstances, balance of risks, and benefits, and personal preferences are understood and accounted for.”

The guideline has been endorsed by the American Neurological Association and the World Federation of Neurology.

Clinicians and patients should be aware of these previous AAN guidelines related to first seizure:

- Evaluating an Apparent Unprovoked First Seizure in Adults
  AAN.com/Guidelines/home/GetGuidelineContent/261
- Treatment of the Child with a First Unprovoked Seizure AAN.com/Guidelines/home/GetGuidelineContent/100
- Evaluating a First Nonfebrile Seizure in Children
  AAN.com/Guidelines/home/GetGuidelineContent/88

Read the guideline and access PDF summaries for clinicians and patients and a slide presentation set at AAN.com/guidelines. For more information, contact Julie Cox at jcox@aan.com or call (612) 928-6069.
Experts Convey Clinically Relevant and Translational Research in Today’s Plenary Sessions

continued from page 1

**George C. Cotzias Lecture**
Degenerative Ataxias: From Genes to Therapies
Stefan M. Pulst, MD, FAAN
University of Utah, Salt Lake City, UT

**Sidney Carter Award in Child Neurology**
Multiple Sclerosis in Children: Journey of a Clinician Investigator
Brenda Banwell, MD, Children’s Hospital of Philadelphia, Philadelphia, PA

**Robert Wartenberg Lecture**
What Has Deep Brain Stimulation Taught Us About the Neurology of Depression?
Helen S. Mayberg, MD, Emory University, Atlanta, GA

**Hot Topics Plenary Session**
5:30 p.m.–6:45 p.m.

**Therapeutics in Neuromuscular Disease**
Brian K. Kaspar, PhD, Nationwide Children’s Hospital, Columbus, OH

**Modeling B-amyloid and Tau Pathology in a 3D Human Neural Cell Culture System**
Doo Yeon Kim, PhD, MassGeneral Institute for Neurodegenerative Disease, Charlestown, MA

**Sex-specific Programming of Neurodevelopment by Stress**
Tracy L. Bale, PhD, University of Pennsylvania Perelman School of Medicine, Philadelphia, PA

**RNA-targeted Therapies for Neurologic Disease**
Timothy M. Miller, MD, PhD, Washington University School of Medicine, St. Louis, MO

**Digesting the Gut Microbiome: Role in CMS Demyelinating Disease**
Lloyd H. Kasper, MD, Dartmouth Medical School, Lebanon, NH
INDUSTRY THERAPEUTIC UPDATE FROM MEDTRONIC

Tuesday, April 21
7:00 – 7:30pm Reception · 7:30pm Dinner Program
Renaissance Washington, DC Downtown · Congressional Hall A-B · 999 9th St. NW · Washington, DC

TONIGHT:
The Solitaire™ stent thrombectomy device for the treatment of acute ischemic stroke: An analysis of the results from four randomized studies.

REVASCAT: A randomized trial of revascularization with SOLITAIRE™ FR device vs. best medical therapy in the treatment of acute stroke due to anterior circulation large vessel occlusion presenting within eight-hours of symptom onset.

Tudor G. Jovin, MD Associate Professor, Stroke Institute and Center for Neuroendovascular Therapy, University of Pittsburgh Medical Center (UPMC) Pittsburgh, Pennsylvania · United States

SWIFT PRIME: The Solitaire™ FR as Primary Treatment for Acute Ischemic Stroke Study
Jeffrey Saver, MD · University of California Los Angeles, California · United States

ESCAPE: The Endovascular Treatment for Small Core and Proximal Occlusion Ischemic Stroke Study
Andrew M. Demchuk, MD, Director, Calgary Stroke Program, Foothills Medical Center · University of Calgary Calgary, AB · Canada

EXTEND-IA: Extending the Time for Thrombolysis in Emergency Neurological Deficits - Intra-Arterial Study
Bruce Campbell, MD · Royal Melbourne Hospital Melbourne, Australia

To register for this event, please visit www.strokesymposiumregistration.com

This is not a CME Program: CME credits will not be given for attendance.
Did you know:

1 out of every 13 prescriptions dispensed in the US is a Mylan product

Helping in the management of CNS disorders

Mylan generics are helping a variety of different patients in the management of neurological conditions like Parkinson’s disease, epilepsy, migraine, and narcolepsy.

See what we’ve been up to at Booth #1529

Reference
1. IMS Health. Total Prescriptions Dispensed Across All Therapeutic Areas. 2014.
Thursday Invited Science Session to Feature Cutting-edge Epilepsy Abstracts

Cutting-edge abstracts from the American Epilepsy Society Annual Meeting will be presented by their authors in 20-minute platform sessions during Thursday’s Invited Science: Epilepsy session. This lineup will emphasize basic, clinical, and translational sciences as they evolve toward a more complete understanding of epilepsy pathophysiology with the overall goal of developing more effective prevention and treatment. The session takes place Thursday, from 1:00 p.m. to 2:45 p.m. in the convention center Room 152 AB, and is free and open to all registered Annual Meeting attendees.

New Trends and Cutting-Edge Research from the American Epilepsy Society

1:00 p.m.–1:20 p.m.
**Increased Cerebral Oxygenation Precedes Generalized Tonic Clonic Seizures**—Brian D. Moseley, MD, Cincinnati, OH

1:20 p.m.–1:40 p.m.
**Factors Influencing Driving Impairment in Persons with Refractory Epilepsy**—Vineet Punia, MD, Cleveland Heights, OH

1:40 p.m.–2:00 p.m.
**Management of Children with Refractory Epilepsy: A Decision Analysis Comparing Medical Versus Surgical Treatment**—Ivan Sanchez Fernandez, MD, Boston, MA

2:00 p.m.–2:20 p.m.
**Temporal Lobe Epilepsy in Patients with Nonlesional MRI and Normal Memory: An SEEG Study**—Jonathan Miller, MD, Cleveland, OH

2:20 p.m.–2:40 p.m.
**Neural Mechanisms of Impaired Consciousness in Typical Childhood Absence Seizures**—Hal Blumenfeld, MD, PhD, New Haven, CT

2:40 p.m.–2:45 p.m.
**Questions and Answers**

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**Congratulate These “Golden Ticket” Winners!**

Did you know that just attending the Annual Meeting can reward you with a fun prize? Some lucky people checking in at Registration have had their badges printed at random on prize-winning golden paper. These “Golden Tickets” have won prizes for:

- **Katherine Spira, MD, Woollahra, NSW, Australia**
  - 2015 AAN Annual Meeting on Demand Gift Certificate

- **Stephen Van Den Eeden, PhD, Oakland, CA**
  - Beacon Bar & Grill Gift Certificate

- **Robert Weissert, MD, Regensburg, Germany**
  - Continuum® 1-year subscription

- **Volker Knappert, MD, Potomac, MD**
  - Hard Rock Cafe Gift Certificate

- **John Mei, MD, Guilford, CT**
  - Cuba Libre Gift Certificate

- **Mira Kapiszy, DO, Tirana, Albania**
  - Cuba Libre Gift Certificate

- **Katerina Spira, MD, Woollahra, NSW, Australia**
  - 2015 AAN Annual Meeting on Demand Gift Certificate

- **Volker Knappert, MD, Potomac, MD**
  - Hard Rock Cafe Gift Certificate

- **John Mei, MD, Guilford, CT**
  - Cuba Libre Gift Certificate

- **Mira Kapiszy, DO, Tirana, Albania**
  - Cuba Libre Gift Certificate

- **Katerina Spira, MD, Woollahra, NSW, Australia**
  - 2015 AAN Annual Meeting on Demand Gift Certificate

- **Robert Weissert, MD, Regensburg, Germany**
  - Continuum® 1-year subscription
I Talks Bring Learning to Life!

Visit the Innovation Room, Salon ABC, in the convention center for a series of special, supplemental educational talks featuring a variety of lectures, presentations, group discussions, and hands-on activities using advanced multimedia formats that bring learning to life! I Talks are free to registered attendees.

**TUESDAY**

12:00 p.m.–1:00 p.m.
Policy and Advocacy Hour with the GRC

Join us to celebrate the defeat of the Medicare Sustainable Growth Rate (SGR)! Learn about the roles and responsibilities of the Government Relations Committee, how advocacy priorities are set, and how advocacy impacts members. Interact with successful advocates as they share their success stories and challenges. A member of Congress or a congressional staff aide will address key issues in neurology and relationship-building between physician constituents and Congress.

1:30 p.m.–3:30 p.m.
Case Report 2.0: Implementing the “CARE” Case Report Guidelines for the Digital Era

Editors of the journal Neurology® will provide didactic teaching about journal writing, the CARE guidelines, and the editorial process, as well as a practical hands-on workshop on the writing of a case report. Attendees will be expected to bring a case with them, and editorial team members will assist attendees in the crafting of a case report worthy of submission to a journal.

4:00 p.m.–5:00 p.m.
How to Hug a Porcupine: Relationship-building with Congress and Why It’s Important

Building relationships with elected officials can sometimes be difficult and uncomfortable. It forces you and your key stakeholders to get close to politicians in ways that may feel “prickly”—like hugging a porcupine. This program will help participants overcome that discomfort, revealing the methods and benefits for building relationships with elected officials.

**WEDNESDAY**

8:00 a.m.–8:30 a.m.
Annual Meeting Orientation Session

Tailored for first-time Annual Meeting attendees, this session will include an overview of the meeting.

12:00 p.m.–1:00 p.m.
Neurology Compensation and Productivity Survey and Dashboard Report

Learn about the only survey and report dedicated solely to neurology compensation and productivity. The presentation will show you how to effectively navigate the survey in a timely manner as well as how to maximize your benefits from the dashboard report feature after the data collection period ends.

1:30 p.m.–3:30 p.m.
How to Avoid “Death by PowerPoint” and Workshop

This presentation will cover basic guidelines on how to effectively use PowerPoint as a tool to enhance learning. Using an interactive and engaging teaching format called write/think-pair-share, where participants are asked to engage with the person sitting next to them every 10 minutes throughout the presentation, the program will cover general principles, things to avoid, and best practices.

4:00 p.m.–4:45 p.m.
Your Abstract Has Been Accepted: Now What? Tips for a Successful Presentation

Learn how to work with your institution’s public relations department to promote your research to the media and the public! You will hear from a veteran national health journalist regarding which science topics are typically covered in the news. The AAN Media Department will give you a step-by-step approach to coordinating with your institution’s media relations department or a scientific medical journal to get your study noticed and provide examples of successful promotion of brain research. A public relations contact from the National Institute of Neurological Disorders and Stroke Public Affairs Department will discuss the benefits to you as a researcher and your institution of launching your message to major media outlets across the US and the world.

**THURSDAY**

12:00 p.m.–1:00 p.m.
AAN’s Axon Registry: Data Powering Neurology’s Future

Join Past President Bruce Sigsbee, MD, FAAN, for this session informing members of the AAN’s registry initiative.

1:30 p.m.–2:30 p.m.
AAN Digital Scavenger Hunt

Compete to win an iPad Mini or a Google Nexus in this fun and exciting Digital Scavenger Hunt, where you’ll discover a treasure trove of resources to enhance your career! Bring your laptop, tablet, or phone to this I Talk and navigate your way around AAN.com and the AAN apps to find gems like free CME and MOC tools, award/fellowship opportunities, and patient resources for your practice.

3:00 p.m.–3:45 p.m.
Your Abstract Has Been Accepted: Now What? Tips for a Successful Presentation

5:00 p.m.–5:30 p.m.
Lessons Learned from an Ebola Patient

Richard T. Davey, Jr., MD, Daniel Chertow, MD, and Avindra Nath, MD, of the National Institutes of Health, will discuss the epidemiology, clinical manifestations, pathophysiology and the unique challenges posed in management of the neurological complications of Ebola virus infection.

Visit AAN.com/view/AM15 for more information.
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Brought to you by Bayer HealthCare
Power Your Practice: Episode-based Payments Improve Ischemic Stroke Care

Improvements in ischemic stroke care and potential cost savings are outcomes of episode-based payments, according to an article in the May 2014 issue of the AAN’s Neurology® Clinical Practice.

In “Episode-based payment for ischemic stroke care with implications for neurologists,” Michael R. Dobbs, MD, MHCM, describes a typical stroke episode and care costs, which can range from $7,309 to $146,149 (the mean is $28,253). He suggests that an episode-based payment system for stroke “should be tiered based on factors like severity of illness, comorbidities, and hospital-acquired” and bonuses or penalties be based on outcomes. He uses as a case study a partnership between Norton Healthcare (a Louisville, KY, nonprofit group of four large hospitals) and UK Health-Care (the health care enterprise of the University of Kentucky).

Recently, AANnews reached out to Dobbs, who is the associate professor and interim chair in the department of neurology at the University of Kentucky Medical Center in Lexington, with some follow-up questions.

Why does an episode-based payment make sense for ischemic stroke?

Episode-based payment bundles a single lumped payment around a health care event, such as ischemic stroke. Ischemic stroke fits well into an episode-based system because (1) ischemic stroke is common, (2) an ischemic stroke care episode lasts for a definable period of time, and (3) ischemic stroke care costs are high and episode-based payment could provide savings.

What role do neurologists play in ischemic stroke care?

That depends on the neurologist. In tertiary-care medical centers, ischemic stroke care is often delivered by neurologists with special expertise in vascular neurology. They personally manage the patient from presentation to discharge. In smaller hospitals, community neurologists often function as consultants for inpatient ischemic stroke care. Any neurologist might manage ischemic stroke risk factor control after discharge in clinic. All neurologists have special expertise and knowledge that can be helpful in ischemic stroke care.

How could neurologists improve ischemic stroke care?

Neurologists can improve ischemic stroke care in many ways. We can participate in meaningful scientific research, we can adhere to best practices, and we can teach other health care providers how to deliver better stroke care. In my opinion, the most effective thing we can do is to teach others key points about delivering safe stroke care.

What’s a value-based stroke care network?

A value-based stroke care network is based on Michael Porter’s equation (ACCESS+QUALITY)/COSTS=VALUE. The network of hospitals and providers works to deliver better access to stroke care, with higher quality, at a lower cost. It’s good for patients and more cost efficient for society. The network hospitals and providers can leverage VALUE to develop a stronger reputation, to negotiate better rates from payers, and create a more efficient cost structure.

Why are episodes of care and bundled payments something to pay attention to?

Health care reform demands better cost control for society with improved outcomes for patients. Financial risk is being shifted from payers to providers. Providers must learn to deliver better care at a lower cost, or fail. Episode-based, bundled payment is reflective of this new paradigm, as are disease-specific capitation, accountable care organizations, and global capitation.

The article in Neurology: Clinical Practice is available to AAN members at http://ow.ly/Bth2.

The AAN also provides resources on episodes of care at AAN.com/practice/new-payment-and-delivery-models/episodes-of-care.
**Neurology Is the Universal Language at the International Experience**

International attendees are encouraged to visit the International Experience in Salon GHI Prefunction of the convention center through Friday to network with other globetrotting neurologists. Meet members of the AAN International Subcommittee, as well as some of the Academy’s international ambassadors. Informal presentations, free to all attendees, will take place through Thursday.

<table>
<thead>
<tr>
<th>Tuesday: Global Neurology Day</th>
<th>Speaker</th>
<th>Title</th>
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<tbody>
<tr>
<td>12:00 p.m.</td>
<td>Igor Koralnik, MD (US)</td>
<td>Establishment of a Global Neurology Program: Partnership Between BIDMC in Boston and the University Teaching Hospital in Lusaka, Zambia</td>
</tr>
<tr>
<td>12:30 p.m.</td>
<td>Mark Hallett, MD, FAAN (US)</td>
<td>How to Get Your Manuscript Published</td>
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<tr>
<th>Wednesday: Latin America/Caribbean Day</th>
<th>Speaker</th>
<th>Title</th>
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<tbody>
<tr>
<td>12:00 p.m.</td>
<td>Amza Ali, MD, FRCP, FAAN (Jamaica)</td>
<td>Advancing Epilepsy Care in the Caribbean</td>
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<tr>
<th>Thursday: Europe Day</th>
<th>Speaker</th>
<th>Title</th>
</tr>
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<tbody>
<tr>
<td>12:30 p.m.</td>
<td>Walter Struhal, MD (Austria)</td>
<td>Harmonization of European Neurology Education</td>
</tr>
<tr>
<td>1:00 p.m.</td>
<td>Filippo Martinelli Boneschi, MD, MS, PhD (Italy)</td>
<td>Genetic Factors in MS: The Experience of the IMSGC Consortium</td>
</tr>
</tbody>
</table>
Join ACADIA Pharmaceuticals Inc. for a virtual reality experience that will transform how you see PD psychosis.

WHAT ARE YOUR PATIENTS WITH PD PSYCHOSIS HOLDING BACK?

See what they see booth 413 at AAN For more information, visit PDpsychosis.com.

Parkinson's disease (PD).
WHAT ARE YOUR PATIENTS WITH PD PSYCHOSIS HOLDING BACK?

Join ACADIA Pharmaceuticals Inc. for a virtual reality experience that will transform how you see PD psychosis.

See what they see booth 413 at AAN

For more information, visit PDpsychosis.com.

Parkinson's disease (PD).

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The Buzz at Academy Central

The AAN’s “Keep Calm and Call a Neurologist” t-shirt seems to have taken DC by storm. The Academy’s new NeuroTracker also seems to be a hot commodity. Whether clinicians, researchers, or teachers, attendees are seeking information about the AAN’s many helpful tools and products, as well as insights on public policy, publications, careers, and much more!

Have you downloaded your free AANnews® app yet that enables you to conveniently read our monthly member magazine on your phone or tablet? If so, show the staff your AANnews app at the AAN.com booth and get a free power bank!

Academy Central is open through Friday, April 24, from 8:00 a.m. to 6:00 p.m. daily.

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**Tell Us Why You Think Neuroscience Is Essential!**

**Look for AAN Video Booth at the Poster Sessions**

The AAN wants to hear from you on why you feel neuroscience is essential to the practice of neurology. The Neuroscience is Essential film crew will be in poster sessions P2 and P3 on Tuesday, April 21, between the hours of 7:30 a.m. and 9:00 a.m. and 6:00 p.m. and 6:30 p.m. Stop by the video booth—look for the lights and camera—and your quote may be used in an upcoming international video promotion.

Neuroscience is Essential is part of a broader “Neuroscience is…” campaign by the AAN geared toward four distinct audiences: K-12 students; practicing neurologists and other neuroscience professionals; medical students; and government agencies, industry, and the general public. The initiative is designed to build awareness and demonstrate the importance of neuroscience research in the understanding, prevention, treatment, and potential future cures of brain diseases.

**Industry Therapeutic Update from BioMarin Pharmaceutical Inc. and PTC Therapeutics, Inc.**

**Advances in Duchenne Muscular Dystrophy Natural History and Biomarkers**

**DATE**

Tuesday, April 21, 2015

**TIME**

7:00 pm – 7:55 pm Dinner

(Doors open at 6:45 pm)

7:55 pm – 10:00 pm Program

**LOCATION**

Marriott Marquis Washington, DC

Liberty Ballroom I–L

**FACULTY PRESENTERS**

Craig McDonald, MD
UC Davis Health System
Sacramento, California

Perry Shieh, MD, PhD
David Geffen School of Medicine at UCLA
Los Angeles, California

H. Lee Sweeney, PhD
Perelman School of Medicine, University of Pennsylvania
Philadelphia, Pennsylvania

**LEARNING OBJECTIVES**

- Characterize the DMD disease course, including effects on ambulation and pulmonary and cardiac function
- Explain the use of clinical biomarkers and imaging assessments for monitoring DMD disease progression
- Provide an overview of state-of-the-art therapies in development for DMD
- Describe current ongoing clinical development programs in DMD

Register for this important event by scanning this QR code with your mobile device, or by accessing the following URL: www.seeuthere.com/aanconvention

This is not a CME program nor will credits be given for attendance.

This event abides by the Sunshine Act Regulations; costs for the attendee’s meals will be reported as required.

For any medical related inquiries, please contact medinfo@ptcbio.com (PTC Therapeutics, Inc.) or medinfo@bmrn.com (BioMarin Pharmaceutical Inc.).
Koroshetz to Speak on BRAIN Initiative at Awards Luncheon

Walter J. Koroshetz, MD, FAAN, interim director of the National Institute of Neurological Disorders and Stroke (NINDS) will speak on the NIH BRAIN Initiative at Wednesday’s Awards Luncheon, held from 12:00 p.m. to 1:30 p.m.

The goal of the Obama administration’s BRAIN (Brain Research through Advancing Innovative Neurotechnologies℠) Initiative is to revolutionize our understanding of the human brain by accelerating the development and application of innovative technologies. The result will be a revolutionary new dynamic picture of the brain that, for the first time, shows how individual cells and complex neural circuits interact in both time and space. This picture will fill major gaps in our current knowledge and provide unprecedented opportunities for exploring new ways to treat, cure, and even prevent brain disorders, and deepen our understanding of how the brain works.

A member of the AAN, Koroshetz became the acting director of NINDS in October 2014, after serving as deputy director under Story Landis Phd. Together, they directed program planning and budgeting, and oversaw the scientific and administrative functions of the institute. He has held leadership roles in a number of NIH and NINDS programs including the NIH’s BRAIN Initiative, the Traumatic Brain Injury Center collaborative effort between the NIH intramural program and the Uniformed Health Services University, and the multi-year work to develop and establish the NIH Office of Emergency Care Research to coordinate NIH emergency care research and research training.

Before joining NINDS, Koroshetz served as vice chair of the neurology service and director of stroke and neurointensive care services at Massachusetts General Hospital (MGH). He was a professor of neurology at Harvard Medical School (HMS) and led neurology resident training at MGH between 1990 and 2007. Over that same period, he co-directed the HMS neurobiology of disease course with Drs. Edward Kravitz and Robert H. Brown.

Tickets for the Awards Luncheon are available for $60 through Registration. Buy a ticket and show your support for award recipients.

INDUSTRY THERAPEUTIC UPDATE FROM NOVARTIS PHARMA AG

The kaleidoscope of MS – Day 1

Multiple colors: exploring the disease spectrum

Tuesday, April 21, 2015, 7:30–9:30 pm (doors open: 7:00 pm)
Grand Ballroom Central/North, Renaissance Washington

Opening and welcome
Martin Duddy (Chair), Newcastle, UK

New reflections
Fred Lublin, New York, NY, USA

Interpreting colorful patterns
Lawrence Steinman, Stanford, CA, USA

Different angles
Robert Naismith, St. Louis, MO, USA

It’s not all black and white
Michael Racke, Columbus, OH, USA
Benjamin Greenberg, Dallas, TX, USA

Timothy Vollmer, Aurora, CO, USA

Chair’s close
Martin Duddy, Newcastle, UK

Refreshments will be served at the start of the event

All delegates must wear their AAN registration badge in order to gain entry to the ITU. This is not a CME program nor will CME credits be given for attendance.
You Are Invited to Attend a Presentation Forum on the Treatment of Seizures

Monday, April 20
5:00 PM - 5:20 PM

Topic: Adjunctive Therapy for the Treatment of Partial-Onset Seizures in Patients 12 Years and Older

Booth 429

Robert T. Wechsler, MD, PhD, FAAN
Owner, Consultants in Epilepsy & Neurology, PLLC
Medical Director, Idaho Comprehensive Epilepsy Center
Boise, ID

Tuesday, April 21
12:30 PM - 12:50 PM

Topic: Adjunctive Therapy for the Treatment of Seizures Associated With Lennox-Gastaut Syndrome

2:45 PM - 3:05 PM

Topic: Adjunctive Therapy for the Treatment of Partial-Onset Seizures in Patients 12 Years and Older

Booth 429

Trevor J. Resnick, MD
Chief, Department of Neurology
Miami Children’s Hospital
Miami, FL

Wednesday, April 22
1:30 PM - 1:50 PM

Topic: Adjunctive Therapy for the Treatment of Partial-Onset Seizures in Patients 12 Years and Older

Booth 429

Robert T. Wechsler, MD, PhD, FAAN
Owner, Consultants in Epilepsy & Neurology, PLLC
Medical Director, Idaho Comprehensive Epilepsy Center
Boise, ID

AGENDA

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
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<tbody>
<tr>
<td>15 min</td>
<td>Presentation</td>
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<tr>
<td>5 min</td>
<td>Question &amp; Answer Session</td>
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</table>

These are promotional presentations and are not certified for continuing medical education credit.
Versatile App Brings AANnews to Your Portable Devices

You now can enjoy keeping up on Academy events, products, and services anywhere with the new AANnews® mobile app. Read your exclusive monthly member magazine on your iOS, Android, or other portable device, “flip” page by page, or select articles directly from the table of contents. The interactive app also can instantly link you to related materials on AAN.com as well as helpful Academy videos discussing the latest changes in practicing neurology or highlighting features of upcoming AAN conferences. To learn more and access your AANnews app, visit your iTunes or Android app store today!
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THERAPY

LEARN MORE AT
REROUTEMIGRAINE.COM AND BOOTH 1303

Reroute Migraine is a clinical resource and community for healthcare professionals. Our goal is to keep you informed about advances in migraine therapy administration.

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Reroute Migraine is a trademark of Avanir Pharmaceuticals, Inc.
Avanir supports innovative medicines for patients with central nervous system disorders of high unmet need, such as the treatment of migraine.
Catch the Latest Research at Wednesday’s Emerging Science Platform and Poster Sessions

Looking for a synopsis of the latest research? Check out the Emerging Science sessions on Wednesday. A total of 21 abstracts were selected for the program, which highlights research where key aspects of the work were conducted after the October 27 abstract submission deadline and is new and of sufficient scientific importance to warrant expedited presentation.

Seven of the abstracts were selected for poster presentation, and 14 for dual presentation. The poster presentation abstracts will be included in Poster Session IV on Wednesday from 7:30 a.m. to 12:00 p.m. The dual presentation abstracts will be featured in a data blitz format during the first 45 minutes of the Emerging Science session from 6:15 p.m. to 7:00 p.m. on Wednesday, followed by poster presentations in the same room from 7:00 p.m. to 7:45 p.m. One was selected to be presented with the Clinical Trials Plenary Session (time and date noted below).

Emerging Science Poster Presentations

Poster Session IV
Wednesday, 7:30 a.m.–12:00 p.m.
Exhibit Hall A

P4.336 “Triheptanoin Dramatically Reduces the Frequency of Paroxysmal Movement Disorders in GLUT1 Deficiency,” Fanny Mochel, MD, Bethesda, MD

P4.337 “Pharmacokinetic-pharmacodynamic Effects of Sublingual Apomorphine (APL-130277) for Acute Rescue of OFF Episodes in Parkinson’s Disease Patients,” Jordan Dubow, Northbrook, IL

Emerging Science Session
Wednesday, 6:15 p.m.–7:45 p.m.
Ballroom C

001 “Randomized, Double-blind, Placebo-controlled, Phase Ib Study of Aducanumab (BIB037), an Anti-AB Monoclonal Antibody, in Patients with Prodromal or Mild Alzheimer’s Disease: Interim Results by Disease Stage and APOE4 Status,” Jeffrey J. Sevigny, MD, Cambridge, MA

P4.338 “Characterization of Absolute Lymphocyte Count Profiles in MS Patients Treated with Relayed-release Dimethyl Fumarate: Considerations for Patient Management,” Robert J. Fox, MD, FAAN, Cleveland, OH

P4.339 “Safety and Tolerability of the Remyelinating Therapeutic Antibody rHIgM22 in Patients with Stable Multiple Sclerosis,” Benjamin M. Greenberg, MD, Dallas, TX


P4.341 “Chronic Treatment with PB1046, a Stable and Long-acting Vasoactive Intestinal Peptide Receptor Agonist, Improves Cardiac and Skeletal Muscle Function in Mouse Models of Duchenne Muscular Dystrophy,” Steve Roof, Columbus, OH

P4.342 “Direct cis-differentiation of Accessible Neuronal Precursors to Model Neurologic Disease in Mice and Humans,” Andrew Liu, MD, New Haven, CT
GE Healthcare

At AAN 2015, visit GE Healthcare booth 1443 to learn more.

For more information, visit www.datscan.com and www.gevizamyl.com.
Myth: Every Concussion is the same.

Fact: We identified six different types of concussions, each with different treatment protocols.

As leaders in clinical care, education, and research, the UPMC Sports Medicine Concussion Program has developed the Vestibular/Ocular Motor Screening (VOMS), which we use in conjunction with a comprehensive clinical interview and computerized neurocognitive testing to assess and manage concussion. The VOMS was developed based on our previous research that identified symptoms related to vestibular system dysfunction as the most accurate predictor of prolonged recovery from sports-related concussions. Using this three pronged approach, we develop individualized treatment plans based on symptoms, sport, and goals, to help patients achieve full recoveries every day.
Learn about free programs to help fulfill MOC requirements at Academy Central

continued from page 1

requirements as mandated by the American Board of Psychiatry and Neurology. See demonstrations of:

- **NeuroPI**
  
  Online performance improvement programs designed to help you meet the ABPN performance in practice clinical requirement for maintenance of certification. Provides 20 CME credits per module. (A $699 value)

- **NeuroSAE**
  
  Online self-assessment exams designed to help you meet the ABPN self-assessment requirement for maintenance of certification. Provides 8 self-assessment CME credits per exam. (A $149 value)

- **NeuroLearn**
  
  Convenient online courses designed to address relevant clinical and practice topics while offering a range of CME credits. (Valued up to $69)

*$0 purchase price excludes Student and Nurse Practitioner/Physician Assistant members at the lower dues rate. Free access is limited to one course per program at a time.

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AT AAN 2015

DISCOVER ADVANCED NEUROMUSCULAR TESTING

- Muscle biopsy
- Acid α-glucosidase
- Various blood tests
- Electrocardiograms
- Nerve conduction tests
- Pulmonary function tests
- Reflex testing
- X-rays
- Magnetic resonance imaging
- Sleep studies
- Targeted DNA analysis

Learn more about next-generation panel testing for neuromuscular disorders—including Pompe disease. A complimentary program is available for targeted DNA analysis of up to 31 separate conditions.¹

Test early can help impact a 13-year average diagnostic delay for Pompe disease.²⁻⁴

Visit Genzyme at Booth #1815 to learn more.

References:


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At Houston Methodist, we’re pioneering imaging technologies to treat our patients in unprecedented ways. From isotopes that detect Alzheimer’s disease before symptoms even occur, to five-dimensional imaging that guides brain tumor removal with ultimate precision, we are reducing the risk of some of medicine’s most complex procedures, while leading our patients to faster healing and better outcomes.

Visit houstonmethodist.org/ni to explore all the ways we’re leading medicine.
Beyond Motor Symptoms: Parkinson’s Disease Psychosis

You are cordially invited to attend an Industry Therapeutic Update from ACADIA Pharmaceuticals Inc.

**FACULTY**
- **Jeffrey L. Cummings, MD, ScD**
  Program Chair and Moderator
- **Claire Henchcliffe, MD, DPhil**
- **Daniel E. Kremens, MD, JD**

**DATE**
Tuesday, April 21, 2015

**LOCATION**
Marriott Marquis
Washington, DC
Liberty Ballroom M-P

**AGENDA**
- 6:45 PM Doors Open
- 7:00 PM - 8:00 PM Presentation
- 8:00 PM - 8:30 PM Q&A
  Dinner Provided

The content of this program is intended to educate healthcare professionals about Parkinson’s disease (PD) psychosis. This program does not qualify for continuing medical education credit.

Join us today for this expert discussion on PD psychosis.

ACADIA Pharmaceuticals Inc. is a biopharmaceutical company focused on the development and commercialization of innovative medications to address unmet medical needs in neurological and related central nervous system disorders. © ACADIA Pharmaceuticals Inc. All rights reserved. PDP-00188 4/15
“So far, I really enjoyed the ‘Infectious, Paraneoplastic and Autoimmune Encephalopathies’ Integrated Neuroscience Session. As a resident, I will really use this in patient care.”

Divya Mella, MD
Galveston, TX

“I found the topics extremely relevant especially in these early years of my neurology career. In our SIGN meetings, we got to talk and ask questions directly to program directors—who we will someday be trying to impress! We get to engage, learn, and exchange ideas with other medical students from all over the world.”

Priti Gros
Montreal, QC, Canada

“The science and education is equally as important as the networking!”

Tahseen Mozaffar, MD, FAAN
Orange, CA

“I am presenting a poster presentation on research titled ‘Demographic Characteristics and Prognostic Factors in Acute Ischemic Stroke in a Tertiary Care Center in Nepal’ on Monday.”

Bikram Gajurel, MD, DM
Maharaajgunj, Nepal

Jeff Kraakevik MD
Fascinating discussion on application of Six-Sigma/quality tools to healthcare. 1 problem is medicine has large knowledge gaps. #AANAM

Dave Watson
Thx @Lnyjri Elaine jones @dralessi and Joel Kaufman for course at #AANAM on advocacy leadership. @AANMember need 2b our own best friend

Chris Giza
3 Phases #concussion management: rest, relative rest, gradual exertion @JeffKutcherMD #AANAM http://www.ncbi.nlm.nih.gov/pubmed/25470160 pic.twitter.com/VuP3dAxm8E

Amaal Starling, M.D.
@AmaalStarling
#DrGioia recommends that schools have a #concussion team to help enforce school accommodations & monitor symptom exacerbations. #AANAM

Jess Schwartz
@DPT2Go @AmaalStarling
Great to see. I’d like to see FULL RTLearne before RTPlay 4 proprioceptive/kineesthetic/motor planning purposes #AANAM #Physio

MJFox Fdn Research
A smattering of the promising Parkinson’s research we heard at #AANAM http://bit.ly/1kYPyTv
Biogen is committed to improving the lives of people with Multiple Sclerosis (MS) by supporting the education of specialists through our MS Clinical Fellowship program as well as our Global MS Registry Research program. To meet these objectives, Biogen is pleased to offer the below fellowship programs tailored specifically to support talented MS Specialists.

- **MS Clinical Fellowship:** We award up to $90,000 for a single academic year in support of MS Clinical Fellows’ salaries.
- **Global MS Registry Research Fellowship:** We award up to €75,000 (or local equivalent) for a single academic year in support of MS Registry Research Fellows’ salaries.

To learn more please contact our Grants Office at 617-914-1299 or send an email to grantsoffice@biogen.com.

The American Academy of Neurology thanks Peake Delancey Printers for their prompt service, exemplary professionalism, and quality production, as well as their generous donation of the 2015 Brain Health Fair program guide.

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“I am an Italian postdoc in the US and am attending the Annual Meeting to have the possibility to present one work of nine about correlations between optical coherence tonography and gray matter lesions in a primary progressive MS population.”

Christian Cordano, PhD
San Francisco, CA
Please join us at Booth 629 for a presentation from these leading experts

Fernando Pagan, MD
Associate Professor of Neurology, Director of Movement Disorders Program, Medical Director Georgetown University Hospital National Parkinson Foundation Center of Excellence
Monday, April 20 | 4:45 PM
Wednesday, April 22 | 12:10 PM

Peter A. LeWitt, MD
Professor of Neurology, Wayne State University School of Medicine
Director, Parkinson’s Disease and Movement Disorders Program, Henry Ford Hospital
Monday, April 20 | 5:30 PM
Tuesday, April 21 | 12:10 PM & 12:40 PM

Neal Hermanowicz, MD
Professor, Director of Movement Disorders Program
University of California, Irvine, Eisenhower Medical Center
Wednesday, April 22 | 12:40 PM
Thursday, April 23 | 11:45 AM & 12:30 PM

A (neuro)logical approach to the treatment of patients with symptomatic neurogenic orthostatic hypotension

NORTHERA™ (droxidopa) is a norepinephrine prodrug and is the first medication approved for the treatment of orthostatic dizziness, lightheadedness, or the “feeling that you are about to black out” in adult patients with symptomatic neurogenic orthostatic hypotension (nOH) caused by primary autonomic failure (Parkinson’s disease, multiple system atrophy, and pure autonomic failure), dopamine beta-hydroxylase deficiency, and non-diabetic autonomic neuropathy. Effectiveness beyond 2 weeks of treatment has not been demonstrated. The continued effectiveness of NORTHERA should be assessed periodically.

IMPORTANT SAFETY INFORMATION

WARNING: SUPINE HYPERTENSION
Monitor supine blood pressure prior to and during treatment and more frequently when increasing doses. Elevating the head of the bed lessens the risk of supine hypertension, and blood pressure should be measured in this position. If supine hypertension cannot be managed by elevation of the head of the bed, reduce or discontinue NORTHERA.

CONTRAINDICATIONS
• None.

WARNINGS AND PRECAUTIONS
• Supine Hypertension: NORTHERA therapy may cause or exacerbate supine hypertension in patients with NOH, which may increase cardiovascular risk if not well-managed.
• Hyperpyrexia and Confusion: Postmarketing cases of a symptom complex resembling neuroleptic malignant syndrome (NMS) have been reported in Japan with NORTHERA use. Observe patients carefully when the dosage of NORTHERA is changed or when concomitant levodopa is reduced abruptly or discontinued, especially if the patient is receiving neuroleptics. NMS is an uncommon but life-threatening syndrome characterized by fever or hyperthermia, muscle rigidity, involuntary movements, altered consciousness, and mental status changes. The early diagnosis of this condition is important for the appropriate management of these patients.
• Ischemic Heart Disease, Arrhythmias, and Congestive Heart Failure: NORTHERA therapy may exacerbate symptoms in patients with existing ischemic heart disease, arrhythmias, and congestive heart failure.

ADVERSE REACTIONS
• Allergic Reactions: This product contains FD&C Yellow No. 5 (tartrazine) which may cause allergic-type reactions (including bronchial asthma) in certain susceptible persons. Although the overall incidence of FD&C Yellow No. 5 (tartrazine) sensitivity in the general population is low, it is frequently seen in patients who also have aspirin hypersensitivity.
• The most common adverse reactions (greater than 5%) were headache, dizziness, nausea, hypertension, and fatigue.

DRUG INTERACTIONS
• Administering NORTHERA in combination with other agents that increase blood pressure (e.g., norepinephrine, ephedrine, midodrine, and triptans) would be expected to increase the risk for supine hypertension. Dopa-decarboxylase inhibitors may require dose adjustments for NORTHERA.

USE IN SPECIFIC POPULATIONS
• Clinical experience with NORTHERA in patients with severe renal function impairment (GFR less than 30 mL/min) is limited. There are no adequate and well-controlled trials of NORTHERA in pregnant women. Women who are nursing should choose nursing or NORTHERA. The safety and effectiveness of NORTHERA in pediatric patients have not been established. No overall differences in safety or effectiveness were observed between subjects aged 75 years and older and younger subjects in clinical trials, but greater sensitivity of some older individuals cannot be ruled out.

Visit NORTHERA.com to download a treatment form, or call the NORTHERA Support Center at 844-601-0101
Please see the Brief Summary on the following page and the full Prescribing Information, including Boxed Warning, at www.NORTHERA.com.

NORTHERA™ (droxidopa) capsules, for oral use
Brief Summary of Prescribing Information
(See package insert for full Prescribing Information or visit www.Northera.com)
Rx Only

WARNING: SUPINE HYPERTENSION
Monitor supine blood pressure prior to and during treatment and more frequently when increasing doses. Elevating the head of the bed lessens the risk of supine hypertension, and blood pressure should be measured in this position. If supine hypertension cannot be managed by elevation of the head of the bed, reduce or discontinue NORTHERA [see Warnings and Precautions].

INDICATIONS AND USAGE – NORTHERA is indicated for the treatment of orthostatic dizziness, lightheadedness, or the “feeling that you are about to black out” in adult patients with symptomatic neurogenic orthostatic hypotension (NOH) caused by primary autonomic failure (Parkinson’s disease (PD), multiple system atrophy, and pure autonomic failure), dopamine beta-hydroxylase deficiency, and non-diabetic autonomic neuropathy. Effectiveness beyond 2 weeks of treatment has not been established. The continued effectiveness of NORTHERA should be assessed periodically.

CONTRAINDICATIONS – None.

WARNINGS AND PRECAUTIONS – Supine Hypertension: NORTHERA therapy may cause or exacerbate supine hypertension in patients with NOH. Patients should be advised to elevate the head of the bed when resting or sleeping. Monitor blood pressure, both in the supine position and in the recommended head-elevated sleeping position. Reduce or discontinue NORTHERA if supine hypertension persists. If supine hypertension is not well-managed, NORTHERA may increase the risk of cardiovascular events.

Hyperpyrexia and Confusion: Post-marketing cases of a symptom complex resembling neuroleptic malignant syndrome (NMS) have been reported with NORTHERA use during post-marketing surveillance in Japan. Observe patients carefully when the dosage of NORTHERA is changed or when concomitant levodopa is reduced abruptly or discontinued, especially if the patient is receiving neuroleptics. NMS is an uncommon but life-threatening syndrome characterized by fever (or hyperthermia), muscle rigidity, involuntary movements, altered consciousness, and mental status changes. The early diagnosis of this condition is important for the appropriate management of these patients.

Ischemic Heart Disease, Arrhythmias, and Congestive Heart Failure: NORTHERA may exacerbate existing ischemic heart disease, arrhythmias, and congestive heart failure. Careful consideration should be given to this potential risk prior to initiating therapy in patients with these conditions.

Allergic Reactions: This product contains FD&C Yellow No. 5 (tartrazine) which may cause allergic-type reactions (including bronchial asthma) in certain susceptible persons. Although the overall incidence of FD&C Yellow No. 5 (tartrazine) sensitivity in the general population is low, it is frequently seen in patients who also have aspirin hypersensitivity.

ADVERSE REACTIONS – Clinical Trials Experience: Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect the rates observed in clinical practice. The safety evaluation of NORTHERA is based on two placebo-controlled studies 1 to 2 weeks in duration (Studies 301 and 302), one 8-week placebo-controlled study (Study 306), and two long-term, open-label extension studies (Studies 303 and 304). In the placebo-controlled studies, a total of 485 patients with Parkinson’s disease, multiple system atrophy, pure autonomic failure, dopamine beta-hydroxylase deficiency, or non-diabetic autonomic neuropathy were randomized and treated. 245 with NORTHERA and 240 with placebo [see Clinical Studies].

Placebo-Controlled Experience: The most commonly observed adverse reactions (those occurring at an incidence of greater than 5% in the NORTHERA group and with at least a 3% greater incidence in the NORTHERA group than in the placebo group) in NORTHERA-treated patients during the three placebo-controlled trials were headache, dizziness, nausea, hypertension. The most common adverse reactions leading to discontinuation from NORTHERA were hypertension or increased blood pressure and nausea.

Table 1. Most Common Adverse Reactions Occurring More Frequently in the NORTHERA Group

<table>
<thead>
<tr>
<th>Study 301 and Study 302 (1 to 2 Weeks Randomized Treatment)</th>
<th>Study 306 (5 to 10 Weeks Randomized Treatment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Placebo (N=152) n (%)</td>
<td>Placebo (N=168) n (%)</td>
</tr>
<tr>
<td>Headache</td>
<td>4 (3.0)</td>
</tr>
<tr>
<td>Dizziness</td>
<td>2 (1.5)</td>
</tr>
<tr>
<td>Nausea</td>
<td>2 (1.5)</td>
</tr>
<tr>
<td>Hypertension</td>
<td>0 (0.0)</td>
</tr>
</tbody>
</table>

Note: n-number of patients. Table displays adverse reactions that were reported in greater than 5% of patients in the NORTHERA group with at least a 3% greater incidence in the NORTHERA group than in the placebo group.

Long-Term, Open-Label Trials with NORTHERA: In the long-term, open-label extension studies, a total of 422 patients, mean age 65 years, were treated with NORTHERA for a mean total exposure of approximately one year. The commonly reported adverse events were falls (24%), urinary tract infections (15%), headache (12%), syncope (12%), and dizziness (12%).

DRUG INTERACTIONS – Drugs that Increase Blood Pressure: Administering NORTHERA in combination with other agents that increase blood pressure (e.g., norepinephrine, ephedrine, midodrine, and trinitrin) would be expected to increase the risk for supine hypertension. Parkinson’s Medications: Dopa-decarboxylase inhibitors may require dose adjustments for NORTHERA.

USE IN SPECIFIC POPULATIONS – Pregnancy: Pregnancy Category C: There are no adequate and well-controlled trials in pregnant women. Following consecutive oral administration at doses of 60, 200, and 600 mg/kg/day to pregnant Sprague Dawley rats, increased incidences of lower body weight and occurrence of undulant rib were noted in fetuses, but they were slight and spontaneously reversed after birth. Based on dose per unit body surface area, these three doses correspond to approximately 0.3, 1, and 3 times, respectively, the maximum recommended total daily dose of 1,800 mg in a 60 kg patient. Shortening of the gestation period was observed in rats at 600 mg/kg/day. Low incidences of renal lesions (cysts, indentations, or renal pelvic dilation) were observed on the surface of the kidneys of female rats treated with droxidopa during the period of fetal organogenesis. No other potentially teratogenic effects have been observed in rats or rabbits. Nursing Mothers: Choose nursing or NORTHERA. In rats, droxidopa is excreted in breast milk, and when the drug was administered to the nursing dams during the period of lactation, reduced weight gain and reduced survival were observed in the offspring. Pediatric Use: The safety and effectiveness of NORTHERA in pediatric patients have not been established. Geriatric Use: A total of 197 patients with symptomatic NOH aged 75 years or above were included in the NORTHERA clinical program. No overall differences in safety or effectiveness were observed between these subjects and younger subjects, and other reported clinical experience has not identified differences in responses between the elderly and younger patients, but greater sensitivity of some older individuals cannot be ruled out. Patients with Renal Impairment: NORTHERA and its metabolites are primarily cleared renally. Patients with mild or moderate renal impairment (GFR greater than 30 mL/min) were included in clinical trials and did not have a higher frequency of adverse reactions. Clinical experience with NORTHERA in patients with severe renal function impairment (GFR less than 30 mL/min) is limited.

OVERDOSAGE – Symptoms: There was one case of overdose reported during post-marketing surveillance in Japan. The patient ingested 7,700 mg of NORTHERA and experienced a hypertensive crisis that resolved promptly with treatment. Treatment: There is no known antidote for NORTHERA overdose. In case of an overdose that may result in an excessively high blood pressure, discontinue NORTHERA and treat with appropriate symptomatic and supportive therapy. Counsel patients to remain in a standing or seated position until their blood pressure drops below an acceptable limit.

Manufactured for: Lundbeck Deerfield, IL 60015, U.S.A.

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DRX-L-00003 August 2014
Come hear leading experts discuss the latest advances in MS

GENZYME’S INDUSTRY THERAPEUTIC UPDATE
Targeting T and B Cells in MS: The Journey From Immunology to Clinical Outcomes

**WHEN**
Tuesday, April 21, 2015

**WHERE**
Marriott Marquis, Washington, DC (Salon 6, Meeting Level 2)

**TIME**
7:00 pm-7:30 pm (Buffet Dinner) / 7:30 pm-10:00 pm (Presentation)

**REGISTER**
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**PRESENTERS**

- **Omar A. Khan, MD**
  Chairman and Professor of Neurology; Neurologist-in-Chief, Detroit Medical Center; Director, Wayne State University Multiple Sclerosis Research Center & The Sastry Foundation Advanced Imaging Laboratory; Director, Detroit Medical Center Multiple Sclerosis Clinic, Detroit, Michigan

- **Heinz Wiendl, MD**
  Chair, Department of Neurology, Inflammatory Disorders of the Nervous System and Neurooncology, University Clinic of Muenster, Muenster, Germany

- **Fred D. Lublin, MD, FAAN, FANA**
  Saunders Family Professor of Neurology; Director, Corinne Goldsmith Dickinson Center for Multiple Sclerosis; Co-Chief Editor, Multiple Sclerosis and Related Disorders; Icahn School of Medicine at Mount Sinai, New York, New York

IN-BOOTH PRODUCT THEATER PRESENTATIONS
APRIL 20-23 AT BOOTH 1909

**PRESENTATION SCHEDULE**

<table>
<thead>
<tr>
<th>Monday, April 20</th>
<th>Tuesday, April 21</th>
<th>Wednesday, April 22</th>
<th>Thursday, April 23</th>
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<tbody>
<tr>
<td>5:00 pm</td>
<td>12:15 pm</td>
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**PRESENTERS**

- **Daniel Wynn, MD**
  Director of Clinical Research and Director, Multiple Sclerosis Center at Consultants in Neurology, Chicago, Illinois

- **Adil Javed, MD, PhD**
  Assistant Professor of Neurology, Department of Neurology, The University of Chicago Medical Center, Chicago, Illinois

- **Bhupendra O. Khatri, MD**
  Medical Director, Center for Neurological Disorders, Milwaukee, Wisconsin

These events are not part of the American Academy of Neurology’s 67th Annual Meeting as planned by the Meeting Management Committee. These are not CME programs, nor will CME credits be given for attendance.

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