



**2009  
SCIENTIFIC  
ABSTRACT  
LISTING AND  
ANNUAL  
MEETING  
INFORMATION**

Washington State Convention  
and Trade Center

Co-Headquarters Hotels:  
• Sheraton Seattle Hotel  
• Grand Hyatt Seattle

**Early Registration  
Deadline: March 20, 2009**

**Seattle**  
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Better Practices, Better Outcomes  
AAN 61<sup>ST</sup> ANNUAL MEETING  
APRIL 25 — MAY 2, 2009

# AAN 61<sup>ST</sup> ANNUAL MEETING, SEATTLE



*“If you’re looking for a wide range of specialized, in-depth opportunities to help you excel in your career, then the Scientific Program at the 2009 Annual Meeting will not disappoint. With more than 2,000 scientific presentations covering a multitude of topics in neurology, this year’s program provides cutting-edge care as well as translational neuroscience coverage to keep you current on the latest breakthroughs in the field. A total of nine poster sessions—along with an excellent Resident Basic Science curriculum—round out this amazing program.*

*The Integrated Neuroscience sessions (half-day programs offered throughout the week) are an excellent way to bring yourself up-to-date on the latest discoveries. Six new topics are highlighted in the Integrated Neuroscience sessions: Alzheimer’s, Imaging, and Biomarkers (ADNI); Recent Advances in Genetics and Molecular Biology in Global Neurology; Endovascular Neurology; the Circadian and Homeostatic Control of Sleep; Advances in Headache; and Traumatic Brain Injury. These half-day programs provide an excellent opportunity to get in-depth updates in several key areas. Be sure to stay for Friday’s Future of Neuroscience Conference where a panel of experts will provide essential insights into the burgeoning field of neurogenetics.*

*I look forward to seeing you in Seattle, and know your Annual Meeting experience will give you new insights, knowledge, and skills to care for your patients and excel in your profession.*

—Stefan M. Pulst, MD, FAAN, Chair, Science Committee, Chair, Scientific Program Subcommittee

## TABLE OF CONTENTS



|                                                     |           |                                                               |            |
|-----------------------------------------------------|-----------|---------------------------------------------------------------|------------|
| Meeting-at-a-Glance . . . . .                       | 2         | Wednesday Poster Session VI . . . . .                         | 72         |
| Industry Relations Message . . . . .                | 4         | <b>Thursday, April 30 Highlights.</b> . . . . .               | <b>77</b>  |
| Program Legend . . . . .                            | 5         | Thursday Poster Session VII. . . . .                          | 78         |
| Meeting Overview . . . . .                          | 6         | Thursday Poster Session VIII . . . . .                        | 83         |
| Scientific Sessions-At-A-Glance . . . . .           | 15        | Thursday Scientific Sessions. . . . .                         | 88         |
| Award Recipients. . . . .                           | 18        | Thursday Integrated Neuroscience Session . . . . .            | 90         |
| <b>Saturday, April 25 Highlights</b> . . . . .      | <b>21</b> | Thursday Scientific Sessions. . . . .                         | 92         |
| <b>Sunday, April 26 Highlights</b> . . . . .        | <b>22</b> | Thursday Poster Session IX . . . . .                          | 94         |
| Sunday Integrated Neuroscience Session . . . . .    | 24        | <b>Friday, May 1 Highlights</b> . . . . .                     | <b>100</b> |
| <b>Monday, April 27 Highlights</b> . . . . .        | <b>25</b> | Friday Integrated Neuroscience Session. . . . .               | 101        |
| Monday Integrated Neuroscience Session . . . . .    | 27        | <b>2009 Virtual Annual Meeting Products (Syllabi</b>          |            |
| <b>Tuesday, April 28 Highlights</b> . . . . .       | <b>28</b> | <b>CD-ROM, Webcast-on-Demand, Practice CD-ROM).</b> . . . . . | <b>102</b> |
| Poster Session Floor Plan. . . . .                  | 31        | General Information. . . . .                                  | 104        |
| Tuesday Poster Session I . . . . .                  | 32        | CME/Accreditation. . . . .                                    | 104        |
| Tuesday Poster Session II. . . . .                  | 37        | Disclaimers/Disclosures . . . . .                             | 104        |
| Tuesday Integrated Neuroscience Session. . . . .    | 42        | Services. . . . .                                             | 104        |
| Tuesday Scientific Sessions . . . . .               | 44        | Guidelines . . . . .                                          | 105        |
| Tuesday Scientific Sessions . . . . .               | 46        | Volunteer Opportunities. . . . .                              | 105        |
| Tuesday Poster Session III . . . . .                | 48        | Weather/Attire . . . . .                                      | 105        |
| <b>Wednesday, April 29 Highlights.</b> . . . . .    | <b>53</b> | Registration . . . . .                                        | 106        |
| Wednesday Poster Session IV . . . . .               | 55        | Hotel Accommodations . . . . .                                | 110        |
| Wednesday Poster Session V. . . . .                 | 61        | Travel Information . . . . .                                  | 112        |
| Wednesday Integrated Neuroscience Session . . . . . | 67        | Alliance Tour Information. . . . .                            | 112        |
| Wednesday Scientific Sessions. . . . .              | 68        | Students, Residents, and Fellows Events . . . . .             | 113        |
| Wednesday Scientific Sessions. . . . .              | 70        | Annual Meeting Exhibitors. . . . .                            | 114        |
|                                                     |           | Committee Members and Staff . . . . .                         | 116        |
|                                                     |           | Offices and Hours of Operation. . . . .                       | 118        |

## Scientific Plenary Sessions

Focusing on clinical and basic science issues of interest to all neurologists, these five Plenary Sessions feature outstanding lecturers who are leaders in their fields:

- Presidential Plenary Session (**see page 28**)
- Hot Topics Plenary Session (**see page 29**)
- Contemporary Clinical Issues and Case Studies Plenary Session (**see page 53**)
- Frontiers in Clinical Neuroscience Plenary Session (**see page 77**)
- Scientific Program Highlights Plenary Session (**see page 100**)

## Future of Neuroscience Conference: New Genetics: The Future of Neurology

A riveting exploration of the latest studies and clinical applications in the area of new genetics, led by a faculty of distinguished experts. The interactive, day-long program will feature poster sessions, platform presentations, a series of case vignettes, and several invited lecturers discussing new developments in the field. The presenters will combine high-level science with practical clinical application on such topics as history of genetics, clinical and technological approaches, epigenetics, regulatory systems, complex genetics in MS and autism, and personalized medicine. (**see page 100**)

## Integrated Neuroscience Programs

Provides in-depth subspecialty concentration around a topic using a combination of presentations, such as scientific sessions, case studies, short poster talks, discussions invited lecturers, and poster sessions. These six sessions offer an expansive look at the following topics:

- Endovascular Neurology (**see page 24**)
- Recent Advances in Genetics and Molecular Biology in Global Neurology (**see page 27**)
- Alzheimer's, Imaging, and Biomarkers (**see page 42**)
- Advances in Headache (**see page 67**)
- The Circadian and Homeostatic Control of Sleep (**see page 90**)
- Traumatic Brain Injury (**see page 101**)

## Resident Basic Science

A three-year basic science curriculum, launched at the 2007 Annual Meeting, will help neurology residents prepare for the Neurology Review Committee, Part I of the Neurology Boards, and the Residency In-service Training Examination (RITE). Programs available in 2009 are neurogenetics and neurometabolic disorders.

## Interventional Neurology featured as new topic in the Scientific Program

New for the 2009 Annual Meeting Interventional Neurology has been split into its own topic as the AAN recognizes this emerging field. Interventional Neurology Scientific programs available are:

- Integrated Neuroscience Session: Endovascular Neurology (**see page 24**)
- S36 Interventional Neurology (**see page 71**)

## Continuation of Additional Poster Sessions

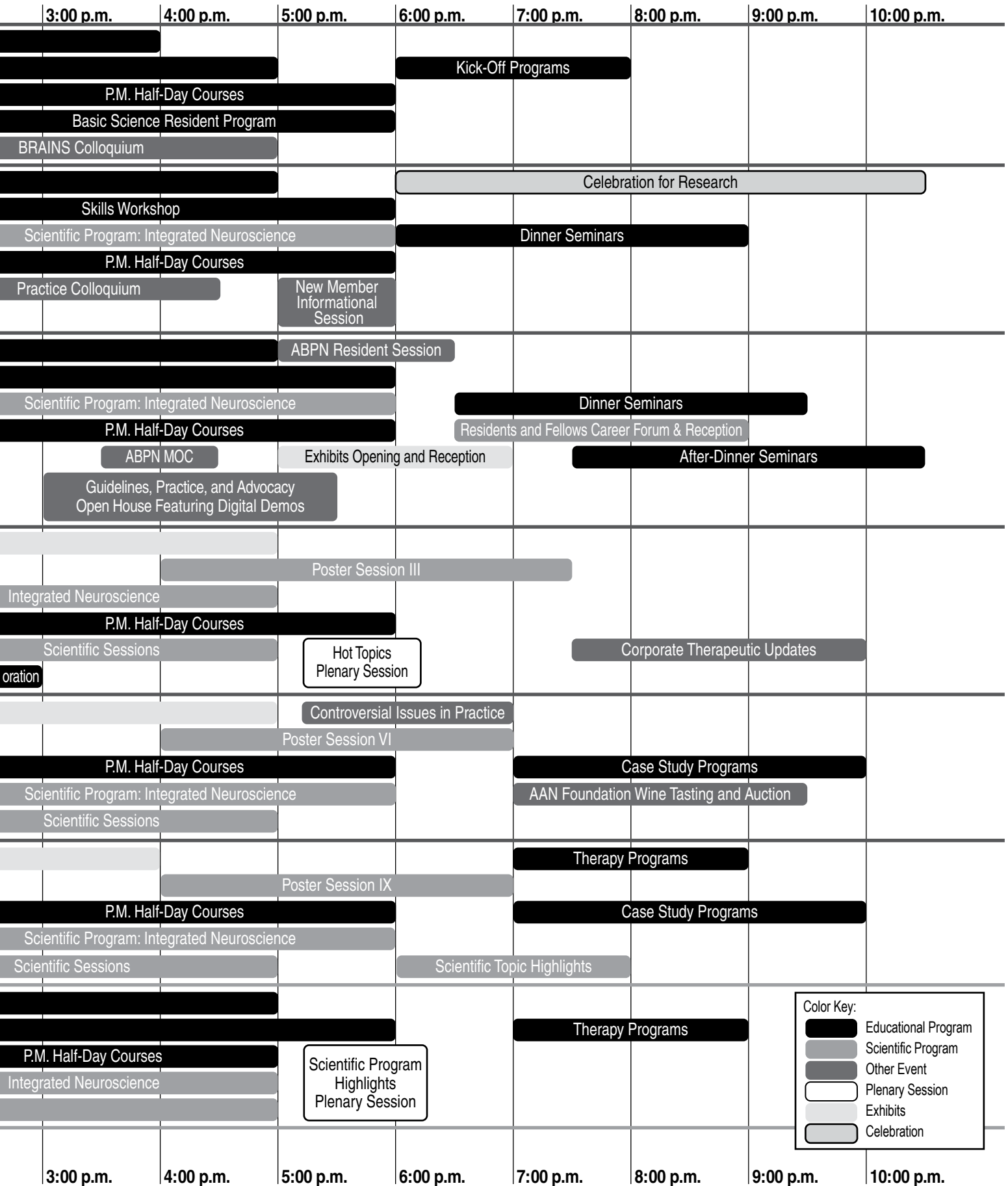
Based on the success of last year's midday poster sessions, the Academy has added an additional midday poster session on Wednesday, April 29, exhibiting premier scientific research. A total of nine poster sessions will take place over three days, from April 28 through April 30.

# MEETING-AT-A-GLANCE

Current as of February 20, 2009

|                                         | 7:00 a.m.                     | 8:00 a.m. | 9:00 a.m.                                                   | 10:00 a.m. | 11:00 a.m.                           | 12:00 p.m.                      | 1:00 p.m. | 2:00 p.m. |
|-----------------------------------------|-------------------------------|-----------|-------------------------------------------------------------|------------|--------------------------------------|---------------------------------|-----------|-----------|
| <b>SAT</b><br>APRIL<br>25 <sup>th</sup> |                               |           | Clerkship and Program Directors' Conference                 |            |                                      |                                 |           |           |
|                                         |                               |           | Full-Day Course                                             |            |                                      |                                 |           |           |
|                                         |                               |           | Basic Science Resident Program                              |            |                                      |                                 |           |           |
| <b>SUN</b><br>APRIL<br>26 <sup>th</sup> | Breakfast Seminars            |           | Full-Day Courses                                            |            |                                      |                                 |           |           |
|                                         |                               |           | A.M. Half-Day Courses                                       |            |                                      |                                 |           |           |
|                                         |                               |           | Patient Safety Colloquium                                   |            |                                      | Luncheon Seminar                |           |           |
|                                         |                               |           |                                                             |            |                                      | Coding Lunches                  |           |           |
| <b>MON</b><br>APRIL<br>27 <sup>th</sup> | Breakfast Seminars            |           | Full-Day Courses                                            |            |                                      |                                 |           |           |
|                                         | International Attendee Summit |           | Skills Workshop                                             |            |                                      |                                 |           |           |
|                                         |                               |           | A.M. Half-Day Courses                                       |            |                                      |                                 |           |           |
|                                         |                               |           | Education Colloquium                                        |            |                                      | Coding Lunches                  |           |           |
|                                         |                               |           |                                                             |            |                                      | Ethics Colloquium               |           |           |
| <b>TUE</b><br>APRIL<br>28 <sup>th</sup> | Breakfast Seminars            |           |                                                             |            |                                      | Exhibits                        |           |           |
|                                         | Poster Session I              |           |                                                             |            |                                      | Poster Session II               |           |           |
|                                         | Run/Walk for Brain Research   |           |                                                             |            | AAN/<br>AANPA<br>Business<br>Meeting | Scientific Program:             |           |           |
|                                         |                               |           | Presidential Plenary Session                                |            |                                      | Luncheon Seminars               |           |           |
|                                         |                               |           |                                                             |            |                                      | NINDS Clinical Research Collab- |           |           |
| <b>WED</b><br>APRIL<br>29 <sup>th</sup> | Breakfast Seminars            |           |                                                             |            |                                      | Exhibits                        |           |           |
|                                         | Poster Session IV             |           |                                                             |            |                                      | Poster Session V                |           |           |
|                                         |                               |           |                                                             |            |                                      | Luncheon Seminar                |           |           |
|                                         |                               |           |                                                             |            |                                      | Awards Luncheon                 |           |           |
|                                         |                               |           | Contemporary Clinical Issues & Case Studies Plenary Session |            |                                      |                                 |           |           |
| <b>THU</b><br>APRIL<br>30 <sup>th</sup> | Breakfast Seminars            |           |                                                             |            |                                      | Exhibits                        |           |           |
|                                         | Poster Session VII            |           |                                                             |            |                                      | Poster Session VIII             |           |           |
|                                         |                               |           |                                                             |            |                                      | Luncheon Seminar                |           |           |
|                                         |                               |           | Frontiers In Clinical Neuroscience Plenary Session          |            |                                      |                                 |           |           |
| <b>FRI</b><br>MAY<br>1 <sup>st</sup>    | Breakfast Seminars            |           | Full-Day Courses                                            |            |                                      |                                 |           |           |
|                                         |                               |           | Skills Workshop                                             |            |                                      |                                 |           |           |
|                                         |                               |           | A.M. Half-Day Courses                                       |            |                                      |                                 |           |           |
|                                         |                               |           |                                                             |            |                                      | Coding Lunches                  |           |           |
|                                         |                               |           | Future of Neuroscience Conference                           |            |                                      |                                 |           |           |
| <b>SAT</b><br>MAY<br>2 <sup>nd</sup>    | Breakfast Seminars            |           | A.M. Half-Day Courses                                       |            |                                      |                                 |           |           |





**Color Key:**

- Educational Program
- Scientific Program
- Other Event
- Plenary Session
- Exhibits
- Celebration

# INDUSTRY RELATIONS MESSAGE

Continuing medical education is one of the most important and well-regarded member services provided by the American Academy of Neurology (AAN). The Annual Meeting is the AAN's premier continuing medical education event. It is internationally recognized in the neurologic community for the quality of its education and scientific programs as well as many networking opportunities.

The AAN benefits from its partnership with corporate sponsors who provide financial support for a variety of Annual Meeting events and programs. The AAN recognizes members' concerns regarding industry involvement in the Annual Meeting and the potential for commercial bias, overt, or otherwise. The AAN annually reviews and revises its guidelines that govern industry participation to ensure that they are appropriate, comprehensive, and unambiguous. The AAN's zero-tolerance policy for any real or perceived commercial bias in AAN education or scientific programs is the fundamental and unwavering principle that guides its interactions with industry. The AAN guidelines state:

***It is the AAN's policy to avoid even the appearance of a conflict of interest between the AAN and industry.***

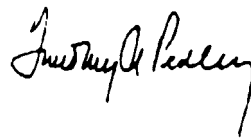
The AAN's Annual Meeting policies and processes are based on, and closely follow, guidelines established by the Accreditation Council for Continuing Medical Education, American Medical Association, and US Food and Drug Administration.

Programs at the Annual Meeting are developed and implemented solely by the AAN's Education Committee, Science Committee, their respective subcommittees, and AAN staff. Industry has absolutely no role in selecting program topics, faculty and directors, or planning program content. Industry influence or promotion on slides or computer-based presentations is prohibited, and any use of product brand names should be avoided. All speakers must personally disclose, in writing, any actual or perceived relationships with industry, regardless of whether these relate to a specific presentation or not. These disclosures are published in *Neurology*<sup>®</sup> and AAN Annual Meeting publications. Industry and presenters are required to sign letters of agreement explicitly stating that they understand and will adhere to the AAN guidelines. The AAN Foundation sponsors a Corporate Roundtable, comprised of representatives from both the AAN and its industry partners, which promotes awareness of, and compliance with, the AAN's policies governing industry participation in the Annual Meeting and other activities.

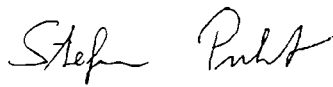
The great majority of the AAN's industry partners and presenters abide by the AAN guidelines, but occasional infractions do occur. Although most of these are minor, the AAN's zero-tolerance policy specifies sanctions for those who violate its guidelines. In addition, the AAN has revised all education and scientific evaluation forms

to provide attendees with an opportunity to report any perceived commercial bias. Although the Meeting Management Committee deals with infractions and perceptions of bias in a rigorous and impartial manner, the Committee frequently seeks input on these issues from the AAN's Ethics, Law, and Humanities Committee.

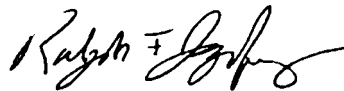
The AAN values its partnership with industry. However, the AAN cannot and will not compromise the independence and credibility of its programs through its relationships with corporate sponsors. Appropriate guidelines and input from attendees are essential components of managing these relationships so that the AAN maintains its integrity as an organization and the confidence of the medical profession. Questions related to these issues may be addressed to Timothy A. Pedley, MD, FAAN, Chairman, Meeting Management Committee.



Timothy A. Pedley, MD, FAAN  
Chairman, Meeting Management Committee



Stefan M. Pulst, MD, FAAN  
Chair, Science Committee  
Chair, Scientific Program Subcommittee

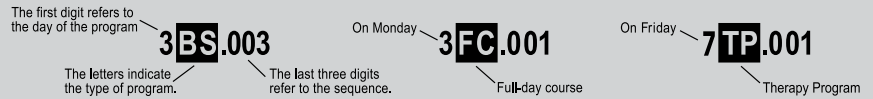


Ralph F. Józefowicz, MD, FAAN  
Chair, Education Committee  
Chair, Annual Meeting Subcommittee

# EDUCATION PROGRAM LEGEND

Visit [www.aan.com/go/am/education](http://www.aan.com/go/am/education) for complete course listings. See page 108 for more details.

## Education Program Legend



### First Digit = Day of Program

|             |                     |
|-------------|---------------------|
| 1 Day One   | Saturday, April 25  |
| 2 Day Two   | Sunday, April 26    |
| 3 Day Three | Monday, April 27    |
| 4 Day Four  | Tuesday, April 28   |
| 5 Day Five  | Wednesday, April 29 |
| 6 Day Six   | Thursday, April 30  |
| 7 Day Seven | Friday, May 1       |
| 8 Day Eight | Saturday, May 2     |

### Letters = Type of Program

#### AC Morning Half-Day Course

Didactic program begins at 9:00 a.m. and ends at 12:45 p.m. Refreshments will be served during the break.

#### AS After-Dinner Seminar

Interactive program begins at 7:30 p.m. and ends at 10:30 p.m. (unless otherwise noted) Desserts, light snacks, and beverages will be served.

#### BS Breakfast Seminar

Interactive program begins at 6:45 a.m. and ends at 8:30 a.m. A plated breakfast will be available at the start of the program. Participants are encouraged to arrive early.

#### CL Coding Lunch

Interactive program begins at 12:00 p.m. and ends at 1:00 p.m. Topic specific coding issues will be discussed. Lunch will be available.

#### CS Case Studies Program

Interactive program begins at 7:00 p.m. and ends at 10:00 p.m. Desserts, light snacks, and beverages will be served.

#### DS Dinner Seminar

Interactive program begins at 6:00 p.m. and ends at 9:00 p.m. on Sunday, April 26, and begins at 6:30 p.m. and ends at 9:30 p.m. on Monday, April 27. A plated dinner will be available at the beginning of the program. Participants are encouraged to arrive early.

#### EC Colloquium

Didactic programs offered as morning or afternoon half-day programs. Free to all registered attendees.

#### EP Clerkship and Program Directors Conference

Interactive program offered only on Saturday, April 25. Program begins at 9:00 a.m. and ends at 4:00 p.m.

#### FC Full-Day Course

Didactic program begins at 9:00 a.m. and ends at 5:00 p.m. Refreshments will be served during the morning and afternoon break. Lunch will not be served.

#### KP Kick-Off Program

Interactive program offered only on Saturday, April 25. Programs begin at 6:00 p.m. and ends at 8:00 p.m. A light snack will be served.

#### LS Luncheon Seminar

Interactive program begins at 12:00 p.m. and ends at 1:30 p.m. Lunch will be served.

#### PC Afternoon Half-Day Course

Didactic program begins at 2:15 p.m. and ends at 6:00 p.m. Refreshments will be served during the break. *Note: Friday afternoon half-day courses begin at 1:15 p.m. and end at 5:00 p.m. to allow time to attend the Scientific Program Highlights Plenary Session.*

#### PW Afternoon Skills Workshop

Hands-on, interactive program begins at 1:30 p.m. and ends at 6:00 p.m. Available to physicians only. Lunch will not be provided.

#### SC Science Conference

Interactive program offered only on Friday, May 1. Program begins at 9:00 a.m. and ends at 5:00 p.m. Lunch will be served.

#### SW Skills Workshop

Hands-on, interactive program begins at 9:00 a.m. and ends at 6:00 p.m. Box lunches will be provided. Available to physicians only.

#### TP Therapy Program

Two-hour didactic program begins at 7:00 p.m. and ends at 9:00 p.m. Desserts, light snacks, and beverages will be served.

# MEETING OVERVIEW

## SATURDAY, APRIL 25

### A.M. Half-Day Course

9:00 a.m.–12:45 p.m.

1AC.001 Resident Basic Science I: Neurogenetics

### Education Directors Program

9:00 a.m.–4:00 p.m.

1EP.001 Clerkship and Program Directors Conference: Faculty and Professional Development

### Full-Day Course

9:00 a.m.–5:00 p.m.

1FC.001 The Practice of Neurology: Issues in Coding and Reimbursement

### Colloquium

1:00 p.m.–5:00 p.m.

1EC.001 BRAINS Colloquium: Critical Thinking for Critical Issues

### P.M. Half-Day Courses

2:15 p.m.–6:00 p.m.

1PC.001 Resident Basic Science II: Neurometabolic Disorders

1PC.002 Using AAN Guidelines and Best Current Evidence in Daily Practice

### Kick-Off Programs

6:00 p.m.–8:00 p.m.

1KP.001 Hot Topics in Multiple Sclerosis

1KP.002 Top 10 Neuro-ophthalmic Diagnoses You Can't Afford to Miss

1KP.003 Movement Disorder Emergencies: Adults and Children

1KP.004 Assessment of Rapidly Progressive Dementias and Related Neurologic Conditions

1KP.005 Acute Stroke Management

1KP.006 Controversies in Epilepsy

1KP.007 Mitochondrial Disorders in Neurology

1KP.008 Starting Your Career: The Early Years

1KP.009 Diagnosis and Management of Motor Neuron Disease

## SUNDAY, APRIL 26

### Breakfast Seminars

6:45 a.m.–8:30 a.m.

2BS.001 Archival Neurologic Films

2BS.002 Rapid Quantitation in EMG: Learning Accurate and Efficient Motor Unit Potential Analysis

2BS.003 Update on Ataxias

2BS.004 Differential Diagnosis of Dementia: Improvements in Syndromic Discrimination

2BS.005 Pseudotumor Cerebri

2BS.006 Critical Care Epilepsy/EEG

2BS.007 Unruptured Intracranial Aneurysms and Intracranial Vascular Malformations: What a Practicing Neurologist Needs to Know

### Colloquium

9:00 a.m.–12:00 p.m.

2EC.001 Patient Safety Colloquium: Medication Safety Across Your Practice Settings

### A.M. Half-Day Courses

9:00 a.m.–12:45 p.m.

2AC.001 Stroke In Young Adults

2AC.002 Neurology of Sleep I

2AC.003 Clinical Issues in Multiple Sclerosis

2AC.004 Botulinum Toxins: Practical Issues and Clinical Uses for Neurologists

2AC.005 Making Sure Your Electronic Health Record System is a Success

### Full-Day Courses

9:00 a.m.–5:00 p.m.

2FC.001 Headaches in Adults

2FC.002 Infections of the Nervous System

2FC.003 Therapy in Neurology

2FC.004 Neurologic Intensive Care

2FC.005 *Continuum* Test Your Knowledge: A Multiple-Choice Question Review

2FC.006 Peripheral Neuropathy

2FC.007 Genetics in Neurology

### Coding Lunch

12:00 p.m.–1:00 p.m.

2CL.001 Coding Lunch: Neuromuscular Disease

### Luncheon Seminar

12:00 p.m.–1:30 p.m.

2LS.001 How to Be Sure Your Patient Education Is Educating Patients

### Colloquium

1:30 p.m.–4:30 p.m.

2EC.002 Practice Colloquium: Improving Quality Through Incentives: Lessons from Model Programs



## **Integrated Neuroscience Session: Endovascular Neurology**

**2:00 p.m.–6:00 p.m.**

*Scientific platform and poster presentations along with an invited speaker session.*

2:00 p.m.–3:30 p.m. Platform Session

3:30 p.m.–4:30 p.m. Poster Session

4:30 p.m.–6:00 p.m. Invited Speaker Session

## **P.M. Skills Workshop**

**2:15 p.m.–6:00 p.m.**

2PW.001 Clinical Usefulness of Botulinum Toxin and Treatment of Dystonia

## **P.M. Half-Day Courses**

**2:15 p.m.–6:00 p.m.**

2PC.001 Neuro-oncology Update I: Primary Brain Tumors

2PC.002 Emergency Department Neuro-ophthalmology

2PC.003 Diagnosis and Management of Movement Disorders in Children

2PC.004 Neuromyelitis Optica: Scientific and Clinical Update

2PC.005 Clinical Approach to Muscle Disease

## **New Member Information Session**

**5:00 p.m.–6:00 p.m.**

## **Dinner Seminars**

**6:00 p.m.–9:00 p.m.**

2DS.001 Stroke in Children and Neonates

2DS.002 Common and Important Ophthalmoscopic Findings

2DS.003 Intractable Epilepsy: What to Do When Nothing Works

2DS.004 Ten Sequelae of Brain Trauma That You Can and Should Address

2DS.005 Top 10 Pitfalls in the Diagnosis of Parkinson's Disease

2DS.006 Sexual Dysfunction in Neurologic Disease

2DS.007 Promoting Successful Cognitive Aging: Factors, Facts, and Fairy Tales

## **Celebration for Research**

**6:00 p.m.–10:30 p.m.**

### **Neurobowl®**

**6:00 p.m.–8:00 p.m.**

### **Neuro Idol**

**8:00 p.m.–10:00 p.m.**

## **Main Stage**

**8:30 p.m.–10:30 p.m.**

## **Neuro Hop**

**8:30 p.m.–10:30 p.m.**

# **MONDAY, APRIL 27**

## **Breakfast Seminars**

**6:45 a.m.–8:30 a.m.**

3BS.001 Criteria for Stopping and Starting Multiple Sclerosis Therapy

3BS.002 Neuro-ophthalmology and Neurovestibular Examination Laboratory

3BS.003 Balance and Gait Disorders

3BS.004 Diagnosing Spells in Older Adults

3BS.005 Global Health Challenges: Neurology in Developing Countries

3BS.006 Neuroplasticity and Stroke Recovery: Theory and Clinical Practice

3BS.007 Recognition and Management of the Many Types of Status Epilepticus

3BS.008 Autoimmune Antibody Testing in Neuropathy: Indications for the Practicing Neurologist

## **International Attendee Summit**

**7:00 a.m.–9:00 a.m.**

## **State Society Leadership Roundtable**

**7:00 a.m.–9:30 a.m.**

## **Colloquium**

**9:00 a.m.–12:00 p.m.**

3EC.001 Education Colloquium: Ethics and Education

## **A.M. Half-Day Courses**

**9:00 a.m.–12:45 p.m.**

3AC.001 Neuro-oncology Update II: Systemic Cancer

3AC.002 MRI and Multiple Sclerosis

3AC.003 Parkinson's Disease and Movement Disorders Update

3AC.004 Eye Movement Disorders, Nystagmus, and Diplopia

3AC.005 Clinical EMG I

3AC.006 Clinical Research Methods I

# MEETING OVERVIEW

## Full-Day Courses

9:00 a.m.–5:00 p.m.

- 3FC.001 Child Neurology
- 3FC.002 Neurology Update I
- 3FC.003 Clinical EEG
- 3FC.004 Dementia Update
- 3FC.005 Cerebrovascular Disease

## Skills Workshop

9:00 a.m.–6:00 p.m.

- 3SW.001 EMG Skills Workshop: Basic

## Kenneth M. Viste, Jr., MD, Neurology Public Policy Fellowship Informational Session

12:00 p.m.–1:00 p.m.

## Coding Lunches

12:00 p.m.–1:00 p.m.

- 3CL.001 Coding Lunch: Dementia
- 3CL.002 Coding Lunch: Cerebrovascular Disease
- 3CL.003 Coding Lunch: Child Neurology

## Ethics Colloquium

12:30 p.m.–2:00 p.m.

## Integrated Neuroscience Session: Recent Advances in Genetics and Molecular Biology in Global Neurology

2:00 p.m.–6:00 p.m.

*Scientific platform and poster presentations along with an invited speaker session.*

- 2:00 p.m.–3:30 p.m. Invited Speaker Session
- 3:30 p.m.–4:30 p.m. Poster Session
- 4:30 p.m.–6:00 p.m. Platform Session

## P.M. Half-Day Courses

2:15 p.m.–6:00 p.m.

- 3PC.001 Women's Issues in Neurology
- 3PC.002 Hot Topics in Headaches and Related Disorders
- 3PC.003 Behavioral Neurology: Contemporary Topics: Memory
- 3PC.004 Genetic Testing in Clinical Neurology
- 3PC.005 Clinical EMG II
- 3PC.006 Clinical Research Methods II

## Guidelines, Practice, and Advocacy Open House Featuring Digital Demos: Technology Solutions That You Can Afford

3:00 p.m.–5:30 p.m.

## ABPN Resident Informational Session

5:00 p.m.–6:30 p.m.

## Student Interest Group in Neurology (SIGN) Meeting

5:30 p.m.–6:30 p.m.

## Exhibit Hall Opening Reception

5:00 p.m.–7:00 p.m.

## Residents and Fellows Career Forum and Reception

6:30 p.m.–9:00 p.m.

## Dinner Seminars

6:30 p.m.–9:30 p.m.

- 3DS.001 Neuroimaging Practicum: Acute Stroke, Spine, and Difficult Cases
- 3DS.002 Controversial Issues in Neurologic Infections
- 3DS.003 Mild Cognitive Impairment: Implications for Clinicians
- 3DS.004 The Interface of Sleep and Neurologic Disorders
- 3DS.005 The Neurology of Famous Musicians and Composers
- 3DS.006 Intraoperative Neurophysiologic Monitoring: Spinal Cord and Nerve Root Monitoring
- 3DS.007 Important Drug Interactions for Neurologists and Psychiatrists
- 3DS.008 Neuropathic Pain: Diagnostic Strategies and Treatment Controversies

## After-Dinner Seminars

7:30 p.m.–10:30 p.m.

- 3AS.001 The Intractable Headache Patient
- 3AS.002 Brain Computer Interfaces: Frontiers in Neurology and Neuroscience
- 3AS.003 Clinical Pearls in Bedside Neurology
- 3AS.004 Hallucinations in Parkinson's Disease: Pathogenesis and Practical Management
- 3AS.005 Improving Accuracy of Dementia Diagnosis: Case Studies with Neuropathology
- 3AS.006 EEG in Children and Adolescents: Common Pitfalls, Classical Syndromes, and Identification of Surgical Candidates
- 3AS.007 Case Studies in the Genetics of Motor Neuron Disorders and Other Neurodegenerations
- 3AS.008 Basic Metabolic Disorders

## TUESDAY, APRIL 28

### Run/Walk for Brain Research

6:30 a.m.–8:30 a.m.

### Breakfast Seminars

6:45 a.m.–8:30 a.m.

- 4BS.001 Neonatal Seizures: An Update
- 4BS.002 Vascular Cognitive Impairment and Dementia: Current Status and Future
- 4BS.003 Advances in the Care of Brain Injury After Resuscitation from Cardiac Arrest
- 4BS.004 Clinical Grant Writing

### Palatucci Advocacy Action Planning Roundtable

7:00 a.m.–9:30 a.m.

### Poster Session I

7:00 a.m.–10:00 a.m.

### Presidential Plenary Session

9:00 a.m.–12:00 p.m.

### AAN/AAN Professional Association Business Meeting

*(Immediately follows the last Presidential Plenary Session lecture)*

### Poster Session II

11:30 a.m.–2:30 p.m.

### Exhibits

11:30 a.m.–5:00 p.m.

Exhibit Hall Lunch

12:00 p.m.–2:00 p.m.

### Luncheon Seminars

12:00 p.m.–1:30 p.m.

- 4LS.001 Primary and Comprehensive Stroke Centers: The Future of Stroke Care
- 4LS.002 Bedside Evidence-Based Medicine: How to Deconstruct Articles in Order to Take Care of Patients

### Level 1 Certification for the NINDS Clinical Research Collaboration

1:00 p.m.–3:00 p.m.

### Integrated Neuroscience Session: Alzheimer's, Imaging, and Biomarkers (ADNI)

1:00 p.m.–5:00 p.m.

*Scientific platform and poster presentations along with an invited speaker session.*

- 1:00 p.m.–2:30 p.m. Platform Session
- 2:30 p.m.–3:30 p.m. Poster Session
- 3:30 p.m.–5:00 p.m. Invited Speaker Session

### Scientific Platform Sessions

2:00 p.m.–3:30 p.m.

- S01 Multiple Sclerosis: Epidemiology/Clinical Outcomes/Biomarkers
- S02 Aging and Dementia: Epidemiology
- S03 Pathogenesis and Epidemiology of Essential Tremor
- S04 Acute Stroke Care
- S05 Inflammatory, Necrotizing, and Autophagic Myopathies
- S06 Multiple Sclerosis: Immunology I
- S07 Sleep Disorders
- S08 Infections/AIDS/Prion Disease
- S09 Clinical Neurophysiology: Intraoperative Monitoring, Evoked Potentials, and Basic Science
- S10 Neuro-oncology

### P.M. Half-Day Courses

2:15 p.m.–6:00 p.m.

- 4PC.001 Neuro-otology
- 4PC.002 Myelopathies
- 4PC.003 Neurologic Complications of Medical Disease
- 4PC.004 History of Neurology: The Origins of the Neurologic Examination
- 4PC.005 Psychiatry for the Neurologist

### Scientific Platform Sessions

3:45 p.m.–5:00 p.m.

- S11 Multiple Sclerosis: Clinical Therapeutics and Interventions
- S12 Anterior Horn: Basic Science
- S13 Parkinson's Disease: Non-Motor Symptoms
- S14 Acute Stroke Therapeutics
- S15 Peripheral Nerve I
- S16 Epilepsy: Women's Issues and Co-Morbidities
- S17 Multiple Sclerosis: Genetics/Pathology
- S18 Cerebrovascular Disease
- S19 Ethics and Pain
- S20 Neurologic Education

# MEETING OVERVIEW

## Poster Session III

4:00 p.m.–7:30 p.m.

## Hot Topics Plenary Session

5:15 p.m.–6:15 p.m.

## Corporate Therapeutic Updates

7:30 p.m.–10:00 p.m.

## WEDNESDAY, APRIL 29

### Breakfast Seminars

6:45 a.m.–8:30 a.m.

- 5BS.001 Advanced Palliative Care and Symptom Management of ALS, Alzheimer's Disease, and Parkinson's Disease
- 5BS.002 Introduction to the Evaluation and Therapy of Restless Legs Syndrome and Periodic Limb Movements in Sleep
- 5BS.003 Editor's Seminar: Tips for Writing and Reviewing for *Neurology*<sup>®</sup>
- 5BS.004 Ethical Dilemmas in the ICU

### Poster Session IV

7:00 a.m.–10:00 a.m.

### Contemporary Clinical Issues and Case Studies Plenary Session

9:00 a.m.–12:00 p.m.

### Poster Session V

11:30 a.m.–2:30 p.m.

### Exhibits

11:30 a.m.–5:00 p.m.

Exhibit Hall Lunch

12:00 p.m.–2:00 p.m.

### American Academy of Neurology and American Academy of Neurology Foundation Awards Luncheon

12:00 p.m.–1:30 p.m.

### Luncheon Seminar

12:00 p.m.–1:30 p.m.

- 5LS.001 E/M: Minimize Mistakes, Maximize Reimbursement

### Integrated Neuroscience Session: Advances in Headache

2:00 p.m.–6:00 p.m.

*Scientific platform and poster presentations along with an invited speaker session.*

- 2:00 p.m.–3:30 p.m. Platform Session
- 3:30 p.m.–4:30 p.m. Poster Session
- 4:30 p.m.–4:45 p.m. Award Presentation
- 4:45 p.m.–6:00 p.m. Invited Speaker Session

### Scientific Platform Sessions

2:00 p.m.–3:30 p.m.

- S21 Multiple Sclerosis: Clinical Trials
- S22 Aging and Dementia: Genetics
- S23 Parkinson's Disease: Epidemiology
- S24 Stroke Epidemiology I
- S25 Muscular Dystrophies
- S26 Epilepsy: Co-Morbidities, Epidemiology, and Health Outcomes
- S27 Peripheral Nerve II
- S28 Behavioral Neurology I
- S29 Neurogenetics
- S30 Neurologic Manifestations of Systemic Disease

### P.M. Half-Day Courses

2:15 p.m.–6:00 p.m.

- 5PC.001 Common Spine Disorders
- 5PC.002 Practical Legal Issues for Neurologists
- 5PC.003 Evaluation and Management of Autonomic Disorders
- 5PC.004 Women's Issues In Cerebrovascular Diseases
- 5PC.005 Neurodevelopmental Disabilities Across the Lifespan

### Scientific Platform Sessions

3:45 p.m.–5:00 p.m.

- S31 Multiple Sclerosis: Imaging I
- S32 Aging and Dementia: Treatment
- S33 Movement Disorders: Dystonia
- S34 Stroke Epidemiology II
- S35 Anterior Horn: SMA and Kennedy's Disease
- S36 Interventional Neurology
- S37 Peripheral Nerve III
- S38 Behavioral Neurology II
- S39 Multiple Sclerosis: Immunology II
- S40 History of Neurology



## Poster Session VI

4:00 p.m.–7:00 p.m.

### Controversial Issues in Practice: Health Care Reform for the Obama Administration and a New Congress – First 100 Days and Beyond

5:15 p.m.–7:00 p.m.

## Case Study Programs

7:00 p.m.–10:00 p.m.

- 5CS.001 Now You See It, Now You Know It: Pathognomonic Neuro-ophthalmology
- 5CS.002 Multiple Sclerosis Case Studies
- 5CS.003 Case Studies in Neuro-oncology
- 5CS.004 Unusual Diagnostic and Management Cases in Neuromuscular Disease

## AAN Foundation Wine Tasting and Auction

7:00 p.m.–9:30 p.m.

Grand Ballroom, Sheraton Hotel

# THURSDAY, APRIL 30

## Breakfast Seminars

6:45 a.m.–8:30 a.m.

- 6BS.001 Canalith Repositioning for Benign Paroxysmal Positional Vertigo
- 6BS.002 Career Development for Clinician Educators
- 6BS.003 The Neurology of Social Behavior
- 6BS.004 Office Orthopedics for the Neurologist

## Poster Session VII

7:00 a.m.–10:00 a.m.

## Frontiers in Clinical Neuroscience Plenary Session

9:00 a.m.–11:00 a.m.

## Poster Session VIII

11:30 a.m.–2:30 p.m.

## Exhibits

11:30 a.m.–4:00 p.m.

Exhibit Hall Lunch

12:00 p.m.–2:00 p.m.

## Luncheon Seminar

12:00 p.m.–1:30 p.m.

- 6LS.001 Telemedicine Increases Options for Successful Stroke Treatment: Nuts and Bolts

## Scientific Platform Sessions

1:30 p.m.–3:30 p.m.

- S41 Multiple Sclerosis: Clinical Outcomes
- S42 Aging and Dementia: Biology or Predictor
- S43 Evaluation and Treatment of Parkinson's Disease
- S44 Stroke Imaging
- S45 Anterior Horn: Clinical and Translational Research
- S46 Headache: Basic and Clinical Science
- S47 Multiple Sclerosis: Immunology III
- S48 Neuroepidemiology/Health Services Research
- S49 Stroke Prevention and Outcomes
- S50 Child Neurology: Diagnosis and Treatment

## Integrated Neuroscience Session: The Circadian and Homeostatic Control of Sleep

2:00 p.m.–6:00 p.m.

*Scientific platform and poster presentations along with an invited speaker session.*

2:00 p.m.–3:30 p.m. Invited Speaker Session

3:30 p.m.–4:30 p.m. Poster Session

4:30 p.m.–6:00 p.m. Platform Session

## P.M. Half-Day Courses

2:15 p.m.–6:00 p.m.

- 6PC.001 Spine Neuroimaging: Clinical-Radiologic Correlation
- 6PC.002 Localization in Clinical Neurology
- 6PC.003 Ethics, Clinical Practice, and Challenges in Neurogeriatric Care for the 21<sup>st</sup> Century
- 6PC.004 Menopausal/Andropausal Neurology

# MEETING OVERVIEW

## Scientific Platform Sessions

3:45 p.m.–5:00 p.m.

- S51 Multiple Sclerosis: Imaging II
- S52 Aging and Dementia: Imaging
- S53 Pathogenesis of Parkinson's Disease
- S54 Hemorrhagic Stroke
- S55 Myasthenic and Mitochondrial Disorders
- S56 Epilepsy: Genetics and Therapy
- S57 Neuro-ophthalmology and Neuro-otology
- S58 Critical Care
- S59 Neural Repair and Neurorehabilitation
- S60 Autonomic Disorders

## Poster Session IX

4:00 p.m.–7:00 p.m.

## Scientific Topic Highlights Program

6:00 p.m.–7:00 p.m.

- Cerebrovascular Disease, Critical Care/Emergency Neurology/Trauma, and Interventional Neurology
- Dementia/Behavioral Neurology
- Epilepsy/EEG
- Movement Disorders
- Neuromuscular, EMG, and Autonomic Disorders

## Scientific Topic Highlights Program

7:00 p.m.–8:00 p.m.

- Combined Scientific Topic Highlights: Child Neurology, Ethics, Pain and Palliative Care, Infections, Neuroepidemiology, and Neuro-oncology
- Clinical Practice
- Multiple Sclerosis

## Therapy Programs

7:00 p.m.–9:00 p.m.

- 6TP.001 Stroke Therapy
- 6TP.002 Epilepsy Therapy
- 6TP.003 Neuromuscular Therapy

## Case Study Programs

7:00 p.m.–10:00 p.m.

- 6CS.001 Case Studies in Dementia
- 6CS.002 Sleep Medicine Cases for the Neurologist
- 6CS.003 Unusual Movement Disorders
- 6CS.004 Challenging Pain Cases in Neurology Practice

## FRIDAY, MAY 1

### Breakfast Seminars

6:45 a.m.–8:30 a.m.

- 7BS.001 Approach to Acute CNS Infections
- 7BS.002 Hyperkinetic Movement Disorders: Diagnosis and Treatment
- 7BS.003 Creativity and Neurologic Disease
- 7BS.004 Attention Deficit Hyperactivity Disorder Across the Lifespan
- 7BS.005 Interventional Therapy for Acute Ischemic Stroke
- 7BS.006 Special Considerations in Women's Epilepsy
- 7BS.007 Brachial Plexus Assessment

### A.M. Half-Day Courses

9:00 a.m.–12:45 p.m.

- 7AC.001 Painful Pain Patients
- 7AC.002 Traumatic Brain Injury
- 7AC.003 Neuromuscular Junction Disorders
- 7AC.004 Primer of Cognitive Neurology
- 7AC.005 Update on Endovascular Treatment of Cerebrovascular Diseases

### Full-Day Courses

9:00 a.m.–5:00 p.m.

- 7FC.001 Update on Multiple Sclerosis
- 7FC.002 Update in Neuroimaging: Essentials and Beyond—Part I
- 7FC.003 Neuro-ophthalmology
- 7FC.004 Clinical Epilepsy
- 7FC.005 Neurology Update II
- 7FC.006 Movement Disorders

### Neuroscience Conference

9:00 a.m.–5:00 p.m.

- 7SC.001 Future of Neuroscience Conference: New Genetics: The Future of Neurology

### Skills Workshop

9:00 a.m.–6:00 p.m.

- 7SW.001 Advanced Techniques in EMG and Neuromuscular Diseases

### Coding Lunches

12:00 p.m.–1:00 p.m.

- 7CL.001 Coding Lunch: Movement Disorders
- 7CL.002 Coding Lunch: Epilepsy

## **Integrated Neuroscience Session: Traumatic Brain Injury**

**1:00 p.m.–5:00 p.m.**

*Scientific platform and poster presentations along with an invited speaker session.*

1:00 p.m.–2:30 p.m. Invited Speaker Session

2:30 p.m.–3:30 p.m. Poster Session

3:30 p.m.–5:00 p.m. Platform Session

## **P.M. Half-Day Courses**

**1:15 p.m.–5:00 p.m.**

7PC.001 Stroke Prevention in 2009

7PC.002 Neurology of Sleep II

7PC.003 Neurologic Consultations in the ICU

7PC.004 Non-Alzheimer's Dementia

7PC.005 Traumatic Spinal Cord Injury

## **Scientific Program Highlights Plenary Session**

**5:15 p.m.–6:15 p.m.**

## **Therapy Programs**

**7:00 p.m.–9:00 p.m.**

7TP.001 Multiple Sclerosis Therapy

7TP.002 Headache Therapy

7TP.003 Movement Disorders Therapy

## **SATURDAY, MAY 2**

### **Breakfast Seminars**

**6:45 a.m.–8:30 a.m.**

8BS.001 Hot Topics in Neuro-Ophthalmology: Optical Coherence Tomography (OCT) in Neurologic Disease

8BS.002 Clinicians' Guide to Myoclonus

8BS.003 Can I Drive? Can I Fly?

8BS.004 A Case-Based Seminar of Frontotemporal Dementia

8BS.005 Surviving Stroke Call: A Guide for Nonvascular Neurologists

8BS.006 Small Fiber Neuropathies: Somatic, Autonomic, or a Mixture of Both

8BS.007 Heavy Metals and Neurology

8BS.008 Antiepileptic Medication

### **A.M. Half-Day Courses**

**9:00 a.m.–12:45 p.m.**

8AC.001 Diagnostic Dilemmas in Multiple Sclerosis

8AC.002 Update in Neuroimaging: Essentials and Beyond—Part II

8AC.003 Perioperative Stroke: A Practical Approach to Risk Stratification and Modification During the Preoperative Evaluation

8AC.004 Emergency Neurology

8AC.005 Deep Brain Stimulation

8AC.006 Structure Function Correlations in Behavioral Neurology

8AC.007 Critical Care of Brain Hemorrhage

8AC.008 How to Analyze Spells by Video-EEG

# AAN CELEBRATION FOR RESEARCH

Sunday, April 26, 2009

## Come to Support Research. Stay for the Fun!

Celebrate the kick-off of the 2009 Annual Meeting with your Academy friends and colleagues at this not-to-be-missed evening of fantastic entertainment and food—all for a great cause! Free to Annual Meeting attendees; guest tickets are \$50.

### Neurobowl® 6:00 p.m.–8:00 p.m.

NEW! In 2009 Neurobowl will pit brainy gladiators from both sides of the Mississippi to test their knowledge in an all-out neuro-rumble. It's East versus West and the winners will take on the 2008 Neurobowl champions!

AAN former president Thomas R. Swift, MD, FAAN, hosts this popular quiz show.

*Sponsored by UCB, Inc.*

### Neuro Idol 8:00 p.m.–10:00 p.m.

Come see your fellow neurologists take the spotlight and showcase their musical talents in a cabaret-style show. To sign up as a performer, contact Erin Jackson at [ejackson@aan.com](mailto:ejackson@aan.com).

*Sponsored by the AAN Partners Program*

### Main Stage 8:30 p.m.–10:30 p.m.

#### Josh Blue Brings Down the House with Big Laughs!

Celebrated comedian Josh Blue's comedy centers on his experiences living and dealing with cerebral palsy. Blue exploded onto the national comedy scene by capturing the attention and endearment of the country as the winner of NBC's "Last Comic Standing."

*Sponsored by Teva Neuroscience, Inc.*

### Neuro Hop 8:30 p.m.–10:30 p.m.

Dance the night away to classic hits from today and yesteryear. DJ Kyle spins the tunes. You provide the wild dance moves!

[www.aan.com/celebrate](http://www.aan.com/celebrate)



Better Practices, Better Outcomes  
AAN 61<sup>ST</sup> ANNUAL MEETING • APRIL 25 — MAY 2, 2009





# SCIENTIFIC SESSIONS AT-A-GLANCE

All scientific presentations will be held at the Washington State Convention and Trade Center (unless otherwise noted).

## Sunday, April 26, 2009

|                     |                                                                                 |
|---------------------|---------------------------------------------------------------------------------|
| 2:00 p.m.–6:00 p.m. | <b>Integrated Neuroscience Session: Endovascular Neurology</b> ..... <b>3AB</b> |
| 2:00 p.m.–3:30 p.m. | ..... Platform Session                                                          |
| 3:30 p.m.–4:30 p.m. | ..... Poster Session                                                            |
| 4:30 p.m.–6:00 p.m. | ..... Invited Speaker Session                                                   |

## Monday, April 27, 2009

|                     |                                                                                                                                |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------|
| 2:00 p.m.–6:00 p.m. | <b>Integrated Neuroscience Session: Recent Advances in Genetics and Molecular Biology in Global Neurology</b> ..... <b>3AB</b> |
| 2:00 p.m.–3:30 p.m. | ..... Invited Speaker Session                                                                                                  |
| 3:30 p.m.–4:30 p.m. | ..... Poster Session                                                                                                           |
| 4:30 p.m.–6:00 p.m. | ..... Platform Session                                                                                                         |

## Tuesday, April 28, 2009

|                      |                                                                                                         |
|----------------------|---------------------------------------------------------------------------------------------------------|
| 7:00 a.m.–10:00 a.m. | <b>Poster Session I</b> ..... <b>6E</b>                                                                 |
| 9:00 a.m.–12:00 p.m. | <b>Presidential Plenary Session</b> ..... <b>4A</b>                                                     |
| 11:30 a.m.–2:30 p.m. | <b>Poster Session II</b> ..... <b>6E</b>                                                                |
| 1:00 p.m.–5:00 p.m.  | <b>Integrated Neuroscience Session: Alzheimer's, Imaging, and Biomarkers (ADNI)</b> ..... <b>3AB</b>    |
| 1:00 p.m.–2:30 p.m.  | ..... Platform Session                                                                                  |
| 2:30 p.m.–3:30 p.m.  | ..... Poster Session                                                                                    |
| 3:30 p.m.–5:00 p.m.  | ..... Invited Speaker Session                                                                           |
| 2:00 p.m.–3:30 p.m.  | <b>Scientific Sessions</b>                                                                              |
| S01                  | Multiple Sclerosis: Epidemiology/Clinical Outcomes/Biomarkers ..... 6B                                  |
| S02                  | Aging and Dementia: Epidemiology ..... 6C                                                               |
| S03                  | Pathogenesis and Epidemiology of Essential Tremor ..... 6A                                              |
|                      | <i>Presentation of the Movement Disorders Research Award</i>                                            |
| S04                  | Acute Stroke Care ..... 608/609                                                                         |
|                      | <i>Presentation of the Michael S. Pessin Stroke Leadership Prize</i>                                    |
| S05                  | Inflammatory, Necrotizing, and Autophagic Myopathies ..... 606/607                                      |
| S06                  | Multiple Sclerosis: Immunology I ..... 611/612                                                          |
| S07                  | Sleep Disorders ..... 605/610                                                                           |
|                      | <i>Presentation of the Sleep Science Award</i>                                                          |
| S08                  | Infections/Aids/Prion Disease ..... 602/603                                                             |
| S09                  | Clinical Neurophysiology: Intraoperative Monitoring, Evoked Potentials, and Basic Science ..... 613/614 |
| S10                  | Neuro-oncology ..... 604                                                                                |
| 3:45 p.m.–5:00 p.m.  | <b>Scientific Sessions</b>                                                                              |
| S11                  | Multiple Sclerosis: Clinical Therapeutics and Interventions ..... 6B                                    |
| S12                  | Anterior Horn: Basic Science ..... 6C                                                                   |
|                      | <i>Presentation of the Sheila Essey Award: An Award for ALS Research</i>                                |
| S13                  | Parkinson's Disease: Non-Motor Symptoms ..... 6A                                                        |
|                      | <i>Presentation of the Jon Stolk Award in Movement Disorders for Young Investigators</i>                |
| S14                  | Acute Stroke Therapeutics ..... 608/609                                                                 |
| S15                  | Peripheral Nerve I ..... 606/607                                                                        |
| S16                  | Epilepsy: Women's Issues and Co-Morbidities ..... 611/612                                               |
| S17                  | Multiple Sclerosis: Genetics/Pathology ..... 605/610                                                    |
| S18                  | Cerebrovascular Disease ..... 602/603                                                                   |
| S19                  | Ethics and Pain ..... 613/614                                                                           |
| S20                  | Neurologic Education ..... 604                                                                          |
| 4:00 p.m.–7:30 p.m.  | <b>Poster Session III</b> ..... <b>6E</b>                                                               |
| 5:15 p.m.–6:15 p.m.  | <b>Hot Topics Plenary Session</b> ..... <b>4A</b>                                                       |

## Wednesday, April 29, 2009

|                      |                                                                                      |
|----------------------|--------------------------------------------------------------------------------------|
| 7:00 a.m.–10:00 a.m. | <b>Poster Session IV</b> ..... <b>6E</b>                                             |
| 9:00 a.m.–12:00 p.m. | <b>Contemporary Clinical Issues and Case Studies Plenary Session</b> ..... <b>4A</b> |

# SCIENTIFIC SESSIONS AT-A-GLANCE

All scientific presentations will be held at the Washington State Convention and Trade Center (unless otherwise noted).

|                                 |                                                                                                     |                                                           |
|---------------------------------|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
| <b>11:30 a.m.–2:30 p.m.</b>     | <b>Poster Session V</b> .....                                                                       | <b>6E</b>                                                 |
| <b>2:00 p.m.–3:30 p.m.</b>      | <b>Scientific Sessions</b>                                                                          |                                                           |
|                                 | S21 Multiple Sclerosis: Clinical Trials .....                                                       | 6B                                                        |
|                                 | <i>Presentation of the John Dystel Prize for Multiple Sclerosis Research</i>                        |                                                           |
|                                 | S22 Aging and Dementia: Genetics .....                                                              | 6C                                                        |
|                                 | <i>Presentation of the Potamkin Prize for Research in Pick's, Alzheimer's, and Related Diseases</i> |                                                           |
|                                 | S23 Parkinson's Disease: Epidemiology .....                                                         | 6A                                                        |
|                                 | S24 Stroke Epidemiology I .....                                                                     | 608/609                                                   |
|                                 | <i>Presentation of the AAN Alliance: Founders Award</i>                                             |                                                           |
|                                 | S25 Muscular Dystrophies .....                                                                      | 606/607                                                   |
|                                 | S26 Epilepsy: Co-Morbidities, Epidemiology, and Health Outcomes .....                               | 611/612                                                   |
|                                 | <i>Presentation of the Dreifuss-Penry Epilepsy Award</i>                                            |                                                           |
|                                 | S27 Peripheral Nerve II .....                                                                       | 605/610                                                   |
|                                 | S28 Behavioral Neurology I .....                                                                    | 602/603                                                   |
|                                 | <i>Presentation of the Norman Geschwind Prize in Behavioral Neurology</i>                           |                                                           |
|                                 | S29 Neurogenetics .....                                                                             | 613/614                                                   |
|                                 | S30 Neurologic Manifestations of Systemic Disease .....                                             | 604                                                       |
| <b>2:00 p.m.–6:00 p.m.</b>      | <b>Integrated Neuroscience Session: Advances in Headache</b> .....                                  | <b>3AB</b>                                                |
|                                 | 2:00 p.m.–3:30 p.m. ....                                                                            | Platform Session                                          |
|                                 | 3:30 p.m.–4:30 p.m. ....                                                                            | Poster Session                                            |
|                                 | 4:30 p.m.–4:45 p.m. ....                                                                            | <i>Presentation of the Harold Wolff-John Graham Award</i> |
|                                 | 4:45 p.m.–6:00 p.m. ....                                                                            | Invited Speaker Session                                   |
| <b>3:45 p.m.–5:00 p.m.</b>      | <b>Scientific Sessions</b>                                                                          |                                                           |
|                                 | S31 Multiple Sclerosis: Imaging I .....                                                             | 6B                                                        |
|                                 | S32 Aging and Dementia: Treatment .....                                                             | 6C                                                        |
|                                 | S33 Movement Disorders: Dystonia .....                                                              | 6A                                                        |
|                                 | S34 Stroke Epidemiology II .....                                                                    | 608/609                                                   |
|                                 | S35 Anterior Horn: SMA and Kennedy's Disease .....                                                  | 606/607                                                   |
|                                 | S36 Interventional Neurology .....                                                                  | 611/612                                                   |
|                                 | S37 Peripheral Nerve III .....                                                                      | 605/610                                                   |
|                                 | S38 Behavioral Neurology II .....                                                                   | 602/603                                                   |
|                                 | S39 Multiple Sclerosis: Immunology II .....                                                         | 613/614                                                   |
|                                 | S40 History of Neurology .....                                                                      | 604                                                       |
|                                 | <i>Presentation of the Lawrence C. McHenry Award</i>                                                |                                                           |
| <b>4:00 p.m.–7:00 p.m.</b>      | <b>Poster Session VI</b> .....                                                                      | <b>6E</b>                                                 |
| <b>Thursday, April 30, 2009</b> |                                                                                                     |                                                           |
| <b>7:00 a.m.–10:00 a.m.</b>     | <b>Poster Session VII</b> .....                                                                     | <b>6E</b>                                                 |
| <b>9:00 a.m.–11:00 a.m.</b>     | <b>Frontiers in Clinical Neuroscience Plenary Session</b> .....                                     | <b>4A</b>                                                 |
| <b>11:30 a.m.–2:30 p.m.</b>     | <b>Poster Session VIII</b> .....                                                                    | <b>6E</b>                                                 |
| <b>1:30 p.m.–3:30 p.m.</b>      | <b>Scientific Sessions</b>                                                                          |                                                           |
|                                 | S41 Multiple Sclerosis: Clinical Outcomes .....                                                     | 6B                                                        |
|                                 | S42 Aging and Dementia: Biology or Predictor .....                                                  | 6C                                                        |
|                                 | S43 Evaluation and Treatment of Parkinson's Disease .....                                           | 6A                                                        |
|                                 | S44 Stroke Imaging .....                                                                            | 608/609                                                   |
|                                 | S45 Anterior Horn: Clinical and Translational Research .....                                        | 606/607                                                   |
|                                 | S46 Headache: Basic and Clinical Science .....                                                      | 611/612                                                   |
|                                 | S47 Multiple Sclerosis: Immunology III .....                                                        | 605/610                                                   |
|                                 | S48 Neuroepidemiology/Health Services Research .....                                                | 602/603                                                   |
|                                 | <i>Presentation of the Bruce S. Schoenberg International Award in Neuroepidemiology</i>             |                                                           |
|                                 | S49 Stroke Prevention and Outcomes .....                                                            | 613/614                                                   |
|                                 | S50 Child Neurology: Diagnosis and Treatment .....                                                  | 604                                                       |

|                            |                                                                                                                                                         |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>2:00 p.m.–6:00 p.m.</b> | <b>Integrated Neuroscience Session: The Circadian and Homeostatic Control of Sleep</b> ..... <b>3AB</b>                                                 |
|                            | 2:00 p.m.–3:30 p.m. .... Invited Speaker Session                                                                                                        |
|                            | 3:30 p.m.–4:30 p.m. .... Poster Session                                                                                                                 |
|                            | 4:30 p.m.–6:00 p.m. .... Platform Session                                                                                                               |
| <b>3:45 p.m.–5:00 p.m.</b> | <b>Scientific Sessions</b>                                                                                                                              |
|                            | S51 Multiple Sclerosis: Imaging II ..... 6B                                                                                                             |
|                            | S52 Aging and Dementia: Imaging..... 6C                                                                                                                 |
|                            | S53 Pathogenesis of Parkinson’s Disease..... 6A                                                                                                         |
|                            | S54 Hemorrhagic Stroke ..... 608/609                                                                                                                    |
|                            | S55 Myasthenic and Mitochondrial Disorders ..... 606/607                                                                                                |
|                            | S56 Epilepsy: Genetics and Therapy ..... 611/612                                                                                                        |
|                            | S57 Neuro-ophthalmology and Neuro-otology ..... 605/610                                                                                                 |
|                            | S58 Critical Care ..... 602/603                                                                                                                         |
|                            | S59 Neural Repair and Neurorehabilitation..... 613/614                                                                                                  |
|                            | <i>Presentation of the AAN Alliance: S. Weir Mitchell Award</i>                                                                                         |
|                            | S60 Autonomic Disorders..... 604                                                                                                                        |
| <b>4:00 p.m.–7:00 p.m.</b> | <b>Poster Session IX</b> ..... <b>6E</b>                                                                                                                |
| <b>6:00 p.m.–7:00 p.m.</b> | <b>Scientific Topic Highlights</b>                                                                                                                      |
|                            | Cerebrovascular Disease, Critical Care/Emergency Neurology/Trauma, and Interventional Neurology ..... 2B                                                |
|                            | Dementia/Behavioral Neurology..... 6C                                                                                                                   |
|                            | Epilepsy/EEG ..... 613/614                                                                                                                              |
|                            | Movement Disorders ..... 6A                                                                                                                             |
|                            | Neuromuscular, EMG, and Autonomic Disorders..... 605/610                                                                                                |
| <b>7:00 p.m.–8:00 p.m.</b> | <b>Scientific Topic Highlights</b>                                                                                                                      |
|                            | Combined Scientific Topic Highlights: Child Neurology, Ethics, Pain and Palliative Care, Infections,<br>Neuroepidemiology, and Neuro-oncology ..... 604 |
|                            | Clinical Practice ..... 3AB                                                                                                                             |
|                            | Multiple Sclerosis..... 6B                                                                                                                              |
| <b>Friday, May 1, 2009</b> |                                                                                                                                                         |
| <b>9:00 a.m.–5:00 p.m.</b> | <b>Future of Neuroscience Conference: New Genetics: The Future of Neurology</b> ..... <b>Hyatt Amphitheater</b>                                         |
| <b>1:00 p.m.–5:00 p.m.</b> | <b>Integrated Neuroscience Session: Traumatic Brain Injury</b> ..... <b>3AB</b>                                                                         |
|                            | 1:00 p.m.–2:30 p.m. .... Invited Speaker Session                                                                                                        |
|                            | 2:30 p.m.–3:30 p.m. .... Poster Session                                                                                                                 |
|                            | 3:30 p.m.–5:00 p.m. .... Platform Session                                                                                                               |
| <b>5:15 p.m.–6:15 p.m.</b> | <b>Scientific Program Highlights Plenary Session</b> ..... <b>4A</b>                                                                                    |

# 2009 AWARD RECIPIENTS

Rooms and locations are subject to change.

## AAN Alliance Awards

### • Founders Award

*Sponsored by the American Academy of Neurology Alliance.*

**Recipient: Kazuma Nagakawa, MD / San Francisco, CA**

Presentation: S24: Stroke Epidemiology I

Date and Time: Wednesday, April 29, 2:00 p.m., Room 608/609

Title: "Transfer Function Analysis of Dynamic Cerebral Autoregulation in Non-traumatic Intracerebral Hemorrhage"

### • S. Weir Mitchell Award

*Sponsored by the American Academy of Neurology Alliance.*

**Recipient: Sashank Prasad, MD / Philadelphia, PA**

Presentation: S59: Neural Repair and Neurorehabilitation

Date and Time: Thursday, April 30, 3:45 p.m., Room 613/614

Title: "Anatomical and Physiological Correlates of Cross-modal Activation in Blindness"

## 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: Jasper R. Daube, MD, FAAN / Rochester, MN**

Presentation: "When, Where and How I Am Still Improving My Skills at Helping Students Learn"

Date and Time: Monday, April 27, 9:15 a.m.–9:45 a.m., Sheraton Metropolitan Ballroom AB

## AAN Foundation Clinical Research Training Fellowships

*Funded by the American Academy of Neurology, the American Academy of Neurology Foundation, and the AAN Foundation Corporate Roundtable.*

### Recipients:

**Peter Turkeltaub, MD, PhD**

University of Pennsylvania, Philadelphia, PA

**Jonathan Lipton, MD, PhD**

Children's Hospital, Boston, MA

**W. Taylor Kimberly, MD, PhD**

Massachusetts General Hospital, Boston, MA

**Sashank Prasad, MD**

U of Penn. School of Medicine, Philadelphia, PA

**Andria L. Ford, MD**

Washington University, St. Louis, MO

**Chad Hales, MD, PhD**

Emory University School of Medicine, Atlanta, GA

**Martina Vendrame, MD, PhD**

Brigham and Women's Hospital, Boston, MA

**Toni Pearson, MD**

Columbia University Medical Center, New York, NY

**Lesli E. Skolarus, MD**

University of Michigan, Ann Arbor, MI

**Rachel Goldmann Gross, MD**

University of Pennsylvania, Philadelphia, PA

**Andrew Lim, BSc, MD, FRCP**

Beth Israel Deaconess Center, Boston, MA

**Glen Jickling, MD**

University of California, Davis, Sacramento, CA

## AAN Foundation Practice Research Training Fellowship

*Funded by The American Academy of Neurology, the American Academy of Neurology Foundation, and the AAN Foundation Corporate Roundtable.*

**Recipient: Beau B. Bruce, MD**

Emory University School of Medicine, Atlanta, GA

## Robert Katzman, MD, Clinical Research Training Fellowship in Alzheimer's Research

*Cosponsored by The American Academy of Neurology Foundation and the Alzheimer's Association.*

**Recipient: Joshua M. Shulman, MD, PhD**

Brigham and Women's Hospital, Boston, MA

## AAN Award For Creative Expression of Human Values in Neurology

*Sponsored by the Ethics, Law and Humanities Committee.*

**Recipients: James Gordon, MD, FRCP, FAAN / Seattle, WA**

Title: "The Art of Knowing"

## 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: Michael Wong, MD, PhD / St. Louis, MO**

Presentation: S26: Epilepsy: Co-Morbidities, Epidemiology, and Health Outcomes

Date and Time: Wednesday, April 29, 2:00 p.m., Room 611/612

## 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: David Miller, FRCP / London, United Kingdom**

Presentation: S21: Multiple Sclerosis: Clinical Trials

Date and Time: Wednesday, April 29, 2:00 p.m., Room 6B

## 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.*

### Recipients:

**Merit Cudkovicz, MD, MSc / Charlestown, MA**

**Orla Hardiman, MD / Dublin, Ireland**

Presentation: S12: Anterior Horn: Basic Science

Date and Time: Tuesday, April 28, 3:45 p.m., Room 6C

## American Academy of Neurology Foundation Chair's Award

*Sponsored by the American Academy of Neurology Foundation.*

**Recipient: TBD**

### **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: Bradley Schlaggar, MD, PhD / St. Louis, MO**

Presentation: S28: Behavioral Neurology I

Date and Time: Wednesday, April 29, 2:00 p.m., Room 602/603

### **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: Christian Wider, MD / Jacksonville, FL**

Presentation: S13: Parkinson's Disease: Non-Motor Symptoms

Date and Time: Tuesday, April 28, 3:45 p.m., Room 6A

### **Association of Indian Neurologists in America (AINA) Lifetime Achievement Award**

*Endowed by the Association of Indian Neurologists in America.*

**Recipient: Shri K. Mishra, MD, FAAN / Encino, CA**

Presentation: AINA Annual Meeting

Date and Time: Tuesday April 28

### **International Scholarship Award**

*Sponsored by the American Academy of Neurology Membership Committee.*

**Recipients:**

**Fabricio Ferreira de Oliveira, MD**

Campinas, SP, Brazil

**Amitav Rath, MD, DNB**

Orissa, India

**Abdullahi Ibrahim, MBBS, FMCP**

Bauchi State, Nigeria

**Marijana Lisak, MD, PhD**

Zagreb, Croatia

**Kolawole W Wahab, MBBS, FMCP**

Kwara State, Nigeria

**Gaetano Cantalupo, MD**

Bologna, Italy

**Ramachandran Meenakshisundaram, MBBS**

Tamilnadu, India

**Adekunle F Mustapha, MBBS, FMCP**

Osun, Nigeria

**Daria Dinacci, MD**

Naples, Italy

**James C. Stevens, MBBS, PhD, MRCP**

London, United Kingdom

**Xin Cheng, MD, PhD**

Shanghai, China

**Augustina O. Charway, MD**

Accra, Ghana

**Shima Mehrabian, MD**

Sofia, Bulgaria

### **Lawrence C. McHenry Award: An Award for the History of Neurology**

*Sponsored by the American Academy of Neurology.*

**Recipient: T. Jock Murray, OC, MD, FRCPC / Halifax, NS, Canada**

Presentation: S40: History of Neurology

Date and Time: Wednesday, April 29, 3:45 p.m., Room 604

Title: "Dr. Samuel Johnson's Stroke"

### **Medical Student Essay Awards**

*Sponsored by the American Academy of Neurology.*

#### **• Extended Neuroscience Award**

**Recipient: Cyrus Raji / Pittsburgh, PA**

Presentation: Poster Session III

Date and Time: Tuesday, April 28, 4:00 p.m., Room 6E

Title: "Independent Effects of Age and Alzheimer's on Gray Matter in a Community Cohort"

#### **• G. Milton Shy Award in Clinical Neurology**

**Recipient: Alissa Waite / Warwick, RI**

Presentation: Poster Session III

Date and Time: Tuesday, April 28, 4:00 p.m., Room 6E

Title: "Seizure Exposure as a Risk Factor for Psychogenic Nonepileptic Seizures"

#### **• Roland P. Mackay Award in Historical Aspects**

**Recipient: Erika Levy / Rochester, NY**

Presentation: Poster Session III

Date and Time: Tuesday, April 28, 4:00 p.m., Room 6E

Title: "Misperceptions of Coprolalia Throughout History"

#### **• Saul R. Korey Award in Experimental Neurology**

Not given in 2009

### **Movement Disorders Research Award**

*Sponsored by the American Academy of Neurology, the Parkinson's Disease Foundation, and the AAN Movement Disorders Section and endowed by the Parkinson's Disease Foundation.*

**Recipient: Mahlon DeLong, MD / Atlanta, GA**

Presentation: S03: Pathogenesis and Epidemiology of Essential Tremor

Date and Time: Tuesday, April 28, 2:00 p.m., Room 6A

### **Neuroscience Research Prize**

*Sponsored by the American Academy of Neurology, American Academy of Neurology Foundation and the Child Neurology Society.*

**Recipients:**

**Jamie Kang / Belmont, MA**

**Jourdan Urbach / Roslyn Heights, NY**

**Henry Zheng / Ellicott City, MD**



# 2009 AWARD RECIPIENTS

Rooms and locations are subject to change.

## Child Neurology Neuroscience Research Prize

*Sponsored by the American Academy of Neurology, American Academy of Neurology Foundation and the Child Neurology Society.*

**Recipient: Inar Zhang / Mercer Island, WA**

Note: The recipient will attend the Child Neurology Society Annual Meeting, October 14-17, 2009 in Louisville, KY

## Palatucci Advocacy Leadership Forum Advocate of the Year.

*Sponsored by the AAN State Affairs Committee.*

**Recipient: Daniel C. Potts, MD / Tuscaloosa, AL**

## Michael S. Pessin Stroke Leadership Prize

*Sponsored by the American Academy of Neurology and endowed by Dr. Pessin's family, friends, and colleagues.*

**Recipient: Matthew Flaherty, MD / Cincinnati, OH**

Presentation: S04: Acute Stroke Care

Date and Time: Tuesday, April 28, 2:00 p.m., Room 608/609

## Potamkin Prize for Research in Pick's, Alzheimer's, and Related Diseases

*Sponsored by the American Academy of Neurology, the AAN Foundation, and funded through the philanthropy of the Potamkin Family.*

**Recipients:**

**Robert Vassar, PhD / Chicago, IL**

**Michael Wolfe, PhD / Boston, MA**

**Berislav Zlokovic, MD, PhD / Rochester, NY**

Presentation: S22: Aging and Dementia: Genetics

Date and Time: Wednesday, April 29, 2:00 p.m., Room 6C

## American Academy of Neurology President's Award

*Sponsored by the American Academy of Neurology.*

**Recipient: Michael L. Goldstein, MD, FAAN / Salt Lake City, UT**

## Preuss Award in Clinical Neuro-oncology

*Supported by the American Academy of Neurology and the AAN Neuro-oncology Section and awarded through a gift from Dr. Preuss' family, friends, and colleagues.*

**Recipient: Scott Plotkin, MD, PhD / Boston, MA**

Presentation: Neuro-oncology Section Meeting

Date and Time: Tuesday, April 28, 12:30 p.m., Room 201

## Research Award in Geriatric Neurology

*Sponsored by the American Academy of Neurology and the AAN Geriatric Neurology Section and supported by the American Geriatrics Society and the John J. Hartford Foundation.*

**Recipient: Andrew Budson, MD / Bedford, MA**

Presentation: Geriatrics Section Meeting

Date and Time: Tuesday, April 28, 12:00 p.m., Room 611/612

## Bruce S. Schoenberg International Award in Neuroepidemiology

*Endowed by GlaxoSmithKline, Inc.*

**Recipient: Edgard-Brice Ngoungou, PhD / Libreville, Gabon**

Presentation: S48: Neuroepidemiology/Health Services Research

Date and Time: Thursday, April 30, 1:30 p.m., Room 602/603

Title: "Relationship Between Cerebral Malaria and Sequelar Epilepsy in Tropical Regions"

## Sleep Science Award

*Sponsored by the American Academy of Neurology and the AAN Sleep Section and endowed by Cephalon, Inc.*

**Recipient: Paul Franken, MD / Lausanne, Switzerland**

Presentation: S07: Sleep Disorders

Date and Time: Tuesday, April 28, 2:00 p.m., Room 605/610

## AAN Foundation/ALS Association Clinician Scientist Development Award

*Cosponsored by the ALS Association and the American Academy of Neurology Foundation.*

**Recipient: Swati Aggarwal, MD**

Massachusetts General Hospital, Boston, MA

## H. Richard Tyler Award

*Sponsored by the American Academy of Neurology and the AAN Archive Committee.*

**Recipient: Donna C. Bergen, MD, FAAN / Chicago, IL**

## Kenneth M. Viste, Jr., MD, Patient Advocate of the Year Award

*Endowed by gifts from Dr. Viste colleagues, friends, and patients.*

**Recipient: Richard Bedlack, MD, PhD, MSc / Durham, NC**

## Harold Wolff-John Graham: An Award for Headache/Facial Pain Research

*Sponsored by the American Academy of Neurology and endowed by Endo Pharmaceuticals.*

**Recipient: Mark Obermann, MD / Essen, Germany**

Presentation: Integrated Neuroscience Session:

Advances in Headache

Date and Time: Wednesday, April 29, 4:30 p.m., Room 3AB

## 2009 AAN Clerkship and Program Directors Conference: Faculty and Professional Development

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**9:00 a.m.–4:00 p.m.**

Participants should be able to discuss the principles of adult learning and practical methods of fostering teaching skills; describe processes to document educational credentials for promotion; identify processes, tools, and policies to deal with problem learners; and have a better understanding of financial planning in their residency program.

**Registration is required.**

## Basic Science Resident Curriculum

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**9:00 a.m.–12:45 p.m.**

**2:15 p.m.–6:00 p.m.**

The resident neuroscience initiative is a three-year basic science curriculum for neurology residents offered at the Annual Meeting. The curriculum is primarily intended to help neurology residents learn the basic sciences on which clinical neurology is founded, as detailed in the Neurology Review Committee (NRC) program requirements for residency education in neurology. Topics that will be covered over the three-year cycle include neuroanatomy, neurophysiology, neuropharmacology, neuropathology, development, and genetics. This curriculum will also help residents prepare for the AAN Residency In-service Training Examination (RITE). This year's program topics include:

1AC.001 Resident Basic Science I: Neurogenetics

1PC.001 Resident Basic Science II: Neurometabolic Disorders

**Registration is required.**

## BRAINS Colloquium: Critical Thinking for Critical Issues

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**1:00 p.m.–5:00 p.m.**

The BRAINS Colloquium is intended to provide attendees with up-to-date information on the “business” of neurology and an opportunity to further develop practice management skill sets. Faculty will address the logistics of taking call and the different call options, implementing an electronic health record, and salary and staffing issues that come along with an atmosphere of declining reimbursement.

**Free and open to all registered attendees.**

### Download Your Syllabi

Obtaining your Education Program syllabi is quicker and easier than ever. All registered attendees will be able to download the full syllabi for your selected programs. Syllabi can be downloaded starting in April. All registered attendees will receive an email notification in April. You can also pick up a printed copy on-site at the room where your program is located, available 30 minutes prior to the start of the program.

## Patient Safety Colloquium: Medication Safety Across Your Practice Settings

9:00 a.m.–12:00 p.m.

Empowers neurologists to participate in the implementation of medication safety and understand safety issues related to herbal medication and medication interactions. Additional objectives include learning the value of internet tools and safe prescribing practices. The colloquium enables neurologists to develop patient safety initiatives for patients with neurologic conditions.

*Free and open to all registered attendees.*

## Practice Colloquium: Improving Quality Through Incentives: Lessons from Model Programs

1:30 p.m.–4:30 p.m.

Incentivizing quality, or “pay-for-performance (P4P),” has received substantial national emphasis over the past several years. The evidence regarding improved health care efficiency and outcomes has been mixed. The purpose of this Practice Colloquium is to review the best available evidence on P4P, particularly with regard to improving the quality of primary versus specialty (neurologic) care. Specific models of P4P that have shown the most promise in large health care systems will be emphasized.

*Free and open to all registered attendees.*

## **NEW!** New Member Information Session

5:00 p.m.–6:00 p.m.

This first-ever, FREE event is open to all new AAN members who joined the Academy since January 1, 2009. This is your opportunity to learn about your Academy and how to make the most of your benefits, and meet and network with Academy leaders. Refreshments will be served.

## Celebration for Research

6:00 p.m.–10:30 p.m.

Join us for an exciting evening filled with music, dancing, laughter and more! Enjoy a lush buffet of Seattle favorites with your friends and colleagues. Extra tickets are available through registration.

## Neurobowl®

6:00 p.m.–8:00 p.m.

There is no better way to begin the 61<sup>st</sup> Annual Meeting than by attending Neurobowl®. Former AAN President Thomas R. Swift, MD, FAAN, hosts another year of competition by the best and brightest in neurology for the enviable Neurobowl title. This popular quiz show focuses on the process of neurological diagnosis with common and rare neurologic case histories, video clips, investigations, and movie segments. Seating is limited and is available on a first-come, first served basis.

**NEW!** In 2009, Neurobowl will pit brainy gladiators from both sides of the Mississippi to test their knowledge in an all-out neuro-rumble. Participants will be divided into two teams: East versus West. The winners will take on the 2008 Neurobowl champions in a contest of ultimate cerebral fitness!

*Sponsored by UCB, Inc.*

## Main Stage: Josh Blue Brings Down the House with Big Laughs!

8:30 p.m.–10:30 p.m.

Celebrated comedian Josh Blue puts the “cerebral” in cerebral palsy. Blue’s comedy centers on his experiences living and dealing with cerebral palsy. He exploded onto the national comedy scene by capturing the attention and endearment of the country as the winner of NBC’s *Last Comic Standing*. Having already established himself as one of the most sought after comedians on the college circuit, his weekly appearances on Last Comic in the summer of 2006 made him a national hit. Josh continues to break down stereotypes of people with disabilities one laugh at a time!

Opening for Josh Blue is “classically trained country crooner” Carrie Cunningham, who is quickly becoming a major name on the music scene. Since the release of her debut solo album, *Honeysweet*, Cunningham has been entertaining audiences worldwide with her heartfelt lyrics both onstage and on the radio.

*Sponsored by Teva Neuroscience, Inc.*

## Neuro Idol

8:00 p.m.–10:00 p.m.



Come see your fellow neurologists take the spotlight and showcase their musical talents. This year will be a cabaret-style show where you can celebrate the hidden musical talents of your colleagues. To sign up or for more information, contact Erin Jackson at [ejackson@aan.com](mailto:ejackson@aan.com) or (651) 695-2704.

*Sponsored by the AAN Partners Program*

## **NEW!** Neuro Hop

8:30 p.m.–10:30 p.m.

Dance the night away to classic hits from today and yesteryear. DJ Kyle spins the tunes. You provide the wild dance moves!

# Join us for the 2009 RUN/WALK for Brain Research

*Sponsored by Eli Lilly and Company*

**Tuesday, April 28**

*6:30 a.m.–8:30 a.m.*

#### **Move Your Feet for Research!**

Put your legs (and your support) behind research! Join your colleagues for a 5k run or one mile walk along the beautiful Seattle waterfront.

#### **Get Sponsors, Help Us Reach the Finish Line**

Friends and family can sponsor your run or walk for a flat donation. Recruit more sponsors to raise more for research. The runner with the most donations receives FREE 2010 Annual Meeting registration.

- *Special Prizes also given for Best Male and Female runners!*
- *Free Run/Walk T-shirt and refreshments*

**Proceeds support Clinical Research Training Fellowships in neurology.**

#### **What's Provided?**

Water and refreshments will be available following the race. The registration fee is \$25. Participants will receive a Run/Walk T-shirt, commemorating the event.



**Register Now: *www.aan.com/run***



**Better Practices, Better Outcomes**  
AAN 61<sup>ST</sup> ANNUAL MEETING • APRIL 25 — MAY 2, 2009



# INTEGRATED NEUROSCIENCE SESSION: ENDOVASCULAR NEUROLOGY

Sunday, April 26 / 2:00 p.m.–6:00 p.m.

Coordinators: Anthony Furlan, MD, FAAN and Tudor Jovin, MD

## Platform Session / 2:00 p.m.–3:30 p.m. / Room 3AB

- |                                                                                                                                                                                                                                                                                                                    |                  |                                                                                                                                                                                                                                       |                  |                                                                                                                                                                                                                                                             |                  |                                                                                                                                                                                                                                                                                                                                                                                 |                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| <b>2:00 p.m.</b><br>Carotid Luminal Diameter Changes One Year after Stenting: Results from the Lead-In Phase of CREST <i>Helmi Lutsep, Kirk Beach, Gary Roubin, Pierre Leimgruber, Brajesh Lal, William Gray, Kenneth Rosenfield, Robert Bergelin, Jenifer Voeks, Mary Longbottom, Robert Hobson, Thomas Brott</i> | <b>IN1-1.001</b> | <b>2:30 p.m.</b><br>Time to Microcatheter for Endovascular Therapy in Acute Ischemic Stroke: A Multicenter Review <i>Jefferson Miley, Muhammad Zeeshan Memon, Haitham Hussein, Douglas Valenta, M. Fareed Suri, Adnan Qureshi</i>     | <b>IN1-1.003</b> | <b>3:00 p.m.</b><br>Predictors of Clinical and Radiographic Outcome in Acute Stroke Patients Treated with Intra-Arterial Therapy Who Achieve Complete Recanalization <i>Mouhammad Jumaa, Ridwan Lin, Aitziber Aleu, Syed Zaidi, Ken Uchino, Tudor Jovin</i> | <b>IN1-1.005</b> | <b>3:15 p.m.</b><br>Imaging Based Intraarterial Treatment for Acute Anterior Circulation Ischemic Stroke Due to Intracranial Large Vessel Occlusion beyond 8 Hours from Symptoms Onset – Preliminary Multicenter Experience <i>Tudor Jovin, Rishi Gupta, David Liebeskind, Ansaar Rai, Nazli Janjua, Dileep Yavagal, Raul Nogueira, UCLA Endovascular Therapy Investigators</i> | <b>IN1-1.006</b> |
| <b>2:15 p.m.</b><br>Measurement of Antiplatelet Inhibition during Neurointerventional Procedures: The Effect of Anti-Thrombotic Duration and Loading Dose <i>Dhruvil Pandya, Brian-Fred Fitzsimmons, Thomas Wolfe, Syed Hussain, Prem Kandiah, Santiago Ortega-Gutierrez, John Lynch, Osama Zaidat</i>             | <b>IN1-1.002</b> | <b>2:45 p.m.</b><br>Occurrence and Predictors of Futile Recanalization Following Intra-Arterial Thrombolysis among Patients with Acute Ischemic Stroke <i>Haitham Hussein, Alexandros Georgiadis, Gabriela Vazquez, Adnan Qureshi</i> | <b>IN1-1.004</b> |                                                                                                                                                                                                                                                             |                  |                                                                                                                                                                                                                                                                                                                                                                                 |                  |

## Poster Session / 3:30 p.m.–4:30 p.m. / Room 3AB

- |                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>IN1-2.001</b> Comparison between Medical Therapy and Endovascular Treatment of the Extracranial Atherosclerotic Vertebral Artery (V1) Stenosis: A Systematic Analysis <i>Muhammad Zeeshan Memon, Robert Taylor, Gabriela Vazquez, Adnan Qureshi</i> | <b>IN1-2.004</b> Safety of Drip and Ship IV tPA in Acute Stroke: The University Hospitals-Case Medical Center Experience <i>Vincent Truong, Sophia Sundararajan, Svetlana Pundik, Michael DeGeorgia, Anthony Furlan, Cathy Sila</i> | <b>IN1-2.007</b> Systolic Blood Pressure Is a Strong Predictor of Vessel Recanalization in Acute Ischemic Stroke Patients Undergoing Thrombectomy: Pooled Analysis of the MERCI and Multi MERCI Trials <i>Raul Nogueira, David Liebeskind, Wade Smith</i> | <b>IN1-2.010</b> CT Permeability in Acute Ischemic Stroke Undergoing Recanalization Therapy: Potential and Pitfalls of First-Pass Perfusion <i>Liangfu Zhu, Jeffrey Alger, Jeffrey Saver, Sidney Starkman, Doojin Kim, Latisha Ali, Bruce Ovbiagele, Arbi Ohanian, John Panagotacos, Ilya Lekh, Reza Jahan, Satoshi Tateshima, Gary Duckwiler, Fernando Viñuela, David Liebeskind</i> |
| <b>IN1-2.002</b> Vascular Interventions in Takayasu's Aorto-Arteritis <i>Sanjeev Sivakumar, Sivakumar Rajappa</i>                                                                                                                                      | <b>IN1-2.005</b> Safety and Outcome of the "Drip and Ship" Paradigm in Acute Ischemic Stroke: A Concurrent Control Study <i>Gustavo Rodriguez, Terry Burns, Jefferson Miley, Alberto Maud, Adnan Qureshi</i>                        | <b>IN1-2.008</b> In-Stent Restenosis on Follow-Up Angiography among Patients Treated with Stenting in Acute Ischemic Stroke <i>Ambooj Tiwari, Amit Kansara, Mahmoud Rayes, Chethan Rao, Maggie Jones, Andrew Xavier</i>                                   |                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>IN1-2.003</b> Enhanced Leptomeningeal Vessels on Contrast-Enhanced CT May Predict Perfusion-Diffusion Mismatch in Patients with Acute Ischemic Stroke <i>Suh-Yun Hong, Kyung-Hee Cho, Hyuk-Won Chang, Chul-Ho Sohn, Sung-Il Sohn</i>                | <b>IN1-2.006</b> Intravenous Alteplase Prior to Cerebral Angiography Increases the Rate of Groin Hematoma <i>Oriana Cornett, Paresh Lalcheta, Azam Mughni, Osamah Choudry, Steven Hoover, Jawad Kirmani</i>                         | <b>IN1-2.009</b> Timing of Complications Following Intracranial Angioplasty and/or Stent Placement. Implications for Post-Procedural Monitoring <i>Alexandros Georgiadis, Nauman Tariq, Muhammad Zeeshan Memon, Ather Taqui, Adnan Qureshi</i>            |                                                                                                                                                                                                                                                                                                                                                                                       |

## Invited Speaker Session\* / 4:30 p.m.–6:00 p.m. / Room 3AB

- |                            |                                                                                        |
|----------------------------|----------------------------------------------------------------------------------------|
| <b>4:30 p.m.–4:55 p.m.</b> | Extracranial Atherostenosis: Best Medical Care or Stenting <i>Osama Zaidat, MD</i>     |
| <b>4:55 p.m.–5:20 p.m.</b> | Intracranial Atherostenosis: Best Medical Care or Stenting <i>Cathy Sila, MD, FAAN</i> |
| <b>5:20 p.m.–5:45 p.m.</b> | Acute Ischemic Stroke Thrombolysis: IV or IA or Both? <i>Rishi Gupta, MD</i>           |
| <b>5:45 p.m.–6:00 p.m.</b> | Panel Discussion                                                                       |

\*Current as of February 23, 2009



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## International Attendee Summit

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**7:00 a.m.–9:00 a.m.**

This exclusive, free event for international meeting attendees provides an excellent opportunity to socialize and network with your international colleagues, make your voice heard on matters most important to you, and get answers to your most pressing AAN-related questions from Academy leaders. Reserve your space today by contacting Laurie Weyandt at [lweyandt@aan.com](mailto:lweyandt@aan.com) or (651) 695-2799.

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## State Society Leadership Roundtable

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**7:00 a.m.–9:30 a.m.**

Leadership representatives of state neurological societies are invited to discuss challenges, strategies and practices related to state society 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 the Academy has to offer.

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## Education Colloquium: Ethics and Education

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**9:00 a.m.–12:00 p.m.**

The ethical dimensions of medical practice have grown exponentially over the past several decades, with neurologists often playing a central role in the identification of ethical issues and developing guidelines for care based on ethical, scientific, and clinical principles.

Attend the Education Colloquium to learn about ethics education; the influence of the clinical environment and culture on the ethical behavior of students, residents, faculty, and practitioners; the essentials of an ethics curriculum and an exploration of a variety of ways to teach ethics; and medical practice and the structure and purpose of health law.

*Free and open to all registered attendees.*

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## Kenneth M. Viste, Jr., MD, Neurology Public Policy Fellowship Information Session

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**12:00 p.m.–1:00 p.m.**

The Kenneth M. Viste, Jr., MD, Neurology Public Policy Fellowship provides an excellent opportunity to gain hands-on experience in federal policy and develop political relationships that help promote the interests of neurology. Meet with past fellows and selection committee members to learn more about the year long paid fellowship in Washington, DC, offered by the AAN Professional Association, the American Neurological Association, and the Child Neurology Society.

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## Ethics Colloquium

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**12:30 p.m.–2:00 p.m.**

In the interest of creating a dialog with AAN membership on pending ethics policies and current ethics topics, the 2009 Ethics Colloquium will be held on Monday, April 27, from 12:30 p.m. to 2:00 p.m. The Ethics Colloquium will be open to all AAN members and interested non-members. Membership will be afforded the opportunity to introduce emerging ethical issues for discussion and will be invited to comment on a proposed policy concerning the ethical and legal aspects of neurological enhancement, which will be presented by members of the Ethics, Law and Humanities Committee.

*Free and open to all registered attendees.*

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## Guidelines, Practice, and Advocacy Open House: Featuring Digital Demos

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**3:00 p.m.–5:30 p.m.**

Get tools and advice to help you succeed in practice. View posters of recent guidelines on controversial clinical issues and discuss the conclusions with the authors. Learn more about advocacy, coding, maximizing reimbursement, effective practice management, performance improvement, and patient safety.

### Digital Demos: Technology Solutions That You Can Afford

Attend the “Digital Demos” presentation, where your fellow neurologist colleagues will present low-cost, easy-to-implement, electronic office solutions that can help move your practice into the 21<sup>st</sup> century and take advantage of Medicare PQRI bonuses.

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## ABPN Resident Informational Session

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**5:00 p.m.–6:30 p.m.**

This is an interactive opportunity for residents and fellows to meet members of the ABPN. The panel will discuss all aspects of the neurology boards and what is expected from candidates. Free and open to all interested persons.

# MONDAY, APRIL 27 HIGHLIGHTS

## Student Interest Group in Neurology (SIGN) Meeting

5:30 p.m.–6:30 p.m.

Student and faculty representatives from existing SIGN chapters and those interested in starting chapters will gather for presentations and discussions.

## Exhibit Hall Opening Reception

5:00 p.m.–7:00 p.m.

Washington State Convention and Trade Center, Exhibit Halls 4B–4F

Attend the opening reception to mingle with fellow attendees and preview the latest products and services available in the neurological industry. Light hors d'oeuvres and beverages will be served. The exhibits will be open at this time.

*Sponsored by EMD Serono, Inc. / Pfizer Inc*

## Residents and Fellows Career Forum and Reception

6:30 p.m.–9:00 p.m.

This career night for residents and fellows features three panel rooms including fellowship, private practice, and academic/research, as well as a poster forum and reception that includes exhibits of private practice groups and opportunities to learn about potential positions from headhunters. Advertisers in AAN Dendrite™ Careers in Neurology will also be on hand to discuss job opportunities.

*Sponsored by Teva Neuroscience, Inc.*

## Panel Forums

6:30 p.m.–7:30 p.m.

### Fellowship Panel

Find out how to search for a fellowship, how program directors select fellows, and how a fellowship could benefit your career.

### Academic/Research Panel

Find out how to start a career in academics/research.

### Private Practice Panel

Find out how to start a career in private practice.

## Poster Forum and Reception

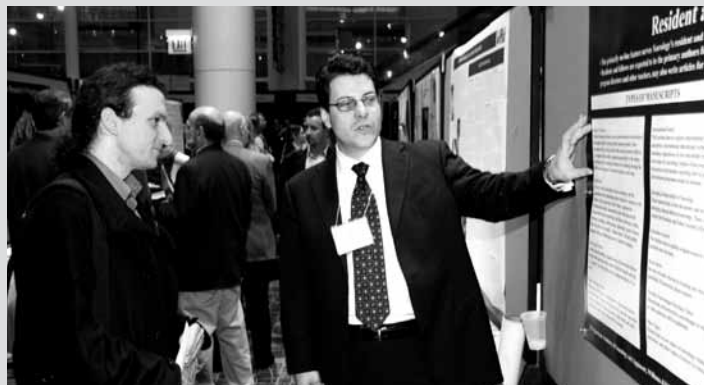
7:30 p.m.–9:00 p.m.

Socialize with other residents and representatives from various neurology programs and address questions regarding fellowships, academic research, and private practice career opportunities.

## **NEW!** International Component Posters

Neurology Residency Programs that feature an international element will have the opportunity to showcase their programs during the poster forum and reception, and to share information about their international outreach. Neurology Residency Programs that have a formal affiliation with foreign programs that encompass teaching and research are encouraged to submit a poster.

For questions about the Residents and Fellows Career Forum and Reception please contact Cheryl Alementi at [calementi@aan.com](mailto:calementi@aan.com) or (651) 695-2737.



*The Residents and Fellows Career Forum and Reception provides important opportunities for finding your career path in neurology.*



*Poster sessions attract a wide variety of national and international neurology programs.*



*Residents and fellows get their questions answered at the Poster Forum and Reception.*

# INTEGRATED NEUROSCIENCE SESSION: RECENT ADVANCES IN GENETICS AND MOLECULAR BIOLOGY IN GLOBAL NEUROLOGY

Monday, April 27 / 2:00 p.m.–6:00 p.m.

Coordinators: S. Claiborne Johnston, MD, PhD and Louis J. Ptacek, MD, FAAN

## Invited Speaker Session\* / 2:00 p.m.–3:30 p.m. / Room 3AB

- 2:00 p.m.–2:20 p.m.** Neurological Disease on the Global Agenda *Julie Jacobson*
- 2:20 p.m.–2:40 p.m.** The Genetics of Multiple Sclerosis and Global Disease Variation *Stephen L. Hauser, MD*
- 2:40 p.m.–3:00 p.m.** Neurogenetics: The European Perspective *Christine Klein, MD*
- 3:00 p.m.–3:20 p.m.** Neurogenetics: The US Perspective *Fuki Hisama, MD*
- 3:20 p.m.–3:30 p.m.** Discussion and Questions

## Poster Session / 3:30 p.m.–4:30 p.m. / Room 3AB

**IN2-1.001** A New RAB7 Mutation in a Large French Charcot-Marie-Tooth 2B Family *Emmanuelle Salort-Campana, Jean Pouget, Rafaelle Bernard, Michel Magistris, Armand Bottani, Alexis Brice, Philippe Latour*

**IN2-1.002** Founder Effect and New Mutations of SPG11 in French-Canadian Families *Inge Meijer, Judith St-Onge, Jean-Pierre Bouchard, Guy Rouleau, Nicolas Dupre*

**IN2-1.003** Variable Phenotypic Expression of Rapid Onset Dystonia Parkinsonism in a Newly Discovered Italian Family with a T613M Mutation in the ATP1A3 Gene *Richard Barbano, Laurie Ozelius, Debbie Hill, Allison Brashear*

**IN2-1.004** Environmental Risk Factors and Quality of Life in Leber Hereditary Optic Neuropathy *Matthew Kirkman, Alex Korsten, Miriam Leonhardt, Konstantinos Dimitriadis, Ireneaus De Co, Thomas Klopstock, Philip Griffiths, Gavin Hudson, Patrick Yu-Wai-Man, Patrick Chinnery*

**IN2-1.005** Neurological Relevance of the Intrathecal Specific Humoral Immune Response Analysis in Dengue Infection *Marzia Puccioni-Sohler, Cristiane Soares, Regina Alvarenga, Luiz Faria, Mauro Castro, José Peralta*

**IN2-1.006** A Large Number of SACS Mutations Are Responsible for ARSACS in the French-Canadian Population *Isabelle Thiffault, Martine Tetreault, Julie Demers-Lamarche, Marie-Josée Dicaire, Jean Mathieu, Jean-Pierre Bouchard, Yves Robitaille, Bernard Brais*

**IN2-1.007** Two Novel CYP7B1 Mutations in Italian Families with Autosomal Recessive Spastic Paraplegia: A Clinical and Genetic Study *Chiara Criscuolo, Alessandro Filla, Giovanni Coppola, Carlo Rinaldi, Rosa Carbone, Stefano Pinto, Q. Wang, Maria Fulvia De Leva, Elena Salvatore, Mario Quarantelli, Daniel Geschwind, Sabina Pappata, Giuseppe De Michele*

**IN2-1.008** A Novel Association of ATP-Binding Cassette Family Gene (ABCB1) among South Indian Patients with Epilepsy *Abhijit Das, Anila Mathew, Neetha Vijayan, Kurupath Radhakrishnan, Moinak Banerjee*

**IN2-1.009** Allelic Associations of ANG with Sporadic ALS in Irish and Swedish Patients *Julie Phukan, Simon Cronin, David Lynch, Matthew Greenway, William McCormack, Jean Saunders, Peter Andersen, Phil Jakeman, Orla Hardiman*

**IN2-1.010** IFN $\beta$ -Pathway Gene Polymorphisms Influence Response to Multiple Sclerosis Treatment. A European Study *Nicolas Couturier, Pierre-Antoine Gourraud, Manuel Comabella, Frank Weber, Bertram Muller-Myhsok, Robert Goertsches, Koen Vandebroeck, Emilie Schmit, Marc Debouverie, Christine Lebrun-Frenay, Emmanuelle Lepage, Gilles Defer, Thibault Moreau, Sandra Vukusic, Serge Mrejen, Gilles Edan, Florence Bucciarelli, Céline Rabadeux, Laurie Parmentier, Helene Merle, Isabelle Cournu-Rebeix, Claire Gout, Michel Clanet, Bertrand Fontaine, David Brassat*

## Platform Session / 4:30 p.m.–6:00 p.m. / Room 3AB

**4:30 p.m.** **IN2-2.001** Ongoing Genomewide Association in Familial Intracranial Aneurysms *Daniel Koller, Ranjan Deka, Dongbing Lai, Daniel Woo, Laura Sauerbeck, Richard Hornung, Sander Connolly, Craig Anderson, Guy Rouleau, Irene Meissner, Carl Langefeld, Joan Bailey-Wilson, John Huston, Robert Brown, Tatiana Foroud, Joseph Broderick*

**4:45 p.m.** **IN2-2.002** Toll-Like Receptors Are Critical for Protection Against West Nile Virus Infection *Amir Sabouri, Maria Marcondes, Michael Berger, Nengming Xiao, Bruce Beutler, Howard Fox, Nora Sarvetnick*

**5:00 p.m.** **IN2-2.003** Viral Risk Factors of HTLV-1-Associated Myelopathy/Tropical Spastic Paraparesis (HAM/TSP) *Amir Sabouri, Kosuke Hanada, Mitsuhiro Osame, Mineki Saito*

**5:15 p.m.** **IN2-2.004** Parental Consanguinity Is Associated with a Higher Incidence Rate of Progressive Encephalopathy: A Cohort Study *Petter Stromme, Pål Suren, Oivind Kanavin, Terje Rootwelt, Berit Woldseth, Michael Abdelnoor, Per Magnus*

**5:30 p.m.** **IN2-2.005** Epistasis among HLA-DRB1, HLA-DQA1 and HLA-DQB1 Loci Determines Multiple Sclerosis Susceptibility *Matthew Lincoln, Sreeram Ramagopalan, Michael Chao, Blanca Herrera, Gabriele DeLuca, Sarah Orton, David Dymant, A. Sadovnick, George Ebers*

**5:45 p.m.** **IN2-2.006** Phenotypic Spectrum of Laing Distal Myopathy in Four Spanish Families with Lys1729del Mutation *Nuria Muelas, Peter Hackman, Helena Luque, Mercedes Garcés, Inmaculada Azorín, Tiina Suominen, Teresa Sevilla, Fernando Mayordomo, Lorena Perpiñán, José María Millán, Bjarne Udd, Juan Vilchez Padilla*

## Run/Walk For Brain Research

Sponsored by Eli Lilly and Company.

6:30 a.m.–8:30 a.m.

Support research in neurology and join us for a 5k run or one mile walk by the scenic waterfront in downtown Seattle. Whether you're an occasional or seasoned runner, or just enjoy a walk, you'll enjoy this beautiful trek—for a good cause. All proceeds go to support Clinical Research Training Fellowships in neurology.

The race is open to all meeting attendees and their families. Water and refreshments will be available following the race. The registration fee is \$25. Friends and family can sponsor your run or walk for a flat donation. Recruit more sponsors to raise more for research. The runner with the most raised receives FREE 2010 Annual Meeting registration.

Bus service to and from the race site will be provided. For registration and details, visit [www.aan.com/go/am/foundation/run](http://www.aan.com/go/am/foundation/run) or contact Andrew Halverson at [ahalverson@aan.com](mailto:ahalverson@aan.com) or (651) 695-2757.

## Palatucci Advocacy Action Planning Roundtable

7:00 a.m.–9:30 a.m.

Now a tradition, the Action Planning Roundtable returns to provide Palatucci Advocacy Leadership Forum graduates a chance to share with their peers the challenges and successes they've encountered while implementing their action plans. Graduates from all years are encouraged to attend.

## Poster Session I

7:00 a.m.–10:00 a.m.

## Presidential Plenary Session

9:00 a.m.–12:00 p.m.

Washington State Convention and Trade Center, Exhibit Hall 4A



**Moderator: Stefan M. Pulst, MD, FAAN, Chair, Science Committee and Scientific Program Subcommittee**

The Presidential Plenary Session features the Academy'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 2008. The session concludes with the annual AAN Business Meeting.

Lectures include:

### Presidential Lecture



Doctoring, 2009, Embracing the Challenge  
*Stephen M. Sergay, MB BCh, FAAN*  
*Tampa Neurology Associates, Tampa, FL*

### Robert Wartenberg Lecture



Cognitive Motor Disorders: The Apraxias  
*Kenneth M. Heilman, MD, FAAN*  
*University of Florida, Gainesville, FL*

### H. Houston Merritt Lecture



"Evidence" and the Effective Clinical Neurologist

*Louis R. Caplan, MD, FAAN*  
*Beth Israel Deaconess Medical Center, Boston, MA*

## Get Involved in Your Academy and Professional Association

Stay for the AAN/AAN Professional Association annual Business Meeting immediately following the final lecture to find out the latest on Academy business and information. Meeting will take place in Room 210 of the Washington State Convention and Trade Center.

## Poster Session II

11:30 a.m.–2:30 p.m.

## Exhibits

11:30 a.m.–5:00 p.m.

**Complimentary luncheon: 12:00 p.m.–2:00 p.m.**

Washington State Convention and Trade Center, Exhibit Halls 4B–4F

See the latest in pharmaceutical products, medical equipment, publications, and products to assist with practice management, teaching methods, and research activities.



## Level I Certification for the NINDS Clinical Research Collaboration

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1:00 p.m.–3:00 p.m.

The NINDS Clinical Research Collaboration (CRC) is designed to connect patients, their physicians, and communities to high-quality research. This course will provide participants with basic research training required as a first step for participation in NINDS-sponsored research through the CRC. Participants will be presented with a provocative review of ethical issues faced when conducting research involving human subjects and will be presented with the essentials of performing research using good clinical practices. Specific information on the steps needed to connect you and your patients to NINDS sponsored-research through the CRC will be provided.

## Poster Session III

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4:00 p.m.–7:30 p.m.

## Hot Topics Plenary Session

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5:15 p.m.–6:15 p.m.

Washington State Convention and Trade Center, Exhibit Hall 4A

**Moderator: Raymond P. Roos, MD, FAAN  
Chair, Basic Science Subcommittee**

This session highlights important and interesting abstracts presented at subspecialty meetings leading up to the

Annual Meeting that are not on the program but should be heard by a wide audience at the Annual Meeting. Topics are selected by the AAN Science Committee and AAN Scientific Program Subcommittee.

### Lectures include:



“Progranulin, MicroRNAs and Neurodegeneration”

*Rosa Rademakers, PhD  
Mayo Clinic – Florida  
Jacksonville, FL*



“Induced Pluripotent Stem (iPS) Cells from a Patient with Spinal Muscular Atrophy: Implications for Neurology”

*Clive Svendsen, PhD  
University of Wisconsin  
Madison, WI*



“Progressive Multifocal Leukoencephalopathy: Lessons from AIDS and the Newer Biologic Agents”

*Joseph R. Berger, MD, FAAN  
University of Kentucky  
Lexington, KY*



“Deep Brain Stimulation Dogma: Fact or Fiction. Results from Randomized Clinical Trials”

*Jerrold L. Vitek, MD, PhD  
Cleveland Clinic Foundation  
Cleveland, OH*

## Corporate Therapeutic Updates

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Sheraton Seattle Hotel

Grand Hyatt Seattle

The Westin Seattle

Hyatt at Olive 8

7:30 p.m.–10:00 p.m.

Five industry-sponsored, non-CME programs will be offered and are open to attendees at no charge. They will provide an opportunity for pharmaceutical companies, device companies, or other neurologic related organizations to share information regarding their current therapies and projects in the pipeline in accordance with standards set for industry by the FDA. See page 30 for more details.





# JOIN US FOR CORPORATE THERAPEUTIC UPDATES

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The Industry representatives below invite you to an informational session on therapeutic updates. This program provides you the opportunity to learn about current therapies and projects in the corporate pipeline.

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## Corporate Therapeutic Updates from:

- **Allergan, Inc.**  
*Movement Disorders  
(Cervical Dystonia and Blepharospasm)*
  - **Bayer HealthCare Pharmaceuticals Inc.**  
*Multiple Sclerosis*
  - **Eisai Inc./Pfizer Inc**  
*Alzheimer's Disease/Dementia*
  - **Ovation Pharmaceuticals Inc.**  
*Movent Disorders  
(Chorea associated with Huntington's Disease)*
  - **Pfizer Inc**  
*Neurologic Pain*
- 

Check on-site for locations and updates

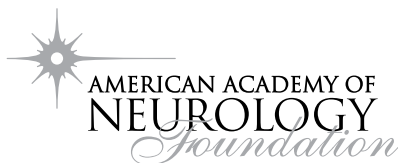
## AAN 61<sup>st</sup> Annual Meeting in Seattle

- > Tuesday, April 28, 2009
- > 7:30 p.m.–10:00 p.m.

**Registration is free and open to all  
registered Annual Meeting attendees.**

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No CME will be given by any accredited organizations for the programs w/industry and cannot affirm claims pertaining to FDA off-label medication, research use of pre-FDA drugs, or other research information that might be discussed.



# POSTER SESSION FLOOR PLAN

Washington State Convention and Trade Center, 6E

\*Authors stand by posters.

## Tuesday, April 28

### Poster Session I

7:00 a.m.–10:00 a.m.

7:00 a.m.–8:30 a.m.\*

### Poster Session II

11:30 a.m.–2:30 p.m.

12:00 p.m.–1:30 p.m.\*

### Poster Session III

4:00 p.m.–7:30 p.m.

6:00 p.m.–7:30 p.m.\*

## Wednesday, April 29

### Poster Session IV

7:00 a.m.–10:00 a.m.

7:00 a.m.–8:30 a.m.\*

### **NEW!** Poster Session V

11:30 a.m.–2:30 p.m.

12:00 p.m.–1:30 p.m.\*

### Poster Session VI

4:00 p.m.–7:00 p.m.

5:30 p.m.–7:00 p.m.\*

## Thursday, April 30

### Poster Session VII

7:00 a.m.–10:00 a.m.

7:00 a.m.–8:30 a.m.\*

### Poster Session VIII

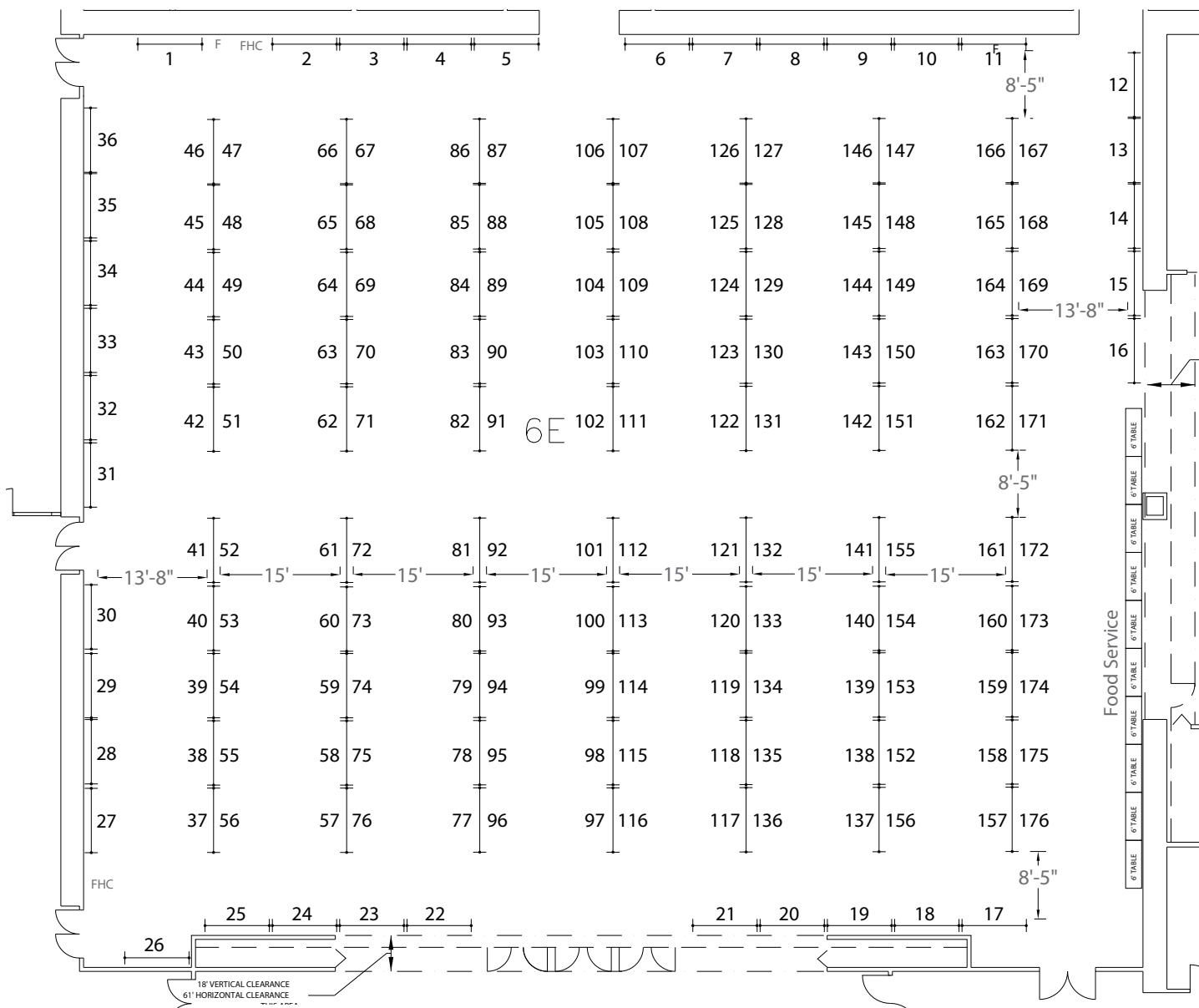
11:30 a.m.–2:30 p.m.

12:00 p.m.–1:30 p.m.\*

### Poster Session IX

4:00 p.m.–7:00 p.m.

5:30 p.m.–7:00 p.m.\*



## Aging and Dementia: Other I

**P01.001** Cognitive Control Correlates with Right Inferior Frontal Gray Matter Volume *Victor Laluz, Anne Bird, John Neuhaus, Mary Widmeyer, Bruce Miller, Joel Kramer*

**P01.002** Dissociable Executive Control Networks in Frontotemporal Lobar Degeneration *Alea Khan, Corey McMillan, David Libon, Delani Gunawardena, Lauren Massimo, Brianna Morgan, Lauren Richmond, Chivon Powers, William Hu, Murray Grossman*

**P01.003** Quantitative Analysis of Electroencephalography in Patients with Alzheimer's Disease and Amnesic Mild Cognitive Impairment *Jee Hoon Roh, Moon-Ho Park, Kun-Woo Park, Dae-Hee Lee, Deokwon Koh, Ki-young Jung*

**P01.004** Semantic Memory Associated with the Left Anterior Temporal Lobe *Kari Haws, Joel Kramer, Victor Laluz, Bruce Miller, Howard Rosen, Matthew Growdon, Jung Jang, Michael Weiner*

**P01.005** The Presence of TDP-43 Inclusions in Cognitively Intact Individuals with Minimal Pathological Findings *Brittany Dugger, Zeshan Ahmed, Keith Josephs, Joseph Parisi, Dennis Dickson*

**P01.006** CSF Tau Form Ratio and MRI Midbrain Measure To Identify Progressive Supranuclear Palsy *Barbara Borroni, Matteo Malinverno, Fabrizio Gardoni, Antonella Alberici, Chiara Agosti, Lucilla Parnetti, Enrico Premi, Ubaldo Bonuccelli, Mario Grassi, Daniela Perani, Paolo Calabresi, Monica Di Luca, Alessandro Padovani*

**P01.007** Caudate Atrophy in TDP-43 Negative FTLD-U Versus Other FTLD Forms *Harro Seelaar, Kirsten Klijnsma, Asma Azmani, Aad van der Lugt, John van Swieten*

**P01.008** Efficacy and Tolerability of Memantine (20 mg) in Behavioral Variant of Frontotemporal Dementia: Double-Blind, Parallel Group, Placebo-Controlled Trial *Martine Verclletto, Claire Boutoleau-Bretonniere, Christelle Volteau, Michele Puel, Sophie Auriacombe, Marie Sarazin, Bernard Michel, Philippe Couratier, Catherine Thomas-Anterion, Patrice Verpillat, Lucette Lacomblez*

**P01.009** Validation of the Telephone Interview of Cognitive Status-Modified (TICS<sub>m</sub>) Scores in Normal Cognition, Mild Cognitive Impairment (MCI) and Dementia *David Knopman, Rosebud Roberts, Yonas Geda, Vernon Pankratz, Ruth Cha, Bradley Boeve, Walter Rocca, Ronald Petersen*

**P01.010** Ratio Tau/Abeta42 Discriminates Alzheimer's Disease and Frontotemporal Dementia with High Specificity *Leonardo De Souza, Foudil Lamari, Bernard Hainque, Caroline Houllier, Claude Jardel, Isabelle Le Ber, Bruno Dubois, Marie Sarazin*

## Neurogenetics and Gene Therapy I

**P01.011** FLAG Tagged Micro-Dystrophin Provides Translational Opportunities for Gene Delivery to Non-Human Primates (NHPs) *Louise Rodino-Klapac, Chrystal Montgomery, William Bremer, Kim Shontz, Katie Campbell, K. Clark, Jerry Mendell*

**P01.012** ProSavin® a Lentiviral Vector Delivering the Genes for Dopamine Biosynthesis Is Safe in Patients with Parkinson's Disease: Early Report *Philippe Remy, Jean-Marc Gurruchaga, Gilles Fénelon, Emma Stratful, Bechir Jarraya, Hélène Lepetit, Jean-Pascal Lefaucheur, Patrice Dolphin, Inanna Gabriel, Kou Abhay, Sonia Lavis, Aurélie Kas, Anne-Laure Ramelli, Scott Ralph, Pierre Brugières, Philippe Hantraye, Susan Kingsman, Kyriacos Mitrophanous, Stephane Palfi*

**P01.013** Hereditary Optic Neuropathies Share a Common Mitochondrial Coupling Defect *Christophe Verny, Patrizia Amati-Bonneau, Arnaud Chevrollier, Virginie Guillet, Dominique Loiseau, Naig Gueguen, Marianne Pou de Crescenzo, Marc Ferre, Helene Dollfus, Sylvie Odent, Dan Milea, Cyril Goizet, Vincent Procaccio, Frédéric Dubas, Pascal Reynier, Dominique Bonneau*

**P01.014** A Novel Dominant C240Y Mutation in GDAP1 Associated with a Mitochondrial Complex I Deficiency and Mitochondrial Structural Modifications *Julien Cassereau, Christophe Verny, Arnaud Chevrollier, Naig Gueguen, Marc Ferre, Marie-Claire Malinge, Patrizia Amati-Bonneau, Vincent Procaccio, Pascal Reynier, Frédéric Dubas, Dominique Bonneau*

**P01.015** A Newly Identified Family with Spinocerebellar Ataxia Type 4 Presenting with Early Sensory Neuronopathy and Mild Cerebellar Involvement *Matthew Harms, Joanna Jen, Muhammad Al-Lozi, Alan Pestronk, Robert Baloh*

**P01.016** Autosomal Recessive Cerebellar Ataxias in Tunisia: Molecular Aspects *Faycal Hentati, Ghada El Euch-Fayache, Yosr Bouhhal, Mourad Zouari, Mounir Kefi, Rim Amouri*

**P01.017** Novel TARDBP Mutations in Amyotrophic Lateral Sclerosis *Jianhua Yan, Faisal Fecto, Erdong Liu, Wenjie Chen, Nailah Siddique, Sandra Donkervoort, Teepu Siddique*

**P01.018** Length of the Normal (CAG) Allele at MJD1 Modulates Age at Onset in Machado-Joseph Disease *Marcondes França, Jr., Anelyssa D'Abreu, Cláudia Maurer-Morelli, Luciana Bonadia, Marilza Silva, Anamarli Nucci, Vanessa Emmel, Mariana Kiehl, Laura Jardim, Maria Luiza Saraiva-Pereira, Iscia Lopes-Cendes*

**P01.019** Arginine:glycine Amidinotransferase Deficiency: A Treatable Encephalomyopathic Syndrome *Ashok Verma, Klaas Wierenga*

**P01.020** Introduction of the TYMP Gene in Thymidine Phosphorylase (TP) Deficient Cell Lines Using Lentiviral Vectors Restores TP Activity: Prospects for Therapy of MNGIE (Mitochondrial Neurogastrointestinal Encephalomyopathy) *Javier Torres, Alba Gómez, Herena Eixarch, Antoni Andreu, Jordi Barquinero, Ramon Martí*

**P01.021** Mutation Screening of ARHSP-TCC Patients Expands the Spectrum of SPG11 Mutations *Carlo Casali, Paola Denora, Alessandra Tessa, Roberto Di Fabio, Kostantinos Michalidis, Maria Teresa Dotti, Antonio Federico, Chiara Criscuolo, Francesco Pierelli, Fernando Kok, Giovanni Stevanin, Alexis Brice, Filippo Santorelli*

**P01.022** Mutations in TACO1 Cause Juvenile-Onset Leigh-Syndrome with Optic Atrophy *Rita Horvath, Woranontee Weraarpachai, Hana Antonicka, Florin Sasarman, Jill Kolesar, Jürgen Seeger, Bertold Schrank, Hanns Lochmueller, Brett Kaufman, Eric Shoubridge*

**P01.023** Direct Resequencing of Candidate Genes in Late-Onset Parkinson's Disease Cases *Jean-Baptiste Riviere, Judith St-Onge, Karl Grenier, Patrick Dion, Edward Fon, Guy Rouleau, Nicolas Dupre*

## Metabolic and Mitochondrial Myopathies

**P01.024** Myopathic Form of Phosphoglycerate Kinase (PGK) Deficiency: A New Case and Pathogenic Considerations *Ronen Spiegel, Estela Area, Hasan Akman, Yoseph Horovitz, Salvatore DiMauro*

**P01.025** A Retrospective Review of Myoadenylate Deaminase Deficiency (MDD) and the Efficacy of D-ribose Therapy *Thomas Brennan, Sakir Gultekin, Edward Cupler*

**P01.026** Generation and Phenotypic Characterization of a Knock-in Mouse Model of McArdle Disease *Antoni Andreu, Gisela Nogales-Gadea, Tomas Pinós, Ramon Martí, Salvatore DiMauro, Hasan Akman, Alejandro Lucia, Miguel Angel Martin, Joaquin Arenas*

**P01.027** Increase of Skeletal Muscle Lactate Production during Exercise in Patients with McArdle Disease *Nicolai Preisler, Mette Cathrine Ormgreen, Tina Jeppesen, Tanja Taivassalo, Simon Hauerslev, Katja Heinicke, Ronald Haller, John Vissing, Gerrit van Hall*

**P01.028** Exercise-Induced Lactate Production Is Paralleled by Enhanced Lactate Oxidation in Patients with Mitochondrial Myopathy *Tina Jeppesen, Mette Ormgreen, Gerrit van Hall, John Vissing*

**P01.029** Deficiency of the Iron-Sulfur Cluster Scaffold Protein, ISCU: Pathophysiology of a Distinctive Mitochondrial Myopathy *Ronald Haller, Katja Heinicke, Karen Ayyad, Wing Hang-Tong, Tracey Rouault*

**P01.030** Relationship between Metabolic Rate Measurements, Mitochondrial Protein Chemistry, and Mitochondrial DNA (mtDNA) Mutations *Lauren Hyams, Genevieve Langley, John Shoffner*

**P01.031** MTERF2 Is a Novel Mitochondrial Transcription Factor That Modulates Oxidative Phosphorylation In Vivo *Corneliu Luca, Tina Wenz, Carlos Moraes*

**P01.032** Short- and Long-Term Effects of Training in Patients with Mitochondrial Myopathy *Jabin Rafiq, Tina Jeppesen, Morten Dunø, Marianne Schwartz, Flemming Wibrand, Thomas Krag, John Vissing*

**P01.033** MELAS: Clinical Features, Muscle Biopsy and Molecular Genetics *Paulo Lorenzoni, Rosana Scola, Cláudia Kay, Raquel Arndt, Aline Freund, Isac Bruck, Mara Santos, Lineu Werneck*

## Autoimmune, Toxic, and Inclusion Body Myopathies

**P01.034** Pathomechanisms of sIBM: Overexpression of APP and Pro-Inflammatory Cell-Stress in Skeletal Muscle Cells *Jens Schmidt, Ellen Gerhardt, Stephan Sehmisch, Marinos Dalakas, Konstanze Barthel*

**P01.035** TDP-43 Is an Autophagy Substrate in Sporadic Inclusion Body Myositis *Jianhua Yan, Shahzad Zafar, Janice Caliendo, Faisal Fecto, Robert Sufit, Senda Ajroud-Driss, Teepu Siddique*



**P01.036** BACE1-Inhibition Reduces Pro-Inflammatory Cell-Stress and Accumulation of  $\beta$ -Amyloid in Skeletal Muscle Cells: Implications for sIBM *Konstanze Barthel, Niels Kruse, Christian Behl, Mathias Bähr, Jens Schmidt*

**P01.037** Clinical and Immunological Features of Inflammatory Myopathy (IM) in Patients with Myasthenia Gravis (MG) *Shigeaki Suzuki, Kimiaki Utsugisawa, Hiroaki Yoshikawa, Masakatsu Motomura, Shiro Matsubara, Kazumasa Yokoyama, Yuriko Nagane, Takahiro Maruta, Masataka Kuwana, Norihiro Suzuki*

**P01.038** Classic Prion Protein, Alzheimer A $\beta$ , Superoxide Dismutase 1, and Nitric Oxide Synthase 1,2 Pathology and Inclusion Body Myositis-Like Muscle Degeneration in an Animal Model of Systemic Pathophysiology in Diabetes: An In Situ and Quantitative Biochemical Analysis *Peter Frederikse, Claudine Bitel, Yicheng Feng, Nizar Souayah*

**P01.039** A Clinical, Neurophysiological and Pathological Prospective Study of 52 Patients with Suspected Statin-Induced Myopathy *Andoni Echaniz-Laguna, Michel Mohr, Christine Tranchant*

**P01.040** Statin-Induced Autoimmune Myopathy, Similarities with Signal Recognition Particle Antibody Associated Myopathy *Nizar Chahin*

**P01.041** Analysis of the Plasminogen Activating System during Muscle Fiber Regeneration in Cardiotoxin-Injured Muscle Fibers *Kenya Murata, Hideto Miwa, Tomoyoshi Kondo*

**P01.042** A Soluble Activin Type IIB Receptor Facilitates Muscle Recovery from Cardiotoxin-Induced Injury *Alan Koncarevic, Samuel Cadena, Diane Mitchell, Jennifer Lachey, Jasbir Seehra*

**P01.043** Isolated Neck Extensor Myopathy: Is It Responsive to Immunotherapy? *Srikanth Muppidi, Sharon Nations, Steven Vernino, Gil Wolfe*

#### Channelopathies and Other Inherited Myopathies

**P01.044** Dominantly-Inherited Myotonia Congenita Resulting from Increased Open Probability of the Fast Gate of the Muscle Chloride Channel CLCN1 *David Richman, Pang-Yen Tseng, Ricardo Maselli, Tsung-Yu Chen*

**P01.045** Variable Heritability of Truncating CLCN1 Mutations in Myotonia Congenita *Randal Richardson, Jack Tarleton, Thomas Bird, Sidney Gospe*

**P01.046** Importance of Reduced Sodium Current (INa) and Inward Rectifier Potassium Current (IKir) in Type I Hypokalemic Periodic Paralysis (HypoKPP) and Thyrotoxic Period Paralysis (TPP) *Araya Puwanant, Robert Ruff*

**P01.047** Spectrum of Clinical, Serological and CSF Abnormalities in Patients with Positive Voltage-Gated Potassium Channel (VGKC) Antibodies *Claudio Mazia, Valeria Salutto, Ricardo Maselli*

**P01.048** Tubulars Aggregates in a Sporadic Case of Stormorken's Syndrome *Raul Morales, Dominique Figarella-Branger, William Camu*

**P01.049** One Gene, Two Clinical Profiles: Novel GBE1 Mutations in GSD Type IV and Adult Polyglucosan Body Disease *Serena Pagliarini, Chiara Marchesi, Costanza Lamperti, Sabrina Lucchiari, Lucia Morandi, Ettore Salsano, Mario Savoardo, Andreina Bordo, Maurizio Moggio, Giacomo Comi, Davide Pareyson*

**P01.050** OPA1-Related Syndrome Lacking Optic Atrophy *Margherita Milone, Brian Younge, Jing Wang, Shulin Zhang, Lee-Jun Wong*

**P01.051** Atypical Presentation of Late-Onset Tay-Sachs Disease (LOTS) with Unusual New Mutation, IVS7-7G *Ahmed El Dokla, Jeremy Shefner*

**P01.052** Holter Monitoring Versus Electrocardiogram (ECG) for the Detection of Cardiac Arrhythmia in Myotonic Dystrophy Type 1 *Jackie Whitesell, Jacinda Sampson, Kevin Whitehead*

**P01.053** Absent or Unrecognized Electromyographic Myotonia in Myotonic Dystrophy Type 2 *Nathan Young, Margherita Milone, Jasper Daube*

#### Autonomic Disorders

**P01.054** Headache in Familial Dysautonomia Patients *Boris Shihman, Israel Steiner, Channa Maayan*

**P01.055** Autonomic Testing in Patients with Interstitial Cystitis *Elizabeth Heller, Kevin McNeeley, Amer Alsheklee, C. Anthony Buffington, Gisela Chelimsky, Thomas Chelimsky*

**P01.056** Co-Morbid Autonomic Disorders in Interstitial Cystitis *Elizabeth Heller, Kevin McNeeley, Amer Alsheklee, C. Anthony Buffington, Gisela Chelimsky, Thomas Chelimsky*

**P01.057** Myocardial Sympathetic Innervation in Patients with Painful Small Fiber Polyneuropathy with Impaired Glucose Tolerance *Oswaldo Nascimento, Jader Azevedo, Marcos De Freitas, Giseli Quintanilha, Marco Antonio Leite, Marco Orsini*

**P01.058** Cardiovascular Autonomic Evaluation in Patients with Idiopathic Painful Small Fiber Neuropathy *Bruno Coutinho, Oswaldo Nascimento, Vitor Zenha, Eduardo Cavalcante*

**P01.059** Insulin Neuritis: Can Excessive Glucose Control Impair Autonomic Function? *Christopher Gibbons, Roy Freeman*

**P01.060** Paraneoplastic Autonomic Neuropathy and Multifocal Demyelinating Neuropathy in Association with Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma *David Younger, Mark Weiss, David Silverman*

**P01.061** Valsalva Maneuver: Influences of Oral Leak Size and Expiratory Strain Duration *Ramesh Khurana, Deepika Mittal, Alex McArthur, Norman Dubin*

**P01.062** Evaluation of a Novel Non Model Driven Assessment of Cardiac Autonomic Activity: Response to Combined Graded Orthostatic and Heat Stress *Ronald Schondorf, Julie Benoit, Marion Genoulaz, Melvyn Lafitte*

**P01.063** Dynamic Retinal Autoregulation during Handgrip and Cold Hand Test: Bayliss Effect Made Visible In Vivo *Helen Hanso, Susanne Jaehne, Walther Vilser, Heinz Reichmann, Tjalf Ziemssen*

**P01.064** Vasomotor and Sudomotor Changes in a Human Model of Small Fiber Neuropathy *Ben Illigens, Christopher Gibbons, Roy Freeman*

**P01.065** Progesterone Alters Schwann Cell Growth in Culture *Katherine Pollard, Thomas Chelimsky, Liliana Berti-Mattera*

**P01.066** Loss of Dopaminergic Neurons in the Ventral Periaqueductal Gray in Autonomic Synucleinopathies *Ann Schmeichel, Brittany Dugger, Gregory Boone, Paola Sandroni, Phillip Low, Joseph Parisi, Eduardo Benarroch*

**P01.067** Efficacy and Safety of Botulinum Toxin Type B (Myobloc®) for the Treatment of Sialorrhea in Parkinson's Disease (PD) *Edgar Salazar-Grueso, Patrick Hogan, Fernando Pagan, Sharon Reinhard, Eric Pappert, William Birmingham*

**P01.068** Pharmacologic Effects of Repeated Administration of Botulinum Toxin Type B (Myobloc®) on Rat Salivary Glands *Sharon Reinhard, Edgar Salazar-Grueso*

#### Neuro-Oncology

**P01.069** Fatal Anti-NMDA Receptor Paraneoplastic Encephalitis Due to Microscopic Ovarian Teratoma *Kara Tower, Mark Malkin, Shannon Rathke, Louis Novoa-Takara, Khang-cheng Ho*

**P01.070** Clinical and Immunological Characterization of 104 Patients with Paraneoplastic Limbic Encephalitis: Data from the PNS Euronetwork *Roberta Vitaliani, Irene Rosellini, Bruno Giometto, PNS EURONetwork*

**P01.071** Cytotoxic Destruction of Cerebellar Purkinje Cells Following Antibody Uptake Is Specific for Anti-Yo Antibody and Does Not Occur with Anticerebellar Antibodies from Ovarian Cancer Patients Who Remain Neurologically Normal *John Greenlee, Kenneth Hill, Susan Clawson, Noel Carlson*

**P01.072** Immune Mediated Neurologic Dysfunction as a Paraneoplastic Syndrome in Renal Cell Carcinoma *Vijay Johnson, Norman Friedman, Nairmeen Haller, Christian Hugel*

**P01.073** Paraneoplastic Antibodies in a General Hospital: An Audit of Positive Cases *Siobhan Kelly, Brian Sweeney, Niamh Bermingham, Catherine Keohane*

**P01.074** Reversible Brain Atrophy in Anti-NMDA Receptor Encephalitis: A Long-Term Observational Study *Takahiro Iizuka, Shintaro Yoshii, Toshimitsu Ide, Junichi Hamada, Fumihiko Sakai, Shinichi Kan, Josep Dalmau*

**P01.075** Hemorrhagic Stroke (HS) in Patients with Cancer *Jordan Reichman, Daniel Berlin, Babak Navi, Lisa DeAngelis*

**P01.076** Novel Use of Dual Immunomodulation To Treat the Cerebellar Variant of Stiff-Person Syndrome (SPS) *Soma Sengupta, Daniel Tarsy, Suriya Jayapalan*

**P01.077** Severe Paraneoplastic Encephalopathy from a Novel Antibody Associated with Occult Metastatic Melanoma *Radoslav Raychev, Rimas Lukas, Axel Rosengart, Martin Nicholas, Jeffrey Frank*

**P01.078** Paraneoplastic Cerebellar Syndrome with Anti-CV2 Antibodies: A Reversible Disease? *Severine Debiais, Isabelle Bonnaud, Denis Saudeau, Bertrand De Toffol*

**P01.079** Clinical and Neurophysiological Measurements of Onset and Recovery of Taxane Neuropathies *Harry Openshaw, Karen Beamon, Patrick Ventura, Paul Frankel, George Somlo*

**P01.080** Dramatic Improvement of Peripheral Nervous System Manifestations of B-Cell Non-Hodgkin's Lymphoma after Rituximab Therapy *Chiara Briani, Renato Zambello, Tiziana Cavallaro, Sergio Ferrari, Marta Lucchetta, Sabine Pollanz, Wolfgang Grisold*

**P01.081** Epilepsy in Treated Brain Tumor Patients *Samuel Goldlust, Phillip Amodio, William Barr, Steven Pacia*

**P01.082** Normal Neural Precursors Have Differential Sensitivity to Commonly Used Chemotherapy Drugs *Daniela Bota, Kelsey Albert, Philip Schwartz*

**P01.083** Seizures as an Initial Symptom of Primary and Secondary Brain Tumor: Should We Always Treat Them? *Anna Rosati, Alessandro Padovani*

**P01.084** Congenital Dumbbell Neuroblastoma Presenting as Paraplegia at Birth: Good Response to Chemotherapy *Ngoc Minh Le, Rachel Allen, Tanya Tekautz, Maria D'Netto, Ricardo Rodriguez, Debabrata Ghosh*

**P01.085** Bevacizumab for the Treatment of Radiation Myelopathy *Benjamin Greenberg, Jaishri Blakeley*

**P01.086** Intra-CSF Trastuzumab in Patients with Neoplastic Meningitis from Breast Cancer or Primary Brain Tumors *Dana Allison, Michael Glantz*

**P01.087** Oligodeoxynucleotides Containing CpG Motifs (CpG-ODNs) in Leptomeningeal Metastases of Solid Tumors: A Phase I Study *Renata Ursu, Sophie Taillibert, Claire Banissi, Florence Capelle, Dimitri Psimaras, Irene Coman, Johann Le Guilloux, Catherine Belin, Khe Hoang-Xuan, Antoine Carpentier*

**P01.088** A Unique Case of Angiotropic Lymphoma Mimicking Encephalomyelodradiculoneuritis *Brajesh Agrawal, Fazeel Siddiqui, Rodger Eible*

**P01.089** Pioglitazone Reduced Tumor Size in a Human Xenograft Mouse Model in a Dose Dependent Manner *Christian Grommes, Colleen Karlo, Andrew Caprariello, Anne DeChant, D'Arbra Blankenship, Gary Landreth*

**P01.090** Importance of Histology and Grading in Older Glioma Patients *Lakshmi Nayak, Fabio Iwamoto, Anne Reiner, Katherine Panageas, Elena Elkin, Lauren Abrey*

**P01.091** Malignant Choroid Plexus Tumors *Ana Azevedo, Carla Firmo, Candida Barroso, Afonso Fernandes, Manuela Mafra, Jose Pimentel*

**P01.092** Chloroquine Induces Autophagic Vacuole Accumulation and Cell Death in Human Glioblastoma Multiforme Cell Lines Independent of Their p53 Status *Ying Geng, Latika Kohli, Barbara Klocke, Kevin Roth*

**P01.093** Central Nervous System Tumors in Neurofibromatosis Type 1 *José Ruiz-Sandoval, Martha Ornelas-Arana, Monica Norméndez-Martínez, Erwin Chiquete, Guillermo Pérez-García*

**P01.094** The Stem Cell Marker prominin-1/CD133 on Membrane Particles in Human Cerebrospinal Fluid Offers Novel Approaches for Studying CNS Disease *Hagen Huttner, Martin Köhrmann, Peggy Janich, Stefan Schwab, Denis Corbeil*

**P01.095** Steroid Requirements during Radiotherapy for Malignant Gliomas *Athina Marantidou, Christine Levy, Irene Coman, Alyette Duquesne, Johan Leguilloux, Catherine Belin, Antoine Carpentier*

**P01.096** Length of Life Versus Quality of Life (QOL) in Patients with Malignant Primary Brain Tumors: Who Cares and Who Matters? *Dana Allison, Michael Glantz*

**P01.097** Salvage Chemotherapy with Bevacizumab for Recurrent Alkylator-Refractory Anaplastic Oligodendroglioma *Marc Chamberlain, Sandra Johnston*

**P01.098** Smoking and Other Risk Factors for Brain Cancer in the Korean Cancer Prevention Study *Grace Kim, Sun Ha Jee, Michael Lim, Ji Eun Yun, Il Soo Park*

**P01.099** Safety of Moderate Hypothermia in Elective Surgery for Spinal Tumors *Matthew Cummock, Jeremiah Johnson, Michael Wang, Allan Levi, Steven Vanni, Barth Green*

**P01.100** Temozolomide for Spinal Cord High-Grade Gliomas *Thomas Kaley, Ijah Mondesire-Crump, Lauren Abrey*

**P01.101** Neuroepithelial Intra Medullary Spinal Cord Tumors in Adults: Study of 70 Cases *Chantal Campello, Anne Le Floch, Fabrice Parker, Luc Bauchet, Hugues Dufau, Henry Dufour, Marilyne Barrie, Olivier Chinot, Michel Lonjon, Jean Pierre Lejeune, Hugues Loiseau, Jerome Honnorat, Jacques Guyotat, Emmanuel Jouanneau, Gilles Perrin, Pierre Labauge*

**P01.102** Non Metastatic Medulloblastoma in Patients over 16 Years of Age: Experience in a Neurological Centre in Argentina *Macarena De La Fuente, Sol Cavanagh, Gustavo Sevlever, Alejandro Muggeri, Blanca Diez*

**Multiple Sclerosis: Immunology I**

**P01.103** Reactivation of BK Virus during Natalizumab Therapy in Relapsing Multiple Sclerosis *Roisin Loneragan, Cillian De Gascun, Michael Carr, Lisa Costelloe, Jean Fletcher, Suzie Coughlan, Aine Waters, Marguerite Duggan, Katie Doyle, Sinead Jordan, William Hall, Michael Hutchinson, Niall Tubridy*

**P01.104** Aberrant Toll-Like Receptor 7 Responses of Plasmacytoid Dendritic Cells in Multiple Sclerosis *Marcin Mycko, Mariola Matysiak-Swiderek, Hanna Cwiklinska, Malgorzata Domowicz, Bozena Szymanska, Ewa Tronczynska, Krzysztof Selmaj*

**P01.105** Activation of Toll-Like Receptors in Secondary Progressive Multiple Sclerosis *Tali Gritzman, Michael Gurevich, Anat Achiron*

**P01.106** Genetic Variation and Plasma Level of the Gelatinase A (Matrix Metalloproteinase-2) and Tissue Inhibitor of Metalloproteinase-2 (TIMP-2) in Multiple Sclerosis *Yvonne Benešová, Anna Vašku, Zdenek Kadanka, Michal Beránek, Magdalena Hladíková, Pavel Stourac, Josef Bednarik*

**P01.107** Daclizumab Treatment Reduces Activated T Cells: Results from the CHOICE MS Study *James Sheridan, Ying Zhang, Valdimir Vexler, Chungchi Wang, Robert Singer, Jacob Elkins, Alice Fong, Meina Tang*

**P01.108** The Mechanism of Action behind the Lymphocyte-Depleting and Immunomodulatory Effects of Cladribine *Bruno Laugel, John Challier, Christiane Siegfried, Yolande Chvatchko, Catherine Salvat, Robert Weissert*

**P01.109** Interferon Beta Treatment Does Not Induce Organ Specific Autoantibodies in Patients with Multiple Sclerosis *Til Menge, Nanette Schloot, Matthias Schott, Bernhard Hemmer, Hans Hartung, Bernd Kieseier*

**P01.110** Immunological Analysis of a Phase III Dose-Escalation Trial of Oral Vitamin D3 with Calcium Supplementation in Patients with Multiple Sclerosis *Jodie Burton, Samantha Kimball, Amit Bar-Or, Hans-Michael Dosch, Donald Gagne, Roy Cheung, Cheryl D'Souza, Melanie Ursell, Reinhold Vieth, Paul O'Connor*

**P01.111** T Cell Renewal in Glatiramer Acetate-Treated Multiple Sclerosis Patients *Marco Chiarini, Ruggero Capra, Alessandra Sottini, Federico Serana, Claudia Ghidini, Cinzia Zanotti, Cinzia Cordioli, Maria Rosa Rottoli, Mauro Zaffaroni, Luisa Imberti*

**P01.112** Molecular Network of the Comprehensive Multiple Sclerosis Brain Lesion Proteome *Jun-ichi Satoh, Hiroko Tabunoki, Takashi Yamamura*

**P01.113** Effect of Laquinimod on the Dendritic Cell Compartment *Tal Birnberg, Steffen Jung*

**P01.114** Interferon-β Therapy May Exert a Neuroprotective Effect Via Upregulation of BDNF Secretion from PBMCs of RR-MS Patients through CD40 Dependent Mechanism *David Azoulay, Karin Fainberg, Natali Urshansky, Firas Fahoum, Arnon Karni*

**P01.115** Slan-DC Are Differently Modulated by Immunomodulatory and Corticosteroid Therapy in Multiple Sclerosis Patient *Katja Thomas, Anja Hänsel, Heinz Reichmann, Knut Schäkel, Tjalf Ziemssen*

**P01.116** Loss of Cobalamin-Mediated Regulation Leads to Decreased EGF and Increased Soluble CD40 Levels in Cerebrospinal Fluid of Patients with Multiple Sclerosis *Giuseppe Scalabrino, Daniela Galimberti, Elena Mutti, Diego Scalabrini, Daniela Veber, Milena De Riz, Fabrizia Bamonti, Elisabetta Capello, Gian Luigi Mancardi, Elio Scarpini*

**P01.117** B Cells and EBV Infection in People with MS *Cosimo Maggiore, Ute Meier, Monica Marta, Ahuva Nissim, Gavin Giovannoni*

**P01.118** T Regulatory Cell Function Is Impaired in Relapsing Remitting but Not in Primary Progressive Multiple Sclerosis *Oezgurd Yaldizli, Roulat Kamou, Norman Putzki*

**P01.119** Natalizumab Treatment Leads to Changes in Adhesion Molecule Expression *Peter Wipfler, Georg Pilz, Katrin Oppermann, Shahrzad Afazel, Elisabeth Haschke-Becher, Michael Huemer, Martin Jakab, Markus Ritter, Gunther Ladurner, Joerg Kraus*

**P01.120** Down Regulation of Antigen Presentation and Inflammatory Pathways by Laquinimod in Cultured Peripheral Blood Mononuclear Cells of Untreated Multiple Sclerosis Patients and Healthy Subjects *Rotem Or-Bach, Polina Sonis, Michael Gurevich, Anat Achiron*



**P01.121** Gray Matter Atrophy Correlates with CSF Humoral Immune Response in Multiple Sclerosis: Insight into Aggressive Multiple Sclerosis and Implications for Therapeutic Intervention *Omar Khan, Jai Perumal, Stephanie Hreha, Christina Caon, Fen Bao, Zahid Latif, Imad Zak, Malik Makki, Alexandros Tselis, Scott Millis, Bruce Cree, Jorge Oksenberg, Stephen Hauser*

**P01.122** Natalizumab Effects on Immune Status of MS Patients after 6 Months of Treatment *Mario Skarica, Girish Hiremath, Kristie Albright, Jinyang Bo, Peter Calabresi*

**P01.123** Gene Expression Profiles Following One-Year Treatment with Glatiramer Acetate 20mg and 40mg (GA, Copaxone®) in Relapsing-Remitting Multiple Sclerosis Patients *Anat Achiron, Tal Belker, Einav Yemini, Polina Sonis, Michael Gurevich*

**P01.124** Immunological Responses to Different Doses of Glatiramer Acetate in MS: Analyses from the FORTE Trial *Wee Yong, Brooke Verhaeghe, Claudia Silva, Mary Lou Myles, Luanne Metz*

**P01.125** Changes in RNA Expression during Exacerbations of Multiple Sclerosis *J. Lindsey, Sandeep Agarwal, Filemon Tan*

### Hyperkinetic Disorders

**P01.126** Orthotopic Liver Transplantation in Wilson Disease *Marina Magalhaes, Rui Seca, Helena Pessegueiro Miranda, Cristina Ramos, Joana Damasio, Marcio Cardoso, Judit Gandara, Manuel Teixeira, Vitor Ribeiro*

**P01.127** Intron Boundary of 18-19 Exons on ATP7B Chromosome Is the Hot Spot in Wilson's Disease in North Indian Population *Madhuri Behari, Saima Siddiqui, S. Vivekanandhan, B. K. Thelma*

**P01.128** Clinical Presentation and Diagnosis of Wilson's Disease: Long-Term Experience with 110 Neurological Patients *Maja Relja, Srdana Telarovic, Vladimir Miletic*

**P01.129** Prognostic Significance of Neurologic Exam Findings in Wilson Disease *James Burke, Praveen Dayalu, Matthew Lorincz*

**P01.130** Incidence and Long-Term Outcome of Normal Pressure Hydrocephalus in Olmsted County, Minnesota *Bryan Klassen, J. Eric Ahlskog*

**P01.131** Candidate Gene Association Study of DLGAP3 in Tourette Syndrome Patients *Jeremiah Scharf, Jacquelyn Crane, Jes Fagermess, Boyd Gunnell, S. Evelyn Stewart, David Pauls, Tourette Syndrome International Consortium for Genetics*

**P01.132** Treatment of Tics with Antipsychotics and the Risk Factors for Obesity *Katie Kompolti, Glen Stebbins, Christopher Goetz, Wenqing Fan, Sue Leurgans*

**P01.133** The Prevalence of Parkinsonism in Fragile X-Associated Tremor/Ataxia Syndrome *Lin Zhang, Lannah Lua, Maureen Leehey, Jennifer Cogswell, Randi Hagerman*

**P01.134** Hyperkinetic Movement Disorder in Ehlers-Danlos Syndrome *Jason Aldred, Fatta Nahab, Mark Hallett, John Nutt*

**P01.135** Clinical Features of Essential Tremor: Information from an Internet-Based Survey *Esther Baldinger*

**P01.136** Solitary Parkinsonian Signs in Essential Tremor May Herald the Eventual Appearance of Parkinson Disease *Alexandra Guevara-Salcedo, Ajay Pandey, Fatta Nahab, Cenk Sengun, Spyridon Papapetropoulos, Angela Russell, Carlos Singer*

**P01.137** Brain Structural Changes in Essential Tremor: Voxel-Based Morphometry at 3 Tesla *Julián Benito-León, Juan Alvarez-Linera, Juan Antonio Hernández-Tamames, Hortensia Alonso-Navarro, Félix Javier Jiménez-Jiménez, Elan Louis*

**P01.138** Predictive Motor Timing Is Not Impaired in Patients with Early Parkinson Disease: Comparative Study with Patients with Spinocerebellar Ataxia and Essential Tremor *Martin Bares, Ovidiu Lungu, Ivica Husarova, Tomas Gescheidt*

**P01.139** Spinocerebellar Ataxia Types 3 and 10: Progression Rate of Gait Ataxia in a Group of 40 Patients *Helio Teive, Renato Munhoz, Lineu Werneck, Tetsuo Ashizawa*

**P01.140** Vision Targeted Health Related Quality of Life Questionnaire in Patients with Spinocerebellar Ataxia (SCA) *Sachin Kedar, Deepita Ghate, Ernest Murray, James Corbett, S. Subramony*

**P01.141** Thalamic Volume Reduction in Machado-Joseph Disease *Anelyssa D'Abreu, Marcondes Franca, Jr., Clarissa Yasuda, Mariana Souza, Iscia Lopes-Cendes, Fernando Cendes*

**P01.142** Treatment of Spinocerebellar Ataxia and Fragile X-Associated Tremor/Ataxia Syndrome (FXTAS) with Varenicline (Chantix®): Results of a Retrospective, Blinded Video Analysis *Theresa Zesiewicz, Susan Perlman, David Lynch, Khalaf Bushara, Kelly Sullivan, George Wilmot, Tetsuo Ashizawa, S. Subramony, Christopher Gomez*

**P01.143** Gamma Knife Thalamotomy for Suppression of Severe Tremor: A Blinded Evaluation *Shen-Yang Lim, Mojgan Hodaie, Filomena Mazzella, Sherry Kotusiewicz, Yu-Yan Poon, Elena Moro*

**P01.144** Characterization of Myofibrillogenesis Regulator-1 Protein, Involved in Paroxysmal Non-Kinesigenic Dyskinesia *Daniele Ghezzi, Carlo Viscomi, Valeria Tiranti, Massimo Zeviani*

**P01.145** Rotigotine Transdermal System: An Update *James Zackheim, Linda Hakes, Arth Christoph, Lars Bauer, Lode Dewulf*

### Cerebrovascular Disease

**P01.146** Perception about Stroke among Patients and Families with Neurological Diseases in Karachi *Abdul Malik, Shiasta Siddiqui, Mubashira Hashmi, Hiba Mahmud, Kauser Mahmood, Furrukh Khan, Mohammad Wasay, Shaikat Ali, Khalid Sher*

**P01.147** Clinical Conditions Associated with Dementia in a South American Geriatric Care Clinic *Maria Zurrú, Alberto Alemán, Jesica Bekerman, Claudia Alonzo, Marcelo Schapira, Javier Benchimol, Luis Cámara, Gabriel Waisman, Edgardo Cristiano*

**P01.148** Stroke Registry: A Developing Country's Perspective *Farukh Khan, Maimoona Siddiqui, Hazim Brohi, Khurram Siddiqui*

**P01.149** Autoregulation in the Posterior Circulation Is Altered by the Metabolic State of the Visual Cortex *Kazuma Nakagawa, Jorge Serrador, Sarah LaRose, Lewis Lipsitz, Farzaneh Sorond*

**P01.150** A Prospective Observational Study of Autonomic Dysfunction among Patients with Stroke *Nataliya Krivitskaya, M. Fareed Suri, Abu Nasar, Hafiz Khan, Peter Michas-Martin, Adnan Qureshi, Nizar Souayah*

**P01.151** Organization of Acute Stroke Services in the Western United States *May Kim, Timothy Ingall, Gene Sung*

**P01.152** Extracranial-Intracranial Arterial Bypass Surgery for Occlusive Carotid Cerebrovascular Disease – A Systematic Metaanalysis *Philippe Lyrer, Felix Fluri, Stefan Engelter*

**P01.153** Post-Partum Caesarian Delivery ("C-section") and Cervicocephalic Arterial Dissections *Luis Natali, Stephen Marks*

**P01.154** Type V Dural Arteriovenous Fistula Presenting as Relapsing and Remitting Brainstem Stroke with Respiratory Failure *Ya-Ju Lin, Ju-Feng Yeh, Sho-Jeng Cheng, Helen Po*

**P01.155** Rate and Characteristics of Ischemic Stroke among Patients Undergoing Cardiovascular Surgery and Endovascular Diagnostic or Therapeutic Procedures *Francisco Klein, Marisol Ferrúa, Noelia Pontello, Agustín Jauregui, Analia Calle, Luciano Sposato*

### Stroke Prevention

**P01.156** Doppler Detection and Quantification of Patent Foramen Ovale: No Need for Transcranial Acoustic Bone Windows? *Fabienne Perren, Patricia Iwanowski, Elena Savva, Theodor Landis*

**P01.157** StrokeMobile: A Primary Prevention Program in African American Communities *Duncan Howe, Andrew Kurtzman, Margaret Gebbia, LeeAnn Weaver, Monique Brown, Jermonda Ford, Kenneth Gaines*

**P01.158** Knowledge and Perception of Stroke among Hospital Workers in an African Community *Rufus Akinyemi, Okechukwu Ogah, Julius Osinfade, Roseline Ogundipe, Olurotimi Oyesola*

**P01.159** Carotid Atherosclerosis and Lipid Parameters: Does a Correlation Exist? *Monica Saini, Maher Saqqur, Khurshid Khan*

**P01.160** Erythropoietin and Neuroprotection in Ischemic Strokes: A Retrospective Review of Chronic Kidney Failure Patients *Joyce Lee, Daniel Ontaneda, Derk Krieger, Sevag Demirjian, Adrian Hernandez*

**P01.161** Telemetric Monitoring for the Detection of Atrial Fibrillation after Acute Ischemic Stroke *Agustín Jauregui, Marisol Ferrúa, Noelia Pontello, Pablo Klin, Rafael Zamora, Francisco Klein, Luciano Sposato*

**P01.162** Role of Antiplatelet Drug in Preventing Ischemic Stroke in Tuberculous Meningitis: A Randomized Placebo Controlled Trial *Usha Kant Misra, Jayantee Kalita, Pradeep Nair*

**P01.163** Cardiovascular Risk Scores in Women: Accurate Estimation or Just Guessing? *Maria Zurrú, Laura Brescacin, Claudia Alonzo, Marina Romano, Fabiana Ortega, Silvina Brienza, Luis Cámara, Gabriel Waisman, Edgardo Cristiano*

**P01.164** TIA Management: Still a Long Way To Go *Monica Saini, Maher Saqqur, Ashfaq Shuaib*

**P01.165** Influence of Co-Morbid Conditions and Race on the Treatment Cost of Stroke. A Large 5-Year Retrospective Analysis *Majaz Moonis, Van Cain, Baqar Husaini*

### Neural Repair/Rehabilitation I

**P01.166** Comprehensive Phenotyping of a Family with the Neurogenic Weakness, Ataxia and Retinitis Pigmentosa (NARP) Syndrome from the mtDNA 8993T>C Mutation *Jeffrey Gelfand, Jacque Duncan, Caroline Racine, Leslie Gillum, Cynthia Chin, Yuhua Zhang, Lee-Jun Wong, Qing Zhang, Austin Roorda, Ari Green*

**P01.167** Virtual Reality Technology in Stroke Rehabilitation: A Pilot Randomized Trial Using Wii Gaming System *Gustavo Saposnik, Mark Bayley, Muhammad Mamdani, Donna Cheung, Judith Hall, Alexis Dishaw, Jackeline Willems, Leonard Cohen, Robert Teasell*

**P01.168** Functional Improvement after a Visual Rehabilitation Intervention for Patients with Homonymous Visual Field Defects *Dorothee Schlueter, Patricia Schulz, Sigrid Kenkel, Jose Romano*

**P01.169** Coordination of Posture and Movement: Correlated Spike Activity in Motor Areas of Opposite Cerebral Hemispheres in Quadrupeds *Soumya Ghosh, David Putrino, Frank Mastaglia*

**P01.170** Transplantation of Neural Stem Cells Derived from Engineered ESC Lineage (sox2-geo/oct4- $\kappa$  Cells) Improves the Phenotype of a Mouse Model of Spinal Muscular Atrophy *Stefania Corti, Monica Nizzardo, Martina Nardini, Sabrina Salani, Chiara Donadoni, Dario Ronchi, Dimitra Papadimitriou, Roberta Virgilio, Nereo Bresolin, Giacomo Comi*

**P01.171** Gray Matter Changes and Cognitive Learning: A Tensor Based Morphometry Study *Antonia Ceccarelli, Maria Rocca, Elisabetta Pagani, Andrea Falini, Giancarlo Comi, Massimo Filippi*

**P01.172** Encapsulated Cell Biodelivery of Nerve Growth Factor to the Cholinergic Basal Forebrain of Alzheimer's Disease Patients *Maria Jönhagen, Per Almqvist, Göran Lind, Åke Seiger, Bengt Linderöth, Lars Wahlberg*

**P01.173** Development of a Novel Clinical Trial Endpoint for Neurogenic Intermittent Claudication *John Markman, Maria Frazer, Nicole Murray, Shirley Rast*

**P01.174** Tropicam Chloride Does Not Cross the Blood-Brain Barrier (BBB) of Male Long Evans Rats *Bobby Sandage, Gregory Lerch, Douglas Larsen, Albert Profy*

**P01.175** Neuroimaging Correlates of Visual Field Expansion after Visual Rehabilitation *Jose Romano, Prantik Kundu, Iszet Campo-Bustillo, Varan Govind, Weizhao Zhao, Andrew Maudsley, Fatta Nahab*

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### Microsoft Co-Founder Paul G. Allen to Speak

Well-known philanthropist, Microsoft co-founder, and owner of the Seattle Seahawks NFL and Portland Trail Blazers NBA franchises, Paul G. Allen has been selected as the 2009 recipient of the Public Leadership in Neurology Award. Allen will be honored for his commitment to brain research, including his \$100 million contribution to the founding of the Allen Institute for Brain Science in his hometown of Seattle.

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**Aging and Dementia:  
ApoE/Amyloid**

**P02.001** Amyloid Load in Cognitively Normal Autopsied Brains Correlates with APOE e4 *Richard Caselli, Thomas Beach, Lucia Sue, Marwan Sabbagh, Donald Connor, Douglas Walker*

**P02.002** ApoE Genotype in ALS *Emily McDowell, Ali Jawaid, Magdala Poon, Leslie Rice, Alicia Salamone, Adriana Strutt, Michele York, Stanley Appel, Paul Schulz*

**P02.003** Education and Occupation Provide Functional Reserve in Both ApoE4 Carriers and Noncarriers Alzheimer's Disease Patients *Valentina Garibotto, Barbara Borroni, Elke Kalbe, Karl Herholz, Vjera Holthoff, Alberto Pupi, Sandro Sorbi, Stefano Cappa, Ferruccio Fazio, Alessandro Padovani, Daniela Perani*

**P02.004** The Rate of Age-Related Cortical Thinning Shows Regional Differences Based on APOE Status in Cognitive Normal Adults *Leslie Baxter, Kewei Chen, Eric Reiman, Richard Caselli*

**P02.005** Reduced Functional Connectivity in Middle-Aged ApoE-ε4 Carriers with and without a Positive Family History of Alzheimer's Disease *Piero Antuono, M. D. Chunming, Wenjun Li, Jennifer Jones, Shi-Jiang Li*

**P02.006** Low Amyloid Precursor Protein (APP)-Metabolite Levels in Patients with White Matter Lesions (WML) and Stroke *Tormod Fladby, Henrik Zetterberg, Ramune Grambaite, Lars Rosengren, Per Selnes, Lisbeth Johnsen, Kaj Blennow*

**P02.007** A Novel Role of Beta-Secretase 1 (BACE1) in the Pathogenesis of Cerebral Amyloid Angiopathy (CAA) *Xin Cheng, Qiang Dong, Ping He, Hikmet Nural, Rena Li, Yong Shen*

**P02.008** Relation of High Sensitivity C-reactive Protein with Plasma Amyloid Beta *James Noble, Nicole Schupf, Jose Luchsinger*

**P02.009** Copper Complexing with Tetrathiomolybdate Suppresses Amyloid Pathology in a Transgenic Mouse Model of Alzheimer's Disease *Joseph Quinn, Christopher Domes, Christopher Harris, George Brewer, Martina Ralle, Teri Gadsdorn*

**P02.010** Potential Alzheimer's Disease Markers for Autism? Beta-Amyloid Precursor Protein and Acetylcholinesterase Correlate with Aggression in Autism *Deborah Sokol, Justin Long, Bryan Maloney, DeMao Chen, Debomoy Lahiri*

**Myasthenia Gravis and  
Myasthenic Syndromes**

**P02.011** Evidence for Poliovirus Infection in Myasthenic Thymus: A Role of Virus-Mediated Autoimmunity in Myasthenia Gravis? *Pia Bernasconi, Paola Cavalcante, Massimo Barberis, Maria Cannone, Fulvio Baggi, Carlo Antozzi, Lorenzo Maggi, Sonia Berrih-Aknin, Renato Mantegazza*

**P02.012** Elevated IL-17 Detectable in the Thymus of Myasthenia Gravis *Naoko Matsui, Shunya Nakane, Takao Mitsui, Yousuke Takahama, Ryuji Kaji*

**P02.013** Juvenile Seropositive Myasthenia Gravis with Anti-MuSK Antibody after Thymectomy *Anna Kostera-Pruszczyk, Hubert Kwiecinski*

**P02.014** Short Term Efficacy of Thoracoscopic Thymectomy in Senile Onset Myasthenia Gravis *Yoshiki Takai, Naoki Suzuki, Ichiro Nakashima, Kazuo Fujihara, Yasuto Itoyama*

**P02.015** Severe Congenital Myasthenic Syndrome (CMS) Associated with Episodic Apnea, Mental Developmental Delay and a Novel Homozygous CHAT Mutation *Claudio Mazia, Juan Arredondo, Maria Vacarezza, Marcela Garcia Erro, Robert Wollmann, Ricardo Maselli*

**P02.016** Characteristics of Late-Onset Myasthenia Gravis *Sasha Zivkovic, Paula Clemens, David Lacomis*

**P02.017** Pulsed Oral Steroids in the Treatment of Myasthenia Gravis: A Retrospective Case Study *Ezgi Tiryaki, Suraj Muley*

**P02.018** Methotrexate in the Treatment of Myasthenia Gravis *Faisal Raja, Mazen Dimachkie, April McVey, Mamatha Pasnoor, Laura Herbelin, Richard Barohn*

**P02.019** Rituximab in Refractory MuSK (+) Myasthenia Gravis (MG) *Prinyarat Burusnukul, Thomas Brennan, Edward Cupler*

**P02.020** Fatigue in Myasthenia Gravis and Multiple Sclerosis: Cross-Sectional, Controlled Comparison Study *Berril Donmez Colakoglu, Serkan Ozakbas, Billur Celik, Esra Coskuner Poyraz, Derya Kaya, Muhtesem Gedizlioglu, Egemen Idiman*

**Peripheral Nerve I**

**P02.021** Diminished Epidermal Nerve Fiber Density in Patients with Antibodies to Outer Surface Protein A (OspA) of *B. burgdorferi* Improves with Intravenous Immunoglobulin Therapy *Amiram Katz, Janet Berkley*

**P02.022** Quantifying Sweat Gland Innervation – A Comparison of Two Novel Methods *Christopher Gibbons, Ben Illigens, Ningshan Wang, Roy Freeman*

**P02.023** Functional MRI Correlates of Fatigue in Patients with Hereditary and Acquired Peripheral Neuropathy *Maria Rocca, Raffaella Fazio, Clarissa Alfieri, Stefano Previtali, Federica Agosta, Paola Valsasina, Andrea Falini, Giancarlo Comi, Massimo Filippi*

**P02.024** Peripheral Nerve Hyperexcitability (PNH): A Clinical Study of 26 Patients *Ignacio Rubio, Luis Bataller, Francisco Perez-Miralles, Maria José Chumillas, Teresa Sevilla, Nuria Muelas, Angela Vincent, Juan Vilchez*

**P02.025** Neurophysiology and Neuropathology of Small-Fiber Sensory Neuropathy: Contact Heat Evoked Potential and Skin Biopsy *Sung-Tsang Hsieh, Chi-Chao Chao*

**P02.026** Epidermal Nerve Fiber Density in Nine-Banded Armadillos with Experimental Leprosy Neuropathy *Gigi Ebenezer, Richard Truman, Peter Hauer, David Scollard, Ryan O'Donnell, Ramanuj Lahiri, Justin McArthur*

**P02.027** Retrospective Assessment of the Usefulness of Skin Biopsies in the Evaluation and Management of Patients with Suspected Small Fiber Neuropathy *Todd Levine, Madison Levine, Nicole Hank, David Saperstein*

**P02.028** Tractography Imaging Study of Peripheral Nerve at 3 Tesla *Oswaldo Nascimento, Giseli Quintanilha, Frederico Paes, Romeu Domingues, Elísio Ribeiro, Marcos De Freitas, Bruno Coutinho*

**P02.029** Histopathology of Wartenberg's Migratory Sensory Mononeuritis *Minal Bhanushali, Muddasir Qureshi, Suraj Muley*

**P02.030** Characterization of Neurophysiologic Features of Idiopathic Hyperhomocysteinemia Induced Peripheral Neuropathy *Jun Jun Luo, Favio Bumanlag, Zina Zhang, Jay Shah, Elena Deliu*

**P02.031** A Beneficial Effect of Glatiramer Acetate (GA, Copaxone®) in Experimental Autoimmune Neuritis *Joab Chapman, Ramona Aronovich*

**P02.032** Vasculitis Neuropathy Mimicking Lower Limb Radiculitis: A Series of 8 Cases *Pierre Lozeron, Mathilde Michon, Catherine Lacroix, Christian Denier, David Adams*

**P02.033** Acute Bilateral Dangling Arm Syndrome Due to Lyme Disease *Kenneth Gorson, Donald Marks, David Kolb, Michael Hayes*

**P02.034** Treatable Subacute Sensory Ataxia Associated with Thiamine Deficiency after Partial Gastrectomy *Marco Spinazzi, Cesare Patrizi*

**P02.035** Immunoglobulin Responsive Motor Neuropathy without Multifocal Conduction Block: A Prospective Study *Edward Yu, Rajwinder Singh, Gregory Seidel, Annabel Wang, Janki Panchal, Dale Lange*

**P02.036** IgA Monoclonal Gammopathy and Peripheral Neuropathy *Christina Fournier, Stephanie Scala, Marianne Rhoads, Gyorgy Abel, Jayashri Srinivasan*

**P02.037** Successful Treatment with Rituximab of One Patient with CANOMAD *Emilien Delmont, Pierre-Yves Jeandel, Anne Michèle Hubert, Sabrina Sacconi, Laurent Marq, José Boucrot, Claude Desnuelle*

**P02.038** An Open-Label Trial of Rituximab (Rituxan®) in Multifocal Motor Neuropathy (MMN) *Vinay Chaudhry, David Comblath*

**P02.039** Vasogenic Cerebral Edema in the Pathogenesis of Bickerstaff Brainstem Encephalitis: An MRI-Based Study *Daniel Santos, Perola Oliveira, Mariana Spitz, Luiza Lopes, Marcus Tullius, Luiz Vasconcellos, Cristiane Soares, Jorge Noujaim*

**P02.040** Evaluation of the Interval Between the Peripheral Neuropathy and the Diagnosis of Primary Sjögren's Syndrome – Study of 21 Cases *Camila Leijoto, Giseli Quintanilha, Oswaldo Nascimento*

**Prognosis in Intracerebral  
Hemorrhage**

**P02.041** Natural History of Complications after Intracerebral Hemorrhage *Patrick Lyden, Myzoon Ali, Ralph Sacco, Ashfaq Shuaib, Kennedy Lees*

**P02.042** Superficial Siderosis of the Central Nervous System: A Retrospective Study of 17 Cases *Stephane Bouly, Elsa Kapfan, Jean Pelletier, David Brassat, Thibault Moreau, Maurice Giroud, Giovanni Castelnovo, Laurent Jomir, Pierre Labauge*

**P02.043** Hyperglycemia as a Predictor of Early Mortality in Intracerebral Hemorrhage *Adetolu Odofuye, Anunaya Jain, Fernanda Bellolio, Ravneet Dhillon, Veena Manivannan, Rachel Gilmore, Alejandro Rabinstein, Sailaja Enduri, Raghav Chandra, Luis Serrano, Balavani Palamari, Neeraja Yerragonda, Wyatt Decker, Latha Stead*

**P02.044** The Utility of MRI and Cerebrovascular Imaging in Deep Structure Intracerebral Hemorrhage Initially Diagnosed with CT *Kurt Lindsay, Andrew Solomon, Sarah Ross, Anish Bhardwaj, Wayne Clark, Helmi Lutsep*

**P02.045** Do Not Resuscitate/Do Not Intubate/Comfort Care Orders in Patients with Intra-Cerebral Hemorrhage *Anunaya Jain, Adetolu Odofuye, M. Fernanda Bellolio, Ravneet Dhillon, Veena Manivannan, Rachel Gilmore, Alejandro Rabinstein, Sailaja Enduri, Raghav Chandra, Luis Serrano, Balavani Palamari, Neeraja Yerragonda, Wyatt Decker, Latha Stead*

**P02.046** Validation and Accuracy of Different Volumetric Measurement Techniques for Intracerebral Hemorrhage *Afshin Divani, Gabriela Vazquez, Theoden Netoff, Ramachandra Tummala, Aviva Abosch*

**P02.047** Use of the ICH Score To Predict Risk of 30-Day Mortality after Hypertensive Intracerebral Hemorrhage *Maamoon Tammaa, Mohamad Haykal, Caryl Dellinger, Elias Giraldo*

**P02.048** Prognosis of Hemorrhage after Attempted Embolectomy *Gene Sung, Wade Smith, David Liebeskind, Nerses Sanossian, Claude Hemphill, Paul Kim*

**P02.049** The Effect of the Results of the STICH Trial on the Management of Spontaneous Supratentorial Intracerebral Hemorrhage in Newcastle upon Tyne, England *Matthew Kirkman, Wattana Mahattanakul, Barbara Gregson, A. David Mendelow*

### Intracerebral and Subarachnoid Hemorrhage

**P02.050** Impact of Anti-Coagulation and Anti-Platelet Use on Early Mortality Following Intracerebral Hemorrhage *Anunaya Jain, Adetolu Odofuye, M. Fernanda Bellolio, Ravneet Dhillon, Veena Manivannan, Rachel Gilmore, Alejandro Rabinstein, Sailaja Enduri, Raghav Chandra, Luis Serrano, Balavani Palamari, Neeraja Yerragonda, Wyatt Decker, Latha Stead*

**P02.051** Gene Expression Profiling in Ruptured and Unruptured Intracranial Aneurysms *Joanna Pera, Agnieszka Slowik, Michal Korostynski, Tadeusz Krzyzkowski, Marek Moskala, Ryszard Przewlocki, Andrzej Szczudlik*

**P02.052** 3D Volumetric Measurements Show Correlation of Perihematoma Edema in Patients with Spontaneous Supratentorial Intracerebral Hemorrhage with Clinical Outcomes *Vahid Tohidi, Azam Mughni, Hamad Ahmad, Bahareh Hassanzadeh, Ahmed El-Gengaihy, Jawad Kirmani, Islam Tafish*

**P02.053** Radiographic Characteristics and Their Effects on Outcomes of Spontaneous Intracerebral Hemorrhage *Pratik Bhattacharya, Ramesh Madhavan, Lakshmi Shankar, Nitin Mahajan, Samrat Bhat, Leeza Salowich-Palm, Seemant Chaturvedi*

**P02.054** Absolute Brain Volume Decreases in Patients with Spontaneous Supratentorial Intracerebral Hemorrhage Using the 3D Volumetric Measurements *Bahareh Hassanzadeh, Hamad Ahmad, Azam Mughni, Vahid Tohidi, Ahmed El-Gengaihy, Jawad Kirmani, Islam Tafish*

**P02.055** High Leukocyte Count in Intracerebral Hemorrhage: A Prognostic Indicator *Ravneet Dhillon, Anunaya Jain, Adetolu Odofuye, M. Fernanda Bellolio, Alejandro Rabinstein, Rachel Gilmore, Sailaja Enduri, Luis Serrano, Veena Manivannan, Balavani Palamari, Neeraja Yerragonda, Raghav Chandra, Wyatt Decker, Latha Stead*

**P02.056** Sex and Hemorrhagic Stroke: Does the Former Influence the Later? *Mubashira Hashmi, Shaista Siddiqi, Liaquat Ali, Farrukh Khan*

**P02.057** Effect of Comorbidities and Complications on Outcomes of Spontaneous Intracerebral Hemorrhage *Ramesh Madhavan, Lakshmi Shankar, Pratik Bhattacharya, Nitin Mahajan, Seemant Chaturvedi*

**P02.058** Effect of Blood Glucose Level on Functional Outcome of Patients Presenting with Intracerebral Hemorrhage *Manivannan Veena, Anunaya Jain, Adetolu Odofuye, M. Fernanda Bellolio, Ravneet Dhillon, Rachel Gilmore, Alejandro Rabinstein, Sailaja Enduri, Raghav Chandra, Luis Serrano, Balavani Palamari, Neeraja Yerragonda, Wyatt Decker, Latha Stead*

**P02.059** Red Blood Cell Transfusion Increases Cerebral Oxygen Delivery after Subarachnoid Hemorrhage *Rajat Dhar, Allyson Zazulia, Tom Videen, Michael Diringer*

### Assessment of Parkinson's Disease

**P02.060** The Impact of Dyskinesia on a Quantitative Measure of Fine Motor Function *Sarah Zauber, Leonard Verhagen Metman*

**P02.061** Validation of the Cognitive Linguistic Quick Test (CLQT) in Parkinson Disease (PD) *Sotirios Parashos, Catherine Wielinski, Cordelia Erickson-Davis, Sarah Lenarz, Marjorie Johnson*

**P02.062** Executive Function and Variability of Home Ambulatory Activity in Parkinson's Disease *Frank Skidmore, Todd Manini, Chad Mackman, Valeria Drago, Breckon Pav, Paul Foster, Kenneth Heilman*

**P02.063** Relevance of Brain MRI in the Diagnosis of Parkinsonism: A Review of 114 Cases *Marie-Josée Langlois, Michel Panisset*

**P02.064** Measurement of Levodopa-Induced Dyskinesia with Inertial Sensors *Kathryn Chung, Mahmood El-Gohary, Brenna Lobb, James McNames*

**P02.065** Predicting Pragmatic Dysfunction in Parkinson Disease *Eryn Lonquist, Jill Newcombe, Deborah Hall*

**P02.066** A Timeline for Parkinson's Disease *Christopher Hawkes, Kelly Del Tredici, Heiko Braak*

**P02.067** Standardized Kinesia™ Bradykinesia Assessment Comparisons to UPDRS-Based Clinician Scoring *Dustin Heldman, David Riley, Brian Maddux, Alberto Espay, Andrew Duker, Joseph Giuffrida*

**P02.068** Digitized Spiral Analysis Distinguishes Parkinson Disease from Normal Controls *Kaili Stanley, Richard Lipton, Annie Hsu, Allison Scott, Culing Wang, Marta San Luciano, Paul Soto, William Severt, Susan Bressman, Qiping Yu, Seth Pullman, Rachel Saunders-Pullman*

**P02.069** Neurodegenerative Markers in Cerebrospinal Fluid in Parkinson Disease *Hana Vranova, Jan Mares, Martin Nevrlý, Petr Kanovsky, David Stejskal*

### Atypical Parkinsonisms and Parkinsonian Syndromes

**P02.070** REM Sleep Behavior Disorder in Atypical Parkinsonism *Renato Munhoz, Helio Teive*

**P02.071** Hypocretin Levels in Patients with Parkinson's Disease (PD), Lewy Body Variant (LBV), Alzheimer's Disease (AD), and Normal Controls (NC): Neuropathological and Clinical Correlates *Stephanie Lessig, Michael Chang, Eliezer Masliah*

**P02.072** Mutations in Beta-Glucocerebrosidase Gene in Polish Patients with Multisystem Atrophy *Zygmunt Jamrozik, Agnieszka Lugowska, Jaroslaw Slawek, Hubert Kwiecinski*

**P02.073** Clinical and Electrophysiological Parameters Can Differentiate Patients with SWEDDs from Tremor-Dominant Parkinson's Disease *Petra Schwingenschuh, Diane Ruge, Mark Edwards, Carmen Terranova, Fatima Carrillo, Susanne Schneider, Laura Silveira-Moriyama, Georg Kagi, Petra Katschnig, John Dickson, Andrew Lees, Niall Quinn, Pablo Mir, John Rothwell, Kailash Bhatia*

**P02.074** Longitudinal Changes in Regional Metabolism and Network Activity in Multiple System Atrophy *Kathleen Poston, Chengke Tang, Thomas Eckert, Yilong Ma, Steven Frucht, David Eidelberg*

**P02.075** Clinical Significance of Regional DTI Measurements in MSA Patients: Evidence for Subclinical Detection of Cerebellar Lesions *Sung Park, Se Oh, Sang Kim, Young Kim, Chong Lee, Zang Cho*

**P02.076** Clinical and Pathological Characterization of 14 New Patients with Adult-Onset Diffuse Leukoencephalopathy with Axonal Spheroids *Christian Wider, Laura Brown, James Garbern, Elizabeth Shuster, Katherine Schweitzer, Jan Aasly, Brent Goodman, Bryan Woodruff, Alexandros Tselis, William Kupsky, Chadwick Christine, Matt Baker, Sarka Oeygarden, Andre Maues De Paula, Jean-Francois Pelissier, Bernard Michel, Joseph Parisi, A. Stoessel, Stephen DeArmond, Rosa Rademakers, Dennis Dickson, Zbigniew Wszolek*



**P02.077** Incidental Progressive Supranuclear Palsy in a Brain Bank Program *Virgilio Gerald Evidente, Charles Adler, Marwan Sabbagh, Donald Connor, John Caviness, Thomas Beach*

**P02.078** Not All Drug Induced Parkinsonisms Are the Same: Dopamine Receptor Versus Calcium Channel Blockers *Renato Munhoz, Helio Teive*

**P02.079** Symmetric Corticobasal Degeneration: An Under-Recognized Entity *Anhar Hassan, Bradley Boeve, Joseph Parisi, Dennis Dickson, Keith Josephs*

#### Acute Stroke

**P02.080** Ipsilateral Cerebral Venous Outflow Obstruction Is Associated with Life-Threatening Brain Edema of Middle Cerebral Artery Infarction *Wengui Yu, Joanna Rives, Babu Welch, Jonathan White, Duke Samson*

**P02.081** Onset-Admission Interval and Site of Cerebral Vascular Accident Differentially Affect Rehabilitation Subtype Outcomes *Joshua Bacon, Maria Tafurt, Joseph Herbert*

**P02.082** Outcomes of Patients with Malignancy Treated with Thrombolytics *Ramy El Khoury, Miriam Morales, Oleg Chernyshev, Anitha Abraham, M. Rick Sline, Indrani Acosta, Vivek Misra, Andrew Barreto, Sean Savitz, Kachikwu Illoh, James Grotta, Nicole Gonzales*

**P02.083** Clinical Outcomes of Patients with Congestive Heart Failure Who Receive Thrombolytic Therapy for Acute Ischemic Stroke *Kachikwu Illoh, Miriam Morales, Tamara Humphrey, Alexander Katcheves, Nneka Ifejika, Francisco Fuentes*

**P02.084** Treatment of Acute Central Retinal Artery Occlusion (CRAO): Current Practice in the United States and Future Plans *Valerie Biousse, Beau Bruce, Michael Frankel, Edward Atkins, Nancy Newman*

**P02.085** In-Hospital Mortality of Hemispherectomy in a Large U.S. Sample *Christopher Horn, Richard Jung, Anthony Furlan, Amer Alshekhl*

**P02.086** Oxidative Stress as Predictor of Clinical Outcome and Effect of Treatment with a Free Radical Scavenger, Edaravone, in Patients with Acute Ischemic Stroke *Hideto Nakajima, Kiichi Unoda, Takumi Ito, Fumiharu Kimura, Toshiaki Hanafusa*

**P02.087** A Novel Treatment in the Management of Acute Ischemic Stroke *Mohamed Ibrahim, Maher Saqqur, Arabesque Parker, Monica Saini, Dulka Manawadu, Ken Butcher, Derek Emery, Ashfaq Shuaib*

**P02.088** Validation of Power M Mode Transcranial Doppler Criteria for Vascular Imaging Proven Proximal MCA Occlusion *Mohamed Ibrahim, Anmmd Kamruzzaman, Khuarshid Khan, Andrie Alexandrov, Andrie Alexandrov, Andrie Alexandrov, Vijay Sharma, Georgios Tsivgoulis, Thang Nguyen Huy, Carol Derksen, Ashfaq Shuaib, Andrew Demchuk, Maher Saqqur*

**P02.089** Plasmin for Enhance Improvement in Acute Ischemic Stroke: A Multicentre Randomized Placebo-Controlled Trial *Jusuf Misbach, Jofizal Jannis, Endang Kustiowati, Lyna Soeridewi, David Umbas, Nizar Yamanie, Fitri Octaviana*

**P02.090** Safety and Efficacy of Intravenous Thrombolysis in Patients Older Than 80 Years of Age *Jitendra Sharma, Sachin Agrawal, John Baker, Karen Olson, Thenmojhi Ramanathan, Catalina Ionita*

**P02.091** Clinical Predictors of Symptomatic Intracranial Hemorrhage after Late Intravenous Thrombolysis for Acute Ischemic Stroke *Muhammad Taqi, Caryl Dellinger, Mervat Wahba, Elias Giraldo*

**P02.092** Citicoline for Acute Ischemic Stroke in Mexican Hospitals: A Retrospective Post-Market Analysis *Carolina León-Jiménez, Erwin Chiquete, Carlos Cantu-Brito, Miguel Andrade-Ramos, José Ruiz-Sandoval*

**P02.093** Very Mild Stroke Patients Significantly Benefit from the Use of Intravenous Tissue Plasminogen Activator without Any Increase of Hemorrhagic Conversion *Ameer Hassan, Bahareh Hassanzadeh, Vahid Tohidi, Jawad Kirmani, Islam Tafish*

**P02.094** Low Doses of Intra-Arterial Thrombolytic Therapy in Ischemic Stroke during Cardiac Catheterization. Efficacy and Safety *Aurelio Mendez-Dominguez, Eid Guering, Jhonathan Uribe-Gonzalez, Enrique Huerta-Diaz, Carlos Martinez-Sanchez, Jorge Gaspar*

**P02.095** Late Endovascular Revascularization in Acute Ischemic Stroke Based on "Clinical-Diffusion Mismatch" (REVASC) *Nazli Janjua, Ahmed El-Gengahy, John Pile-Spellman, Adnan Qureshi*

**P02.096** Acute Ischemic Stroke Due to Middle Cerebral Artery Occlusion: Effectiveness of Intracranial Percutaneous Transluminal Angioplasty in Patients without Improvement of Neurological Deficit after Intravenous Thrombolysis *Roman Herzig, Katerina Axmanová, Daniel Václavík, Markéta Kubošová, Dušan Kucera, Martin Válka, Vladimír Cizek, Jaroslav Krátký, Jana Zapletalová, Petr Kanovsky*

**P02.097** Brugada Syndrome Revealed by Acute Vertigo Due to Cerebellar Infarction *Christian Denier, Thierry Guedj, Sylvie Dinanian, David Adams*

**P02.098** Acute Intra-Arterial Therapy in Ischemic Stroke: The Clinical Impact of Recanalization Versus Persistent Occlusion *Danny Bega, Shyam Prabhakaran, Michael Chen, Vivien Lee*

#### Critical Care: Hypothermia/Hemorrhagic Stroke

**P02.099** Reduced Platelet Activity Is Associated with More Intraventricular Hemorrhage *Andrew Naidech, Bernard Bendok, Sarice Bassin, Rajeev Garg, Storm Liebling, Richard Bernstein, H. Hunt Batjer, Mark Alberts, Thomas Bleck*

**P02.100** Early Vasospasm Detection Following Aneurysmal Subarachnoid Hemorrhage – A Novel Multimodality Strategy Incorporating Intracranial Neurosensor and Licox Monitors along with Transcranial Dopplers and Neuroimaging Techniques *Samuel Tsappidi, Wendy Wright, Owen Samuels, Charles Cawley, Jacques Dion, Daniel Barrow*

**P02.101** Anti-Epileptic Medication in Subarachnoid Hemorrhage: Usage Patterns and Relationship to Outcomes in United States *Mustapha Ezzeddine, Gabriela Vazquez, Rakesh Khatri, M. Fareed Suri, Adnan Qureshi*

**P02.102** Diffuse Myokymia Following Cardiac Arrest *Jeffrey McClean, Lyell Jones*

**P02.103** Factors Influencing Anti-Shivering Interventions during Therapeutic Temperature Modulation *H. Choi, Luis Fernandez, J. Schmidt, Maxwell Merkow, Stephan Mayer, Kiwon Lee, Jan Claassen, Neeraj Badjatia*

**P02.104** Prediction of Neurological Outcome after CPR in Dutch Intensive Care Units *Aline Bouwes, Michael Kuiper, Albert Hijdra, Janneke Horn*

**P02.105** Favorable Neurological Outcome Following Hypothermia after Cardiac Arrest Is Associated with Faster Cooling Initiation, Younger Age and Ventricular Fibrillation, but Not Goal Temperature Attainment Time *Jack Rose, Evelyn Taverna, Mary Sullivan, Jackie Phan, Christopher Brown, David Tong*

**P02.106** Rhinochill: A Novel Brain Hypothermia Delivery Device *Gene Sung, Michel Torbey, Alex Abou-Cheb*

#### Critical Care/Emergency Neurology/Toxicology

**P02.107** Interobserver Variability Study of the FOUR Score (Spanish Version) in a Stroke Unit Setting *Luis Idrovo Freire, Blanca Fuentes Gimeno, Josmarlin Medina Baez, Laura Gabaldón Torres, Gerardo Ruiz-Ares, Maria José Abenza, Maria Jose Aguilar-Amat, Alfonso Tafur Chang, Eelco Wijdicks, Exuperio Diez Tejedor*

**P02.108** Characterization of Anemia after Non-Traumatic Brain Hemorrhage *Luis Fernandez, Pedro Kurtz, Noeleen Ostapkovich, Michael Schmidt, Jan Claassen, Stephan Mayer, Kiwon Lee, Neeraj Badjatia*

**P02.109** Neuroglycopenia Secondary to Counterfeit Sex Drugs Containing Glibenclamide: A Local Epidemic *Hoe Chin Chua, Rinkoo Dalan*

**P02.110** An Alternative Diagnosis: Star Fruit Poisoning in a Patient with Renal Failure *Sarah Sheikh, Nathan Hellman, Sushrut Waikar, Galen Henderson*

**P02.111** Observational Cohort Study of the Impact of Anemia and Transfusion on Outcome after Traumatic Brain Injury *Premal Bhavsar, Rashmi Shringer, Terence O'Keefe, Carol Moore, Caryn Harper, Christopher Madden, Ravindra Sarode, Larry Gentilello, Ramon Diaz-Arrastia*

**P02.112** Cranial Imaging in Prolonged Refractory Status Epilepticus *Yvan Tran, Marie Atkinson, William Coplin, Gregory Norris, Kenneth Casey, Aashit Shah*

**P02.113** Incidence of Adrenal Insufficiency in Neurointensive Care Unit *Dhimant Dani, Thomas Wolfe, John Lynch, Osama Zaidat, Brian-Fred Fitzsimmons, Michel Torbey*

**P02.114** Safety and Feasibility of Percutaneous Tracheostomy Performed by Neurointensivists *Celine Rahman, David Seder, Kiwon Lee, Nirmala Rossan-Ragunath, Luis Fernandez, Fred Rincon, Errol Gordon, Jan Claassen, Stephan Mayer, Neeraj Badjatia*



**P02.115** Diagnostic Value of Muscle Fiber Conduction Velocity Measurements in Distinguishing between Myopathy and Neuropathy: Preliminary Study of ICU Acquired Paresis *Nam-Hee Kim, Myung-Goo Ji, Min-Jeong Kim*

**P02.116** Severe Clinical Deterioration and Hydrocephalus after Lumbar Puncture in a Shunted Patient with Primary Adult Aqueductal Stenosis *Vikram Khurana, Marc Dinkin, Steven Feske, Allan Ropper*

**Multiple Sclerosis: Outcomes and Scales I**

**P02.117** Early Predictors of Long-Term Response to Therapy in a 15-Year Follow-Up Study of Intramuscular Interferon Beta-1a in Patients with Relapsing-Remitting Multiple Sclerosis *Robert Bermel, Bianca Weinstock-Guttman, Dennis Bourdette, Pamela Foulds, Robert Hyde, Amy Pace, Richard Rudick*

**P02.118** Natural History of Asymptomatic Multiple Sclerosis *Orhun Kantarci, Anu Jacob, Sabahattin Saip, Ayse Altintas, Mark Keegan, Aksel Silva*

**P02.119** CSF Abnormalities and the Risk of Clinically Definite Multiple Sclerosis in Patients with Clinically Isolated Syndromes: A Meta-Analysis of Placebo Patients from the Interferon Beta and Glatiramer Acetate Clinically Isolated Syndrome Trials *Claire Riley, Jennifer Smrka, Shahram Khalid, Shuang Wang, Mark Tullman*

**P02.120** Cortical Thickness and Cognitive Performance in Multiple Sclerosis Patients *Asaf Achiron, Sigal Tal, Mark Dolev, Eran Berkovitch, Anat Achiron*

**P02.121** Predictors of Multiple Sclerosis Following Clinically Isolated Syndrome with a Tumefactive Demyelinating Lesion *Jerome Gruber, Ilya Kister, Michael Gruber, Floyd Warren, Harold Weinberg, Andreas Neophytides, Matilde Inglese, David Zagzag, Joseph Herbert*

**P02.122** Relationship between Physical Activity and Mental Health in Multiple Sclerosis Patients without Limitation of Physical Function: A Cross-Sectional Exploratory Study *Alexander Tallner, Klaus Pfeifer, Ingrid Wenny, Mathias Mauerer, Anne Waschbisch*

**P02.123** Effects of the Treatment Burden Associated with Injectable Disease-Modifying Therapies on Self-Reported Health Utilities in Multiple Sclerosis *Kevin Smith, Michael Trisolini, Benjamin Eckert, Timothy Vollmer*

**P02.124** Prospective Study on Combined Visual, Motor and Somatosensory Evoked Potentials as Markers of the Disease Course over Two Years in Patients with Early Multiple Sclerosis *Regina Schlaeger, Marcus D'Souza, Christian Schindler, Leticia Grize, Ludwig Kappos, Peter Fuhr*

**P02.125** Symbol Digit Modalities Test Improves the Reliability and Validity of the Multiple Sclerosis Functional Composite *Allison Drake, Sarah Morrow, Robert Zivadinov, Bianca Weinstock-Guttman, Frederick Munschauer, Ralph Benedict*

**P02.126** Modified Montreal Cognitive Assessment (MoMoCA) in the Multiple Sclerosis Population *Galina Vorobeychik, Nicole Beauregard, Kim Waspe, Qi Xu*

**P02.127** Socioeconomic Impact of Early Mobility Impairment in Patients with Multiple Sclerosis: Results from the NARCOMS Registry *Amber Salter, Timothy Vollmer, Ruth-Ann Marrie, Denise Campagnolo, Tuula Tyry, Gary Cutter*

**P02.128** Value of Oligoclonal Bands and MRI in Predicting Development of Multiple Sclerosis in Patients with Clinically Isolated Syndromes *Juan Rojas, Liliana Patrucco, Edgardo Cristiano*

**P02.129** The Negative Impact of Comorbidity on Quality of Life in MS *Ruth-Ann Marrie, Gary Cutter, Tuula Tyry, Denise Campagnolo, Timothy Vollmer*

**P02.130** Neurocognitive Status in Patients with Demyelinating Disease and Healthy Controls Assessed with the Pediatric MS Center of Excellence Consensus Neuropsychological Battery *Joy Parrish, Eluen Yeh, Lisa Jackson, Bianca Weinstock-Guttman, Ralph Benedict*

**P02.131** Prognosis of Primary Progressive Multiple Sclerosis: Do Cerebrospinal Fluid Oligoclonal IgM Bands Play a Role? *Jessica Mandrioli, Anna Maria Simone, Roberta Bedin, Elisa Merelli, Diana Ferraro, Maria Grazia Venneri, Rosanna Annecca, Paolo Nichelli, Patrizia Sola*

**P02.132** Tactile-Associated Recruitment of Cervical Cord Is Altered in MS Patients with Fatigue *Martina Absinta, Federica Agosta, Paola Valsasina, Sebastiano Galantucci, Domenico Caputo, Massimo Filippi*

**P02.133** Telephone-Based Exercise Promotion for Major Depression in People with MS: A Randomized Controlled Trial *Charles Bombardier, Dawn Ehde, Laura Gibbons, George Kraft*

**P02.134** Multiple Sclerosis: Natalizumab Therapy, Surgery and Post-Operative Infectious Complications *Mark Gudesblatt, Myassar Zarif, Barbara Bumstead, Joshua Loewenstein, Anne Dunne, Lori Fafard, Laura Graffitti, Carol Seidel, Lourdes Cruz, Chris Burke, Serina Fahie, Joan Bohuslaw*

**P02.135** Transcranial Direct Current Stimulation (tDCS) for Fatigue in Multiple Sclerosis *Filippo Cogiamanian, Roberta Ferrucci, Milena De Riz, Maurizio Vergari, Laura Tadini, Matteo Ciocca, Robertino Dilena, Sara Marceglia, Francesca Marneli, Manuela Fumagalli, Simona Mrakic-Spota, Elio Scarpini, Sergio Barbieri, Alberto Priori*

**P02.136** Characteristics and Predictive Factors of Disability Outcomes of Multiple Sclerosis Patients with 5-Year Use of Initial Disease Modifying Therapy *Cornelia Mihal, Barbara Teter, Brian Apatoff, Patricia Coyle, Susan Gauthier, Andrew Goodman, Malcolm Gottesman, Carl Granger, Joseph Herbert, Richard Holub, Burk Jubelt, Ilya Kister, Lauren Krupp, Michael Lenihan, Fred Lublin, Aaron Miller, Fredrick Munschauer, Allan Perel, Steven Schwid, David Snyder, Mark Tullman, Robert Zivadinov, Bianca Weinstock-Guttman*

**P02.137** Multiple Sclerosis – Effects of Immunomodulatory Therapy on Relapse Rate and Pregnancy Outcome *Kerstin Hellwig, Heike Agne, Christian Beste, Andrew Chan, Ralf Gold*

**P02.138** Pretreatment with Loratadine and Acetaminophen Prior to Natalizumab Infusion: Impact on Infusion and Hypersensitivity Reactions *Carlo Tomatore, Krisana Gesuwan*

**P02.139** Self-Reported Side Effects and Injection-Site Problems among Long-Term Users of Multiple Sclerosis Disease-Modifying Therapies *Kevin Smith, Michael Trisolini, Benjamin Eckert, Timothy Vollmer*

**P02.140** Validation of DYMUS Questionnaire for the Assessment of Dysphagia in Multiple Sclerosis *Roberto Bergamaschi, Cristiana Rezzani, Claudio Solaro, Dymus Group*

**P02.141** Compliance and Complications after 5 Years of Continuous Therapy with Interferon-Beta (IFNβ) and Glatiramer Acetate (GA) in RRMS *Christina Caon, Deena Lisak, Kelly Xiufang, Robert Lisak, Alexandros Tselis, Omar Khan*

**P02.142** Early Effects of Natalizumab on Patient Reported Fatigue and Cognitive Function *Judith Stephenson, Siddhesh Kamat, Krithika Rajagopalan, Sonalee Agarwal, Joseph Singer*

**P02.143** Baseline Expanded Disability Status Score (EDSS) Variation in a Randomized Controlled Trial in Primary Progressive (PP) MS *Peter Chin, Emmanuelle Waubant, Gary Cutter, Jerry Wolinsky, Kathleen Hawker, Jiameng Zhang, Craig Smith*

**P02.144** Examining the Association between High-Density Lipoprotein Levels and Disability in Patients with Multiple Sclerosis *Allison Drake, Arielle Kurzweil, Murali Ramanathan, Barbara Teter, Terry Justinger, Frederick Munschauer, Cornelia Mihal, Robert Zivadinov, Bianca Weinstock-Guttman*

**P02.145** Neurological Recovery Following Treatment of Aggressive MS with Immunoablation and Autologous Stem Cell Transplantation *Mark Freedman, Harold Atkins, Marjorie Bowman, Canadian BMT Study Group*

**Neurologic Manifestations of Systemic Disease I**

**P02.146** Infarct Patterns in Acute Stroke Patients with Patent Foramen Ovale Compared to Patients with Atrial Fibrillation *Il-Gon Kim, Jeong Lee, Sung Rae Kim, So-Hyun Kim, Seong Hye Choi, Choong-Kun Ha, Eun-Cheol Song, Joung-Ho Rha*

**P02.147** Severe Acute Carbon Monoxide Poisoning Induced Cardiac Arrest in the Setting of Alcohol Intoxication: A Deleterious Combination Leading to Cortical-Subcortical Brain Injury *Wilson Cueva, Alfredo Garcia, Fernando Goldenberg, Jeffrey Frank*

**P02.148** What Was My Patient Doing? The Importance of History in Syncope Evaluation *Luis Serrano, M. Fernanda Bellolio, Benjamin Sandefur, Wyatt Decker, Anunaya Jain, Ravneet Dhillon, Veena Manivannan, Adetolu Odufuye, Balavani Palamari, Neeraja Yerragonda, Latha Stead*

**P02.149** Heroin Myelopathy: Case Report and Review *Reena Shah, Eric McDade, Stephen Reich*

**P02.150** Anti-NMDA Receptor Encephalitis Associated with Marked CSF Pleocytosis: A Case Report *Ahmed Hassan, Shawna Cutting, Sayona John, Richard Temes, Sarah Zauber*

**P02.151** High-Sensitive Detection System for Paraneoplastic Anti-Neuronal Antibodies *Hisatomo Kowa, Atushi Iwata, Jun Shimizu, Shoji Tsuji*

**P02.152** Progressive Multifocal Leukoencephalopathy Associated with Efalizumab *Wade Welch, Susan Staugaitis, Robert Fox*

**P02.153** Treatment with Mono-ADP-Ribosylation Inhibitors Protect Against CA1 Neuronal Injury Induced by Exposure to Carbon Monoxide *Roi Wallis, Kimberly Panizzon*

**P02.154** Neurological Diagnoses Following Lung Transplantation *Farah Mateen, Alejandro Rabinstein, Diederik van de Beek, Eelco Wijdicks*

**P02.155** Mitochondrial, Ehlers-Danlos and CADASIL Features in the Same Family: A Genetic Puzzle or a New Disease Entity? *Irene Colombo, Maura Servida, Andreina Bordon, Patrizia Ciscato, Alessandro Prella, Giacomo Pietro Comi, Maria Teresa Bassi, Alessandra Bassotti, Maurizia Valli, Nereo Bresolin, Maurizio Moggio, Monica Sciacco*

**P02.156** Cerebral Infarction: An Associated Feature of POEMS Syndrome? *Stefan Dupont, Michelle Mauerermann, Angela Dispenzieri, Robert Brown, Jr.*

**P02.157** Posterior Leukoencephalopathy and Brain Endothelial Cell Dysfunction Caused by the Macrolide Roxithromycin *Rakefet Tsabari, Sigal Tal, Dvora Nas, Ramona Aronovich, David Gurwitz, Joab Chapman, Ilan Blatt*

**P02.158** Novel Imaging in Copper Myelopathy *Scott Newsome, Daniel Reich, Seth Smith, Peter Calabresi, Benjamin Greenberg*

**P02.159** Successful Treatment of Encephalopathy Associated with Autoimmune Thyroiditis: A Case Report *Rohit Marawar, Earl Zimmerman*

**P02.160** Cerebrovascular Disease Associated with Progressive Systemic Sclerosis (Scleroderma): A Case Series *Victor Zach, Kathryn Kirchoff, Colum Amory, John Dengler, Christina Sun-Edelstein, Marina Zvartau-Hind, Gretchen Tietjen, Steven Levine*

**P02.161** Hyperammonemia-Induced Brain Edema in the Setting of Otherwise Normal Liver Function Test: Report of Two Cases of Devastating but Treatable Causes of Adult-Onset Impaired Ureaogenesis *Wilson Cueva, Fernando Goldenberg, Jeffrey Frank*

**P02.162** Anterior Horn Syndrome Revealing Neurosarcoidosis *Nataliya Krivitskaya, Ameer Hassan, Eun-Sook Cho, Sami Khella, Peter Andreas Michas-Martin, Nizar Souayah*

**P02.163** Toxic Leukoencephalopathy after Heroin Inhalation: Pathognomonic Images from Five Cases of Chasing the Dragon *Javier Cardenas, Laura Lehnhoff, Kara Stuart-Lewis*

**P02.164** Reversible Metronidazole-Induced Cerebellar Toxicity in a Multiple Transplant Recipient *Tracey Graves, Marie Condon, Marina Loucaidou, Richard Perry*

**P02.165** Polyarteritis Nodosa-Type Vasculitis Isolated to the Central Nervous System: A First Case Report of a Fulminant Primary CNS Vasculitis Variant *Joshua Chern, Doris Kung, Joseph Kass*

#### Headache I

**P02.166** Short-Term Consistency of Triptan Use: Do Migraineurs Take Triptans When Available to Them? *Bozena Katic, X. Henry Hu, Daisy Ng-Mak, Tony Ho, Marcelo Bigal*

**P02.167** Nocebo Is the Enemy, Not Placebo. A Meta-Analysis of the Nocebo Effect in Migraine *Dimos Mitsikostas, Leonidas Mantonakis, Nikolaos Chalarakis*

**P02.168** IV Ketamine in the Clinic To Treat Cluster Headache *John Claude Krusz*

**P02.169** Occipital Nerve Blocks: Effect of Symptomatic Medication Overuse and Headache Type on Failure Rate *Joshua Tobin, Nancy Skok, Stephen Flitman*

**P02.170** Is There a PFO Closure Responsive Migraine Subgroup? *Amy Almaraz, Katherine Noe, David Fortuin, John Sweeney, Richard Lee, David Dodick*

**P02.171** Group Psychotherapy in Chronic Daily Headache with Medication Overuse *Silvia Compostella, Cristina Muscio, Elisabetta Venturelli, Paolo Liberini, Renata Rao, Stefano Gipponi, Eluisa Sapia, Alessandro Padovani*

**P02.172** Acute Treatment of Medically Refractory Cluster Headache by Electrical Stimulation of the Sphenopalatine Ganglion (SPG) *Stewart Tepper, Ali Rezaei, Samer Narouze, Andre Machado, Charles Steiner, Jenna Stump, Mehdi Ansarinia*

**P02.173** Response to Aspirin in Migraineurs (RAM) *Jill Jesurum, Cindy Fuller, Sylvia Lucas, Natalia Murinova, Colleen Truva, Elisa McGee, Mark Reisman*

**P02.174** Head-to-Head, Open Label, Randomized, Prospective Short-Term Preventive Treatment Study of Menstrual Migraine with Eletriptan 40mg Versus Sumatriptan 50mg *David Dolezil*

**P02.175** Neck Pain or Headache: Which Is the Better Predictor of 2-Hour Pain-Free Following Migraine Treatment? *Sutapa Ford, Anne Calhoun, Yonghong Nie, Young Truong, Alan Finkel*

**P02.176** Levetiracetam in the Treatment of Chronic Migraine: A Multi-Case Report *Daniel Kantor, Stephanie Nahas*



## Residents and Fellows: Put Yourself On a Career Path!

### Attend the Residents and Fellows Career Forum and Reception.

Trainees in neurology are invited to attend the Residents and Fellows Career Forum and Reception on Monday, April 27, from 6:30 p.m. to 9:00 p.m. The Forum features three panel rooms including fellowship, private practice, and academic/research. Make a point to attend the poster forum and reception that includes exhibits of private practice groups and opportunities to learn about potential positions from headhunters. Speak with advertisers in AAN Dendrite™ Careers in Neurology about job opportunities. New this year: International Component Posters that showcase international programs. Mark your calendar for this essential event!

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# INTEGRATED NEUROSCIENCE SESSION: ALZHEIMER'S, IMAGING, AND BIOMARKERS (ADNI)

Tuesday, April 28 / 1:00 p.m.–5:00 p.m.

Coordinators: Ronald Petersen, PhD, MD, and Michael Weiner, MD

## Platform Session / 1:00 p.m.–2:30 p.m. / Room 3AB

|                                                                                                                                                                                                                                                                                           |                  |                                                                                                                                                                           |                  |                                                                                                                                                                                                                                                                            |                  |                                                                                                                                                                                                                                    |                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| <b>1:00 p.m.</b><br>Gray and White Matter Atrophy in Alzheimer's Disease: A Comparative Study Using Subjects from the Alzheimer's Disease Neuroimaging Initiative (ADNI) <i>Jim Nikelski, Howard Chertkow, Alan Evans</i>                                                                 | <b>IN3-1.001</b> | <b>1:30 p.m.</b><br>Pre- and Clinical Dementia with Amyloid Deposition Using PIB PET Imaging <i>Shizuo Hatashita, Hidetomo Yamasaki</i>                                   | <b>IN3-1.003</b> | <b>2:00 p.m.</b><br>Mapping Correlations between Serum Abeta and tau and Hippocampal Atrophy Measures in 282 ADNI Subjects <i>Liana Apostolova, Amity Green, Kristy Hwang, Jonathan Morra, Jeffrey Cummings, Arthur Toga, Clifford Jack, Michael Weiner, Paul Thompson</i> | <b>IN3-1.005</b> | <b>2:15 p.m.</b><br>Amyloid Beta (A $\beta$ ) Effects on Cognition Are Mediated by Cell Injury (Tau) and Death (Progressive Atrophy) <i>Charles DeCarli, David Drucker, Evan Lloyd, Owen Carmichael, Evan Fletcher, Dan Mungas</i> | <b>IN3-1.006</b> |
| <b>1:15 p.m.</b><br>The ADAS-cog's Performance as a Measure – Lessons from the ADNI Study: Part 3 – Do the Scale Modifications Add Value? <i>Jeremy Hobart, Holly Posner, Paul Aisen, Ola Selnes, Yaakov Stern, Ronald Thomas, Michael Weiner, John Zajicek, Scott Zeger, Stefan Cano</i> | <b>IN3-1.002</b> | <b>1:45 p.m.</b><br>APOE Status Predicts PiB-Positivity in Nondemented Aging: Evidence for Preclinical Alzheimer's Disease <i>John Morris, Catherine Roe, Mark Mintun</i> | <b>IN3-1.004</b> |                                                                                                                                                                                                                                                                            |                  |                                                                                                                                                                                                                                    |                  |

## Poster Session / 2:30 p.m.–3:30 p.m. / Room 3AB

|                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>IN3-2.001</b> ApoE Genotype Is Associated with Rate of Hippocampal Atrophy Independent of Clinical Diagnosis: Data from the ADNI Study <i>Evan Fletcher, Evan Lloyd, David Drucker, Owen Carmichael, Charles DeCarli</i>                            | <b>IN3-2.004</b> Quantifying the Correspondence between Tissue Atrophy and Mini-Mental State Exam (MMSE) Scores: Morphometry and Behavior in Alzheimer's Disease Neuroimaging Initiative (ADNI) Subjects <i>Jim Nikelski, Howard Chertkow, Alan Evans</i> | <b>IN3-2.006</b> White Matter Hyperintensities, Incident MRI Infarcts Correlate with Cognition (ADNI Study) <i>Jing He, Evan Fletcher, Oliver Martinez, Owen Carmichael, Charles DeCarli</i>                                                                | <b>IN3-2.009</b> Use of a Monoclonal Anti-A $\beta$ Antibody with Biochemical and Imaging Biomarkers To Determine Amyloid Plaque Load in Patients with Alzheimer's Disease (AD) and Control Subjects <i>Eric Siemers, Ronald Demattos, Friedrich Stuart, Robert Dean, Gopalan Sethuraman, Racke Margaret, Danna Jennings, Gilles Tamagnan, Kenneth Marek, John Seibyl, Steven Paul</i> |
| <b>IN3-2.002</b> In Vivo Mapping of Amyloid Toxicity in Alzheimer's Disease <i>Giovanni Frisoni, Marco Lorenzi, Anna Caroli, Nina Kempainen, Kjell Nagren, Juha Rinne</i>                                                                              | <b>IN3-2.005</b> Mapping the Progression of Atrophy in Early and Late Onset Sporadic Alzheimer's Disease: A Tensor-Based Morphometry Study <i>Raffaella Migliaccio, Federica Agosta, Bruce Miller, Maria Luisa Gorno-Tempini</i>                          | <b>IN3-2.007</b> Susceptibility-Weighted Imaging in Mild Cognitive Impairment <i>Antao Du, E. Mark Haacke</i>                                                                                                                                               | <b>IN3-2.010</b> Mapping Hippocampal Atrophy in Mild Cognitive Impairment and Alzheimer's Disease <i>Liana Apostolova, Amity Green, Kristy Hwang, Jeffrey Cummings, Arthur Toga, Paul Thompson</i>                                                                                                                                                                                     |
| <b>IN3-2.003</b> Regional Rates of Brain Atrophy Are Significantly Associated with Rates of Cognitive Decline Even after Adjusting for Clinical Syndrome <i>Dan Mungas, David Drucker, Evan Lloyd, Owen Carmichael, Evan Fletcher, Charles DeCarli</i> |                                                                                                                                                                                                                                                           | <b>IN3-2.008</b> Regional Differences in White Matter Integrity Distinguish Cognitively Normal Late-Middle-Aged Individuals at Increased Genetic Risk for Alzheimer's Disease <i>Adam Fleisher, Leslie Baxter, Kewei Chen, Eric Reiman, Richard Caselli</i> |                                                                                                                                                                                                                                                                                                                                                                                        |

## Invited Speaker Session\* / 3:30 p.m.–5:00 p.m. / Room 3AB

|                             |                                                                                       |
|-----------------------------|---------------------------------------------------------------------------------------|
| <b>3:30 p.m.– 4:00 p.m.</b> | Alzheimer's Disease Neuroimaging Initiative (ADNI) Overview <i>Michael Weiner, MD</i> |
| <b>4:00 p.m.– 4:30 p.m.</b> | Quantitative MRI in ADNI <i>Clifford Jack, MD</i>                                     |
| <b>4:30 p.m.– 5:00 p.m.</b> | FDG PET and PiB Imaging in ADNI <i>William Jagust, MD</i>                             |

\*Current as of February 23, 2009

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**Wednesday, April 29**

7:00 p.m.–9:30 p.m.

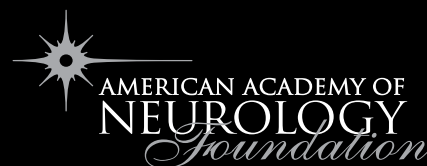
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## S01 Multiple Sclerosis: Epidemiology/Clinical Outcomes/Biomarkers

- Room 6B**
- 2:00 p.m. S01.001**  
Early and Late Smoking as Independent Risk Factors for Multiple Sclerosis: A Case-Control Study *Joseph Finkelstein, Eunne Cha, Mitchell Wallin, Walter Royal, Christopher Bever*
- 2:15 p.m. S01.002**  
Cognitive and Psychosocial Features of Childhood and Juvenile Multiple Sclerosis: A Reappraisal after 2 Years *Maria Amato, Benedetta Goretti, Angelo Ghezzi, Silvia Lori, Valentina Zipoli, Emilio Portaccio, Lucia Moiola, Monica Falautano, Maria De Caro, Mariangela Lopez, Francesco Patti, Rosario Vecchio, Carlo Pozzilli, Valentina Bianchi, Marco Roscio, Giancarlo Comi, Maria Trojano*
- 2:30 p.m. S01.003**  
Pediatric MS before Puberty: A Distinct CSF Inflammatory Profile *Dorothee Chabas, Jayne Ness, Eluen Yeh, Nancy Kuntz, Ivan De Kouchkovsky, Jonathan Strober, Bianca Weinstock-Guttman, Moses Rodriguez, Emmanuelle Waubant, NMSS Network of Pediatric MS Centers of Excellence*
- 2:45 p.m. S01.004**  
Serum N-Acetyl-Aspartate (NAA) Levels Differ in Neuromyelitis Optica (NMO) and Multiple Sclerosis (MS) *Carla Tortorella, Maddalena Ruggieri, Rosaria Leante, Ceci Edmondo, Elisabetta Di Monte, Maria Amato, Angelo Ghezzi, Alessandra Lugaresi, Francesco Patti, Patrizia Sola, Giovanni Zimatore, Pietro Iaffaldano, Vita Direnzo, Paolo Livrea, Maria Trojano*
- 3:00 p.m. S01.005**  
Retinal Nerve Fiber Layer Thinning after Acute Optic Neuritis: Importance of 1 Month Findings *Mark Kupersmith, Gary Mandel, Susan Anderson, Randy Kardon*
- 3:15 p.m. S01.006**  
Exclusive Breastfeeding and the Risk of Postpartum Relapses in Women with Multiple Sclerosis *Annette Langer-Gould, Stella Huang, Amethyst Leimpeter, Kathleen Albers, Stephen Van Den Eeden, Lorene Nelson*

## S02 Aging and Dementia: Epidemiology

- Room 6C**
- 2:00 p.m. S02.001**  
Acceleration of Motor Decline Predicts MCI up to 12 Years before Onset *Teresa Buracchio, Hiroko Dodge, Diane Howieson, Dara Wasserman, Jeffrey Kaye*
- 2:15 p.m. S02.002**  
Diabetes Mellitus Severity Is Associated with Subcortical Infarctions on MRI: The Mayo Clinic Study of Aging *Rosebud Roberts, Scott Przybelski, Stephen Weigand, Kejal Kantarci, Maria Shiung, Yonas Geda, David Knopman, Clifford Jack, Jr., Walter Rocca, Ronald Petersen*
- 2:30 p.m. S02.003**  
Lifetime Cigarette Smoking Is Protective for Lewy-Related Pathology *Debby Tsuang, Gail Li, Eric Larson, Jane Shofer, Mary Lou Thompson, Walter Kukull, Steve Millard, Paul Crane, James Leverenz, Thomas Montine*
- 2:45 p.m. S02.004**  
Bilingualism Does Not Protect Against Dementia or MCI: Results from the Einstein Aging Study (EAS) *Amy Sanders, Richard Lipton, Charlie Hall, Mindy Katz, Joe Verghese*
- 3:00 p.m. S02.005**  
The Metabolic Syndrome and Development of Cognitive Impairment among Older Women *Kristine Yaffe, Andrea Weston, Terri Blackwell, Kathryn Krueger*
- 3:15 p.m. S02.006**  
Cognitive Activities Are Associated with Decreased Risk of Mild Cognitive Impairment: The Mayo Clinic Population-Based Study of Aging *Yonas Geda, Rosebud Roberts, David Knopman, Vernon Pankratz, Teresa Christianson, Bradley Boeve, Robert Ivnik, Eric Tangalos, Walter Rocca, Ronald Petersen*

## S03 Pathogenesis and Epidemiology of Essential Tremor

- Room 6A**
- 2:00 p.m. Presentation of the Movement Disorders Research Award**  
*Sponsored by the American Academy of Neurology, the Parkinson's Disease Foundation, and the AAN Movement Disorders Section and endowed by the Parkinson's Disease Foundation.*  
**Recipient:** **Mahlon R. DeLong, MD** Atlanta, GA
- 2:30 p.m. S03.003**  
Striatal Tyrosine Hydroxylase in Autopsied Patients with Essential Tremor *Holly Shill, Charles Adler, Thomas Beach, Lih-Fen Lue, Lucia Sue, Nicole Campbell, Douglas Walker*
- 2:45 p.m. S03.004**  
GABA<sub>A</sub> Receptor  $\alpha$ 1 Protein Is Increased in the Cerebellar Cortex of Essential Tremor Patients *Alex Rajput, Can Luo*
- 3:00 p.m. S03.005**  
Torpedoes in Essential Tremor, Parkinson's Disease, Alzheimer's Disease, and Control Brains *Elan Louis, Phyllis Faust, Jean-Paul Vonsattel, Lawrence Honig, Alexander Rajput, Ali Rajput, Rajesh Pahwa, Kelly Lyons, Web Ross, Rodger Elble, Cordelia Erickson-Davis*
- 3:15 p.m. S03.006**  
Association between Essential Tremor and Dementia: Population-Based Study in Northern Manhattan *Sujata Thawani, Nicole Schupf, Elan Louis*

## S04 Acute Stroke Care

- Room 608/609**
- 2:00 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:** **Matthew Flaherty, MD** Cincinnati, OH
- 2:15 p.m. S04.002**  
Impact of Joint Commission Certification of Primary Stroke Centers on the Administration Rate of IV Tissue Plasminogen Activator for Ischemic Stroke *Mark Alberts, Jean Range, Ann Watt, Vicki Cantwell, Joe Troy*
- 2:30 p.m. S04.003**  
Number Needed To Treat To Benefit and Number Needed To Harm for IV TPA Therapy in the 3-4.5 Hour Window: Joint Outcome Table Analysis of the ECASS 3 Trial *Jeffrey Saver, James Grotta, David Liebeskind, Helmi Lutssep, Lee Schwamm, Phillip Scott, Sidney Starkman*
- 2:45 p.m. S04.004**  
Improving Reliability of Stroke Disability Assessment in Clinical Trials and Clinical Practice: The Focused Assessment for the Modified Rankin Scale *Jeffrey Saver, Anna Yanes, Bogdan Filip, Scott Hamilton, Robin Conwit, Sidney Starkman, FAST-MAG Investigators and Coordinators FM*
- 3:00 p.m. S04.005**  
Primary Stroke Centers: Characteristics and Re-Certification Rates *Mark Alberts, M. Hampel, Jean Range*
- 3:15 p.m. S04.006**  
Earlier Hospital Arrival in Acute Stroke Is Associated with Delayed tPA Administration *Aaron Izenberg, Frank Silver, Michael Hill, Moira Kapral, Leanne Casaubon, Jiming Fang, Annette Robertson, David Gladstone*

## S05 Inflammatory, Necrotizing, and Autophagic Myopathies

- Room 606/607**
- 2:00 p.m. S05.001**  
TDP-43 in Inflammatory Myopathies *Bas van Hoeve, Helenius Schelhaas, H. Laak, Baziell Engelen, Benno Küsters*
- 2:15 p.m. S05.002**  
Signal Recognition Particle 54kD Autoantibody (SRP54-IgG) and Accompanying Autoimmune Necrotizing Myopathy Identified Incidentally in Paraneoplastic Antibody Screening *Metha Apiwattanakul, Andrew McKeon, Margherita Milone, Thomas Kryzer, K. Meng Tan, Sean Pittock, Vanda Lennon*
- 2:30 p.m. S05.003**  
Natural History of Idiopathic and Post-Exertional Rhabdomyolysis *Joshua Alpers, Lyell Jones*
- 2:45 p.m. S05.004**  
Inhibited Lysosomal Activity in Sporadic Inclusion-Body Myositis (s-IBM) Muscle Fibers Is Associated with Increased Maturation of Autophagosomes and Accumulation of sequestosome 1/p62 ("p62") Immunopositive Inclusions *Anna Nogalska, Chiara Terracciano, Carla D'Agostino, W. King Engel, Valerie Askanas*
- 3:00 p.m. S05.005**  
Hypomorphic Alleles of the VMA21 Gene Downregulate the V-ATPase and Cause X-Linked Myopathy with Excessive Autophagy *Nivetha Ramachandran, Iulia Munteanu, Peixiang Wang, Pauline Aubourg, Hannu Kalimo, Nicolas Levy, Morris Manolson, Cameron Ackerley, Berge Minassian*
- 3:15 p.m. S05.006**  
Treatment with Resveratrol, trans-3,4',5-trihydroxystilbene Polyphenol Decreases Amyloid Beta Precursor Protein (A $\beta$ PP), Amyloid- $\beta$  (A $\beta$ ) Oligomerization and Myostatin in A $\beta$ PP-Overexpressing Cultured Human Muscle Fibers (A $\beta$ PP<sup>-</sup>-CHMF-IBM Model): Relevance to Treatment of Sporadic-IBM Patients *Anna Nogalska, Carla D'Agostino, W. King Engel, Valerie Askanas*

**S06 Multiple Sclerosis: Immunology I**

**Room 611/612**

**2:00 p.m. S06.001**  
Interferon-beta Treatment Increases FoxP3 Expression and CD56bright Natural Killer Cells in Subjects with Multiple Sclerosis *Arthur Vandenbark, Jianya Huan, Marissa Agotsch, Dorian LaTocha, Susan Goelz, Halina Offner, Stefan Lanker, Dennis Bourdette*

**2:15 p.m. S06.002**  
Interferon Beta (IFNβ)-1b Changes B-Cell Cytokine Secretion Profile and Inhibits Th17 Cell Differentiation *Vinod Ramgolam, Danielle Speer, Neelima Choudhary, Silva Markovic-Plese*

**2:30 p.m. S06.003**  
Role of the Renin-Angiotensin System in Autoimmune Inflammation of the CNS: Targeting the Angiotensin II Receptor as a New Therapeutic Option in Multiple Sclerosis? *De-Hyung Lee, Johannes Stegbauer, Silvia Seubert, Gisa Ellrichmann, Stefanie Gaupp, Christian Rump, Ralf Gold, Ralf Linker*

**2:45 p.m. S06.004**  
Atacicept Inhibits Disease Activity in a Murine Model of Experimental Autoimmune Encephalomyelitis *Katherine Lewis, Pallavur Sivakumar, Shannon Okada, Kristen Bontadelli, Mark Maurer, Hongping Ren, Kimberly Waggie, Jane Gross, Paola Zaratin, Stacey Dillon*

**3:00 p.m. S06.005**  
Toll-Like Receptor 7/8 Dysfunction in Patients with Multiple Sclerosis on Natalizumab *Nicoline Schiess, Tory Johnson, Peter Calabresi, Avindra Nath*

**3:15 p.m. S06.006**  
CD25, a Molecule Linked to MS Susceptibility, Has Important Effects in Initiation and Termination of T Cell Responses in Humans *Jehad Edwan, Jayne Martin, Justin Perry, Bibiana Bielekova*

**S07 Sleep Disorders**

**Room 605/610**

**2:00 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: Paul Franken, MD Lausanne, Switzerland*

**2:15 p.m. S07.002**  
The Transition from REM Sleep Behavior Disorder to Neurodegenerative Disease *Ronald Postuma, Jean-Francois Gagnon, Melanie Vendette, Jacques Montplaisir*

**2:30 p.m. S07.003**  
Similar Incidences of Augmentation during 26 Weeks of Double-Blind Pramipexole Treatment for Restless Legs Syndrome in Comparison to Placebo *Birgit Högl, Diego Garcia-Borreguero, Mandy Sohr, Stefanie Brenner*

**2:45 p.m. S07.004**  
The Presence of Sleep Apnea Independently Increases Risk of Death after Acute Ischemic Stroke *Meghna Mansukhani, Maria Fernanda Bellolio, Sailaja Enduri, Virend Somers, Latha Stead*

**3:00 p.m. S07.005**  
Frequency of Sleep Disorders in the Community-Dwelling Elderly: The Mayo Clinic Study of Aging *Jennifer Molano, Bradley Boeve, Rosebud Roberts, Yonas Geda, Teresa Christianson, David Knopman, Glenn Smith, Robert Ivnik, V. Pankratz, Michael Silber, Tanis Ferman, Ronald Petersen*

**3:15 p.m. S07.006**  
Diffusion Weighted Imaging in Narcolepsy with Cataplexy *Christopher Scherfler, Birgit Frauscher, Michael Schocke, Viola Gschliesser, Karl Egger, Michael Nocker, Georg Goebel, Werner Jaschke, Werner Poewe, Birgit Högl*

**S08 Infections/AIDS/ Prion Disease**

**Room 602/603**

**2:00 p.m. S08.001**  
Vascular Risk Factors and Human Immunodeficiency Virus Serostatus Convey Different Risks for Cognitive Dysfunction in Gay/Bisexual Men *James Becker, Lawrence Kingsley, Joanne Mullen, Bruce Cohen, Eileen Martin, Eric Miller, Ann Ragin, Ned Sacktor, Ola Selnes, Barbara Visscher*

**2:15 p.m. S08.002**  
Longitudinal Changes in Psychomotor Speed Test Performance among HIV+ and HIV- Individuals: The Impact of Age and Serostatus *Ned Sacktor, Richard Skolasky, Ola Selnes, James Becker, Bruce Cohen, Eileen Martin, Barbara Visscher, Eric Miller*

**2:30 p.m. S08.003**  
A Tat-Immune Complex Binds the NMDA Receptor, Preventing Receptor Activation and Excitotoxicity *Jeffrey Rumbaugh, Muznabanu Bachani, Wenxue Li, T. Butler, K. Smith, Mario Bianchet, Mark Prendergast, Avindra Nath*

**2:45 p.m. S08.004**  
Selective Vulnerability of Dorsal Root Ganglia Neurons in Experimental Rabies after Peripheral Inoculation of CVS-11 in Adult Mice *Alan Jackson, Lena Hsu, John Rossiter*

**3:00 p.m. S08.005**  
Neurocysticercosis: Relationship between Taenia Antigen Levels in Cerebrospinal Fluid and Magnetic Resonance Imaging *Ronaldo Abraham, José Livramento, Cláudia Leite, Alessandra Pardini, Adelaide Vaz, Luis Machado*

**3:15 p.m. S08.006**  
Ultrasonography in Ulnar Neuropathy at the Elbow: Differences between Entrapment and Leprosy *Marcos De Freitas, Ana Alice Carvalho, Osvaldo Nascimento, Fabiano Baiao, Fernando Cardoso, Tânia Escada, Maria Navares, Myrian Hahn*

**S09 Clinical Neurophysiology: Intraoperative Monitoring, Evoked Potential, and Basic Science**

**Room 613/614**

**2:00 p.m. S09.001**  
Competition between Neurons in the Same Superior Colliculus Facilitates Saccade Target Selection *Gregory Day, Martin Paré*

**2:15 p.m. S09.002**  
Microelectrode Recording Is Critical for Successful STN DBS Surgery *Monica Kurtis, Whitney Smith, Qiping Yu, Robert Goodman, Guy McKhann, Linda Winfield, Blair Ford, Seth Pullman*

**2:30 p.m. S09.003**  
Predictive Value of Brainstem Auditory Evoked Potentials (BAEPs) in Decreasing Post Operative Neurological Deficit during Expanded Endonasal Approach (EEA) to Skull Base Surgeries *Parthasarathy Thirumala, Paul Gardner, Amin Kassam, Daniel Prevedello, Kelly Wichman, Miguel Habeych, Donald Crammond, Carl Snyderman, Ricardo Carrau, Jeffery Balzer*

**2:45 p.m. S09.004**  
Predictive Value of Spontaneous Electromyography (S-EMG) Monitoring of Lower Cranial Nerves (CN V, VII-XII) during Expanded Endonasal Approach (EEA) to Skull Base Surgeries *Parthasarathy Thirumala, Paul Gardner, Amin Kassam, Donald Crammond, Miguel Habeych, Kelly Wichman, Daniel Prevedello, Carl Snyderman, Ricardo Carrau, Jeffery Balzer*

**3:00 p.m. S09.005**  
The Impact of Age on the Multifocal VEP in a Healthy Elderly Population: Findings from the Myelin and Aging Study *Christopher Songster, Caroline Racine, Reva Wilhelm, Bruce Miller, Stephen Hauser, Ari Green*

**3:15 p.m. S09.006**  
Somatosensory Cortex Activation Changes after Botulinum Toxin Type A Injections in Post-Stroke Spasticity *Martin Nevrlý, Robert Opavský, Pavel Otruba, Hana Vranova, Petr Hlustik, Petr Kanovsky*

**S10 Neuro-Oncology**

**Room 604**

**2:00 p.m. S10.001**  
Glioblastoma in the Elderly: The Memorial Sloan-Kettering Cancer Center Experience (1997-2007) *Fabio Iwamoto, Anna Cooper, Anne Reiner, Lakshmi Nayak, Lauren Abrey*

**2:15 p.m. S10.002**  
Leptomeningeal Spread of Malignant Glioma during Treatment with Bevacizumab (Avastin) *Dilpreet Kaur, Karen Black, Andrea Olsen, Alexis Demopoulos*

**2:30 p.m. S10.003**  
Magnetic Resonance Imaging with Perfusion Sequence in the Analysis of Patients Undergoing Treatment for High Grade Glioma: Correlation with Outcome *Pamela New, Yvonne Kew, Sanjay Singh, Suzanne Powell*

**2:45 p.m. S10.004**  
Assessment of the Location and Characteristics of MRI Contrast Enhancement, Radiation Dose-Volume Parameters and Magnetic Resonance Spectroscopy in Histologically Proven Cerebral Radiation Necrosis *Lisa Rogers, Christina Tsien, Randy Ten Haken, Paul McKeever, Augusto Elias, Larry Junck, Pia Sundgren*

**3:00 p.m. S10.005**  
Salvage Chemotherapy with Bevacizumab for Recurrent Alkylator-Refractory Anaplastic Astrocytoma *Marc Chamberlain, Sandra Johnson*

**3:15 p.m. S10.006**  
The Safety of Therapeutic Anticoagulation for Deep Venous Thrombosis/ Pulmonary Embolus (DVT/ PE) and the Risk of Recurrent DVT/PE in Glioma Patients Receiving Bevacizumab-Based Therapy: The CNOG Experience *Lisa Rogers, Mark Malkin, Sherrell Bertoni, Pat Lada, Hendrikus Krouwer, Larry Junck, James Froehlich, Martin Nicholas, Nina Paleologos*

## S11 Multiple Sclerosis: Clinical Therapeutics and Interventions

### Room 6B

**3:45 p.m. S11.001**  
VLA-4 Antisense – An Oligonucleotide Targeting VLA-4 mRNA (ATL1102) Significantly Reduces New Active Lesions in Patients with RR-MS *Volker Limmoth, Frederik Barkhof, Nuket Desem*

**4:00 p.m. S11.002**  
Randomized Double-Blind Placebo-Controlled Trial of Memantine 10 mg Twice a Day for Three Months as a Treatment for Cognitive Impairment in Multiple Sclerosis *Jesus Lovera, Elliot Frohman, Theodore Brown, Daniel Bandari, Ruth Whitham, Katherine Wild, Dennis Bourdette*

**4:15 p.m. S11.003**  
Deep Brain Stimulation of the Caudal Zona Incerta for Tremor in Multiple Sclerosis *Jacqueline Bernard, Theresa Pretto, Richard Penn*

**4:30 p.m. S11.004**  
Effect of Natalizumab Switch in Suboptimal-Responders to First-Line Disease Modifying Therapy *Tamara Castillo-Trivino, Elizabeth Crabtree-Hartman, Bruce Cree, Douglas Goodin, Ari Green, Stephen Hauser, Ellen Mowry, Darin Okuda, Daniel Pelletier, Scott Zamvil, Emmanuelle Waubant*

**4:45 p.m. S11.005**  
Natalizumab in Patients with Relapsing Multiple Sclerosis: Updated Utilization and Safety Results Including TOUCH™ and TYGRIS *Carmen Bozic, Glyn Belcher, Richard Kim, Robert Hyde, Frances Lynn, Mariska Kooijmans-Coutinho, Michael Panzara*

## S12 Anterior Horn: Basic Science

### Room 6C

**3:45 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.*

*Recipients:*  
**Merit Cudkowicz, MD, MSc**  
*Charlestown, MA*  
**Orla Hardiman, MD**  
*Dublin, Ireland*

**4:15 p.m. S12.003**  
mSOD1G93A Binds Microglial CD14/TLRs Inducing a Novel Mechanism for Microglia-Mediated Motoneuron Injury *Weihua Zhao, David Beers, Jenny Henkel, Wei Zhang, Makoto Urushitani, Jean-Pierre Julien, Stanley Appel*

**4:30 p.m. S12.004**  
Astrocytes Induce Motoneuron Death and Axonopathy in an In Vitro Model of Spinal Muscular Atrophy *Dimitra Papadimitriou, Diane Re, Tetsuya Nagata, Umrao Monani, Serge Przedborski*

**4:45 p.m. S12.005**  
A Novel Putative Familial ALS Locus on Chromosome 12: D-Amino Acid Oxidase *Jacqueline De Bellerocche, John Mitchell, Praveen Paul, Han-Jou Chen, Alex Morris, Amin Hajitou, Sabine Winkler, Veronica Tisato, Nick Mazarakis*

## S13 Parkinson's Disease: Non-Motor Symptoms

### Room 6A

**3:45 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:*  
**Christian Wider, MD**  
*Jacksonville, FL*

**4:00 p.m. S13.002**  
Metabolic Abnormalities Associated with Progressive Cognitive Dysfunction in Parkinson's Disease *Kathleen Poston, Paul Mattis, Chengke Tang, Matthew Bussa, David Eidelberg*

**4:15 p.m. S13.003**  
The Relationship between Motor Symptoms Laterality with Cognition and Other Non-Motor Symptoms in Parkinson's Disease *Esther Cubo, Pablo Martinez Martin, Jaime Kulisevsky, Javier Pagonarraba, Jesus Martin-Gonzalez*

**4:30 p.m. S13.004**  
Ropinirel Prolonged Release Reduces Significant Sleep Disturbance in Patients with Advanced Parkinson's Disease (PD) Not Optimally Controlled with L-dopa K. *Chaudhuri, Luigi Giorgi, Julia Statham*

**4:45 p.m. S13.005**  
Is There a Link between Lower and Higher Order Visual Deficits in Early Parkinson's Disease?: A Case-Control Study *Géraldine Hipp, Michel Vaillant, Nico Diederich, Vannina Pieri*

## S14 Acute Stroke Therapeutics

### Room 608/609

**3:45 p.m. S14.001**  
Cerebrovascular Effects of Mannitol and 23.4% Saline in Ischemic and Hemorrhagic Stroke *Michael Diringer, Allyson Zazulia, William Powers, Tom Videen*

**4:00 p.m. S14.002**  
Dosing Errors Did Not Have a Major Impact on Outcome in the NINDS rt-PA Stroke Study *Steven Messe, Scott Kasner, Brett Cucchiara, David Tanne, Andrew Demchuk, Bichun Ouyang, Steven Levine*

**4:15 p.m. S14.003**  
Eligibility for rt-PA within a Population: The Effect of the ECASS 3 Trial *Dawn Kleindorfer, Jane Khoury, Kathleen Alwell, Charles Moomaw, Daniel Woo, Matthew Flaherty, Joseph Broderick, Brett Kissela*

**4:30 p.m. S14.004**  
Association of Hyperacute Blood Pressure with Early Functional Outcome in Acute Ischemic Stroke Patients *Wei Liu, Georgios Tsvigoulis, Marc Malkoff*

**4:45 p.m. S14.005**  
Tissue Plasminogen Activator Treatment Caused Cerebral Hemorrhage Is Decreased by Mild Hypothermia in Experimental Stroke *Xian Tang, Liping Liu, Maya Koike, Rona Giffard, Midori Yenari*

## S15 Peripheral Nerve I

### Room 606/607

**3:45 p.m. S15.001**  
VEGF Gene Transfer for Treatment of Diabetic Polyneuropathy: A Randomized Double Blinded Trial *Allan Ropper, Kenneth Gorson, Clifton Gooch, David Weinberg, James Ware, Ann Pieczek, Joshua Kershen, Douglas Losordo*

**4:00 p.m. S15.002**  
Clinical and Schwann Cell Phenotypes in a Patient with PMP22 Homozygous Null Mutation *Istvan Katona, Mario Saporta, Louise Carr, Fiona Macdonald, Louise Brueton, Ueli Suter, Michael Shy, Mary Reilly, Jun Li, Helen Roper*

**4:15 p.m. S15.003**  
Novel Mass Spectrometry Approach Distinguishes Varied Amyloid Types in Peripheral Nerve Tissue *Christopher Klein, Peter Dyck, Julie Vrana, Michelle Mauermann, Lawrence Witt, Nathan Staff, Zeldenrust Steven, Robert Bergen, Dogan Ahmet*

**4:30 p.m. S15.004**  
The Genetic Contribution of Copy Number Variants to Hereditary Peripheral Neuropathies *Jia Huang, Justin Price, Gladys Montenegro, Gaofeng Wang, Xingyao Wu, Jeffery Vance, Michael Shy, Stephan Züchner*

**4:45 p.m. S15.005**  
Conduction Block in PMP22 Deficiency *Yunhong Bai, Xuebao Zhang, Istvan Katona, Mario Saporta, Michael Shy, Heather O'Malley, Lori Isom, Ueli Sutter, Jun Li*



**S16 Epilepsy: Women's Issues and Co-Morbidities**

**Room 611/612**

**3:45 p.m. S16.001**  
Case Reports of Pregnancies in Pregabalin Clinical Studies *Jigna Shah, Suzanne Giordano, George Karknias*

**4:00 p.m. S16.002**  
Sixteen-Year Interim Results from an International Observational Study of Pregnancy Outcomes Following Exposure to Lamotrigine *John Messenheimer, John Weil*

**4:15 p.m. S16.003**  
A Double-Blind, Placebo-Controlled, Dose-Ranging Clinical Study To Evaluate the Safety, Tolerability, and Antiepileptic Activity of Ganaxolone in Treatment of Patients with Infantile Spasms *Julia Tsai, John Pellock, Jana von Hehn, Vincent Pierbone, Kenneth Shaw, Elizabeth Garofalo*

**4:30 p.m. S16.004**  
Antiepileptic Drugs Are Associated with Osteoporotic Fractures – A Population-Based Analysis *Nathalie Jette, Lisa Lix, Colleen Metge, Heather Prior, Jane McChesney, William Leslie*

**4:45 p.m. S16.005**  
Risk of Seizures in Children of Women with Epilepsy *Kimford Meador, Gus Baker, Jill Clayton Smith, Laura Kalayjian, Joyce Liporace, Page Pennell, Nancy Browning*

**S17 Multiple Sclerosis: Genetics/Pathology**

**Room 605/610**

**3:45 p.m. S17.001**  
Two Different Arg19 Mutations in the N-terminus of Aquaporin-4 Suggest a Molecular Mechanism of Susceptibility to Neuromyelitis Optica *Marcelo Matiello, Janet Schaefer-Klein, David Hebrink, Daniel Kingsbury, Vanda Lennon, Brian Weinshtenker*

**4:00 p.m. S17.002**  
Long Term Isolated Optic Neuritis and Benign Multiple Sclerosis Carry Alleles Protecting from Malignant Progression *Gabriele De Luca, Sreeram Ramagopalan, Katie Morrison, Lahiru Handunnetthi, Michael Chao, Sarah Orton, Matthew Lincoln, David Dymant, Dessa Sadovnick, George Ebers, Jette Frederiksen*

**4:15 p.m. S17.003**  
HLA-DRB1\*0401 and HLA-DRB1\*0408 Are Strongly Associated with the Development of Antibodies Against Interferon-beta Therapy in Multiple Sclerosis *Sabine Cepok, Steve Hoffmann, Verena Grummel, Klaus Lehmann-Horn, Joerg Hackermueller, Peter Stadler, Hans-Peter Hartung, Achim Berthele, Florian Deisenhammer, Ralf Wasmuth, Bernhard Hemmer*

**4:30 p.m. S17.004**  
Axonal Loss in Primary Progressive MS Is Less Dependent on Demyelination Than in Secondary Progressive MS *Emma Tallantyre, Lars Boe, Lowe James, Nikos Evangelou*

**4:45 p.m. S17.005**  
Increased Inflammation in Diffusely Injured White Matter and in Remyelinated Plaques Correlates with Active Demyelination in Progressive Multiple Sclerosis *Stephan Bramow, Josa Frischer, Per Sorensen, Hans Lassmann, Henning Laursen*

**S18 Cerebrovascular Disease**

**Room 602/603**

**3:45 p.m. S18.001**  
Blockade of Bradykinin Receptor B1 but Not Bradykinin Receptor B2 Provides Protection from Cerebral Infarction and Brain Edema *Christoph Kleinschnitz, Madeleine Austinat, Stefan Braeuning, Michael Bader, Thomas Renné, Guido Stoll*

**4:00 p.m. S18.002**  
NIHSS Score Is Poorly Predictive of Proximal Occlusion in Acute Cerebral Ischemia *Matthew Maas, Michael Lev, Hakan Ay, Aneesh Singhal, David Greer, Wade Smith, Gordon Harris, Elkan Halpern, Walter Koroshetz, Karen Furie*

**4:15 p.m. S18.003**  
Effects of White Matter and Lacunar Volume on a Global Measure of Depression among Cognitively Intact Individuals *Jonathan Gooblar, Lara Heflin, Wendy Mack, Dan Mungas, Bruce Reed, Michael Weiner, Helena Chui, Joel Kramer*

**4:30 p.m. S18.004**  
Biochemical Aspirin Resistance in Acute Ischemic Stroke and Relationship with Humoral Markers *Hung-Yi Hsu, Ying-Tsung Chen, Yu-Ping Ho, Yi-Ying Chiang*

**4:45 p.m. S18.005**  
The Underpinnings of Transient Global Amnesia Due to Jugular Valve Incompetence: Evidence from a Series of 189 Patients *Chiara Agosti, Barbara Borroni, Nabil Akkawi, Alessandro Padovani*

**S19 Ethics and Pain**

**Room 613/614**

**3:45 p.m. S19.001**  
Imaging Genetics: Ethics at the Interface of Research and Clinical Neuroscience *Kate Tairyan, Judy Illes*

**4:00 p.m. S19.002**  
Non-Heart Beating Organ Donor Procedure after Euthanasia in Three Neurological Patients *Patrick Cras, Gerda Van Beeumen, Pat Wijffels, Frank Heyvaert, Dirk Ysebaert*

**4:15 p.m. S19.003**  
Withdrawal and Withhold of Treatment in Severe Acute Stroke Patients: Decision Making Process and Palliative Care *Sophie Crozier, Isabelle Meresse, Philippe Bizouarn, Christine Pires, Yves Samson*

**4:30 p.m. S19.004**  
Death Rounds on a Neurology Inpatient Service: Coping with Death and Dying *Sandeep Khot, Martha Billings, Darrell Owens, W. T. Longstreth, Jr.*

**4:45 p.m. S19.005**  
Neurocognitive Enhancement for the Treatment of Chronic Nonmalignant Pain *Peter Przekop, Allison Przekop, Stephen Ashwal*

**S20 Neurologic Education**

**Room 604**

**3:45 p.m. S20.001**  
Evaluating the Effectiveness of Continuum as a Teaching Tool for Medical Students *Richard Isaacson, Joseph Safdieh, Christopher Ochner*

**4:00 p.m. S20.002**  
Poor Inter-Rater Reliability between Local Faculty and ABPN Examiners in Evaluating the Neurology Clinical Skills Exam: Preliminary Results *Lori Schuh, Zachary London, Robert Neel, Charles Brock, Brett Kissela, Lonni Schultz, Douglas Gelb*

**4:15 p.m. S20.003**  
Comparison of Third and Fourth Year Neurology Clerkship Experience and Its Impact on Attitudes towards Neurology *Imran Ali, Nabeel Herial, Joanne Lynn, Gretchen Tietjen*

**4:30 p.m. S20.004**  
First-Year Outcomes for the Parnassus Integrated Student Clinical Experiences (PISCES): A Multidisciplinary Longitudinal Patient Centered Model for Third-Year Medical Education at the University of California, San Francisco *Heidi Kirsch, Ann Poncelet*

**4:45 p.m. S20.005**  
Video Review for Resident Skills Training and Assessment *Ruple Laughlin*



**Interventional  
Neurology I**

**P03.001** Referral Pattern among Neurologists for Neurointerventional Procedures *Ramy El Khoury, Nazli Janjua*

**P03.002** Necessity of Face Masks and Caps in Neurointerventional Suite Circulating Staff *Oluwakayode Adejoro, Jawairia Memon, M. Fareed Suri, Adnan Qureshi*

**P03.003** Contrast Nephropathy in Aneurysmal Subarachnoid Hemorrhage *Gunjan Parikh, Mohamed Teleb, Denise Campagnolo, Rajiv Poduval, Peter Nakaji*

**P03.004** Stent Supported Revascularization of Acute Basilar Artery Occlusion beyond 8 Hours of Stroke Onset *Amit Kansara, Ambooj Tiwari, Mahmoud Rayes, Chethan Rao, Maggie Jones, Andrew Xavier*

**P03.005** Quantification and Comparison of Techniques for Measuring Cerebral Vasospasm on CTA as Determined by TCD *Steven Hoover, Osamah Choudry, Vahid Tohidi, Ameer Hassan, Charles Prestigiacomo, Jawad Kirmani*

**P03.006** High Risk of Recurrent Ischemic Events among Patients with Deferred Endovascular Treatment for Symptomatic Intracranial Disease *Osman Kozak, Nauman Tariq, M. Fareed Suri, Ramachandra Tummala, Robert Taylor, Adnan Qureshi*

**P03.007** Late Stent Thrombosis Following Self-Expanding Intracranial Stent Placement *Amit Kansara, Ambooj Tiwari, Mahmoud Rayes, Chethan Rao, Maggie Jones, Andrew Xavier*

**P03.008** Correlating Aspirin and Clopidogrel Platelet Function Inhibition with Clinical and Angiographic Outcome during Neurointerventional Procedures *Thodore Klem, Dhruvil Pandya, Thomas Wolfe, Prem Kandiah, Syed Hussain, Brian-Fred Fitzsimmons, John Lynch, Osama Zaidat*

**P03.009** Intraarterial Nicardipine for Treatment of Cocaine Induced Cerebral Vasospasm and Stroke *Ammar AlKawi, Ahmed El-Gengaihy, Akram Shhadeh, Steven Hoover*

**P03.010** The Adjunctive Use of Intra-Arterial Eptifibatid as a Revascularization Tool in Acute Cerebrovascular Ischemia *Jitendra Sharma, Marlon Mathews, J. Mocco, Kenneth Snyder, Catalina Ionita, Adnan Siddiqui, L. Hopkins, Elad Levy*

**Clinical Neurophysiology:  
EMG / NCS**

**P03.011** Correlation of Motor Unit Number Estimates to Histologic Fiber Counts in the Peroneal Nerve of Rabbits *Namita Goyal, Francis Henry, Robert Redmond, William David*

**P03.012** Using Incremental Motor Unit Number Estimation To Quantify Nerve Regeneration Following Various Methods of Surgical Repair of the Transected Rabbit Peroneal Nerve *Namita Goyal, Francis Henry, Laura Baldassari, Robert Redmond, William David*

**P03.013** The Utility of Inching Technique in Diagnosis of Motor Nerve Conduction Block *Mingsheng Liu, Liying Cui*

**P03.014** Electrodiagnostic Profile of Demyelination in Diabetic Neuropathy *Nizar Souayah, Abu Nasar, Nataliya Krivitskaya, Amer Alshekhlée, Russell Chin, Hafiz Khan, Sami Khella, David Krendel, Thomas Brannagan, Peter Siao-Tick-Chong*

**P03.015** Safety of Nerve Conduction Studies in Individuals with Cardiac Pacemakers *Christen Shoemith, Andrew Krahn, Bradley Watson, Kathy Blackler, Michael Nicolle*

**P03.016** Repetitive Nerve Stimulation Test in Myasthenic Crisis *Sunil Goli, Gwendolyn Claussen, Shin Oh*

**P03.017** The Value of Single Fiber Electromyography in Diagnosis of Amyotrophic Lateral Sclerosis *Mingsheng Liu, Liying Cui*

**P03.018 WITHDRAWN**

**P03.019** Atypical Presentation of Multifocal Motor Neuropathy: Clinical and Neurophysiologic Data of Brazilian Male Case Report *Luiz Guanaes, Fernando Cardoso, Osvaldo Nascimento*

**Topics in Clinical  
Neurophysiology**

**P03.020** Time Course of Cortical Facilitation Following Subthalamic Deep Brain Stimulation in Parkinson's Disease *Renju Kuriakose, Utpal Saha, Gabriel Castillo, Carolyn Gunraj, Filomena Mazella, Clement Hamani, Elena Moro, Andres Lozano, Moji Hodaie, Antony Lang, Robert Chen*

**P03.021** Utility of Intraoperative Somatosensory and Motor Evoked Potentials in Detecting Cervical Root Avulsion *Vita Kesner, Brian Crum*

**P03.022** Intraoperative Phrenic Nerve Somatosensory Evoked Potentials during Electrode Implanting Procedure for Chronic Motor Stimulation *Yann Péréon, Axel Terrier, Thibaud Lebouvier, Sylvie Raoul, Jean-Paul Nguyen*

**P03.023** Botulinum Toxin Injection into the Trapezius Muscle of Cynomolgus Monkeys: Comparison of Duration of Action between Serotype A and B *Joseph Arezzo, Mona Litwak, Meg Corliss, Edgar Salazar-Grueso*

**P03.024** Comparison of the Spread of Biological Activity of Botulinum Toxin Type B and Botulinum Toxin Type A in a Monkey Model *Joseph Arezzo, Mona Litwak, Meg Corliss, Edgar Salazar-Grueso*

**P03.025** Electrophysiological and Radiological Findings in Trigeminal Neuralgia – An Attempt To Correlate *Meenakshisundaram Umaiorubahan, Sharana Gowda*

**P03.026** Robust Response of Brain Glucose Metabolism to Short-Term Physiological Stimulation as Evaluated with Early Time Frames on FDG PET *Andrei Vlassenko, Lars Couture, Iga Wegorzewska, Mark Mintun*

**P03.027** White Matter Hyperintensities on 1.5 and 3 Tesla Brain MRI in Healthy Individuals. A Morphological and Topographic Quantitative Comparison Study *Carol DiPerri, Michael Dwyer, David Wack, Jennifer Cox, Komal Hashmi, Erik Saluste, Sara Hussein, Turi Dalaker, Claudiu Schirda, Stefano Bastianello, Roberto Bergamaschi, Robert Zivadinov*

**EEG & Evoked Potentials**

**P03.028** Abnormal Calf Reflexes at Standard Tibial Nerve Somatosensory Evoked Potentials: An Indicator of Pyramidal Involvement in Multiple Sclerosis? *Letizia Leocani, Mariangela Bianco, Renata Balnyte, Laura Straffi, Sebastiano Bucello, Ubaldo Del Carro, Lucia Moiola, Vittorio Martinelli, Giancarlo Comi*

**P03.029** The Evaluation of Brain Atrophy in Multiple Sclerosis; the Relevance of Clinical and Electrophysiological Correlates *Nilufer Kale, Jale Agaoglu, Gulden Onder, Osman Tanik*

**P03.030** An Analysis of EEGs and Laboratory Data in ARPKD Patients for the Detection of Metabolic Abnormalities *Sabina Miranda, John Hughes, Meral Gunay-Aygun, Rebecca Fasano, Susumu Sato*

**P03.031** Is Lazarus' Sign a Spinal Reflex, or a Frontal Seizure? *Rajdeep Singh, Robert Beach, James Sexton, Deborah Bradshaw*

**P03.032** Utility of Electrooculography for Prediction of Outcome of Temporal Lobectomy for Medically Refractory Epilepsy *Matthew Eccher, Samip Patel*

**P03.033** Cognitively Normal Oldest-Old Have Abnormal EEGs: Findings from The 90+ Study *Carrie Brumback Peltz, Howard Kim, Claudia Kawas*

**P03.034** Seizure Diagnosis in the ICU: Yield with Routine EEG *Venkat Ramani, Oceanis Vaou, Donald Risucci*

**P03.035** Acute Mental Status Changes and Subtle Periodic Epileptiform Discharges, Reversible with Bolus of Benzodiazepine Injection: Another Form of NCSE *Pegah Afra, George Zinkhan, Tawnya Constantino, Fumisuke Matsuo*

**Peripheral Nerve II**

**P03.036** MBL Complement Pathway Activity Is Increased in Patients with Multifocal Motor Neuropathy *Elisabeth Cats, Leonard Van den Berg, Jos van Strijp, Erik Heezius, Ger Rijkers, Sanne Piepers, W. -Ludo van der Pol*

**P03.037** Efficacy of Intravenous Immunoglobulin (IVIg) Treatment in Demyelinating Neuropathy Associated with Monoclonal Gammopathy of Unknown Significance (MGUS) *Marie Theaudin, Pierre Lozeron, Catherine Lacroix, Violaine Plante-Bordeneuve, Christian Denier, David Adams*

**P03.038** Long-Term Maintenance Therapy with Subcutaneous Immunoglobulin in Multifocal Motor Neuropathy *Thomas Harbo, Henning Andersen, Johannes Jakobsen*

**P03.039** Anti-Ganglioside Antibodies in Multifocal Motor Neuropathy: Frequency, Specificity and Association with Weakness and Disability *Elisabeth Cats, Leonard Van den Berg, Anne Tio-Gillen, Bart Jacobs, W. -Ludo van der Pol*

**P03.040** Anti-Ganglioside Complex IgM Antibodies in Chronic Immune Mediated Neuropathies *Eduardo Nobile-Orazio, Claudia Giannotta, Fabrizia Terenghi, Sandro Sonnino*

**P03.041** Presence and Severity of Tremor Is Increased in IgM MGUS Neuropathy Compared to Matched Age and Neuropathy Controls *Christopher Klein, Joon Moon, Neeraj Kumar, Steve Zeldenrust, Yanhong Wu, Michelle Mauermann*

**P03.042** Follow-Up Study and Response to Treatment in 18 Patients with Lewis-Sumner Syndrome *Shahram Attarian, Annie Verschuere, Emmanuelle Campana-Salort, Jean-Philippe Azulay, Jean Pouget*

**P03.043** Distal Acquired Demyelinating Sensory (DADS) Neuropathy without Anti-MAG Antibodies (Ab): A Distinct Entity? *Sandrine Larue, Florian Dashi, Karine Viala, Jean Neil, Pierre Bouche, Thierry Maisonobe, Jean-Marc Léger*

**P03.044** Are Biological and Electrophysiological Parameters Related to the Disability of the Patients with Polyneuropathy with Anti-MAG Antibodies? *Emilien Delmont, Mael Launey, Charles Benaim, Sabrina Sacconi, Claude Desnuelle*

**P03.045** Natalizumab in the Therapy of Multifocal Motoric Neuropathy (MMN): First Case Report *Alaleh Raji, Gerhard Winkler*

### Child Neurology: Imaging and Pathology

**P03.046** Chiari 1 Malformation (CM1) in Children with Neurofibromatosis 1 (NF1) *Akil Patel, A. David Rothner*

**P03.047** Comparison of MRI Features of Inflammatory Disorders of the CNS in Children *Adrian Fawcett, Leonard Verhey, Helen Branson, Suzanne Laughlin, Sunita Venkateswaran, Susanne Benseler, Sandra Magalhaes, Brenda Banwell*

**P03.048** Two Unusual Clinical and Radiological Presentations of Biotinidase Deficiency *Niamh Mc Sweeney, Sanjay Bhate, Stephanie Grunewald, Kling Chong, Cheryl Hemingway*

**P03.049** Clinical and Radiological Features of Vein of Galen Malformation *Niamh Mc Sweeney, Sanjay Bhate, Stefan Brew, Vijeya Ganesan*

**P03.050** Loss of ETHE1, a Sulfur Mitochondrial Dioxygenase, Causes Fatal Sulfide Toxicity in Ethylmalonic Encephalopathy *Valeria Tiranti, Carlo Viscomi, Ivano DiMeo, Tatjana Hildebrandt, Marco Rimoldi, Alessandro Prelle, Massimo Zeviani*

**P03.051** Covert Cerebral Infarction on MRI in a UK-Based Population of Children with Sickle Cell Disease *Nomazulu Dlamini, Dawn Saunders, Mike Bynevelt, Deborah Hewes, Tim Cox, Kling Chong, Jane Evans, Fenella Kirkham*

**P03.052** MRI Analysis of the Corpus Callosum in Siblings of Children with Autism Spectrum Disorder *Lauren Branchini, Kristen Lindgren, Helen Tager-Flusberg*

**P03.053** Small-Vessel CNS Vasculitis in Childhood: Clinical and Pathological Correlation *Jorina Elbers, William Halliday, Cynthia Hawkins, Hutchinson Clare, Susanne Benseler*

**P03.054** MRI Lesion Characteristics of ADEM in Children *Leonard Verhey, Suzanne Laughlin, Helen Branson, Adrian Fawcett, Sunita Venkateswaran, Sandra Magalhaes, Brenda Banwell*

**P03.055** Magnetic Resonance (MR) and Diffusion Tensor Imaging (DTI) Abnormalities in Children with Cerebellar Mutism (CM) after Posterior Fossa Tumor Resection *Brannon Morris, Nicholas Phillips, Fred Laningham, Dana Wallace, Kirsten Ness, Amar Gajjar, Robert Ogg*

### Multiple Sclerosis: Neuropathology and Neurophysiology

**P03.056** Quantification of Neuronal Loss in Multiple Sclerosis: A PET Study with [<sup>11</sup>C]-Flumazenil *Bruno Stankoff, Claire Leroy, Florent Sureau, Rana Assouad, Sandrine Bourgeois, Ayman Tourbah, Damien Galanaud, Caroline Papeix, Catherine Lubetzki, Claude Comtat, Jacques Delforge, Regine Trebossen, Michel Bottlaender*

**P03.057** CD4+CD25+Foxp3+ T Cells Are Cytotoxic for Human Neurons *Yohannes Haile, Dion Pasichnyk, Chris Bleackley, Fabrizio Giuliani*

**P03.058** Remyelinated Plaques in Progressive Multiple Sclerosis Are Susceptible to Second Hit Active Demyelination *Stephan Bramow, Josa Frischer, Per Sorensen, Hans Lassmann, Nils Koch-Henriksen, Henning Laursen*

**P03.059** The Killing of Neurons by Activated T Cells Is Promoted by Microglia *Erin O'Ferrall, Brooke Verhaeghe, Rowena Cua, Claudia Silva, V. Wee Yong*

**P03.060** Multifocal Myelinolysis after Rapid Correction of Hyperglycemia *Shan Abbas, Elysia James, L. John Greenfield*

**P03.061** Gadolinium Enhancement Patterns of Tumefactive Demyelinating Lesions: Correlations with Brain Biopsy Findings and Pathophysiology *Masaki Kobayashi, Yuko Shimizu, Noriyuki Shibata, Yuko Ono, Keiko Maruyama, Kohei Ota, Shinichiro Uchiyama*

### Multiple Sclerosis: Imaging

**P03.062** Early MRI Activity during Interferon Beta-1a Therapy Predicts Response to Treatment in Patients at High Risk of Developing Clinically Definite Multiple Sclerosis *R. Philip Kinkel, Paul O'Connor, Jack Simon, John Carulli, Susan Goelz, Robert Hyde, Stefan Lanke, Amy Pace, Alfred Sandrock, Hao Zhang*

**P03.063** Preservation of Brain Adaptive Properties Contributes to the Clinical Picture of Benign Multiple Sclerosis *Antonia Ceccarelli, Maria Rocca, Angelo Ghezzi, Sebastiano Galantucci, Andrea Falini, Giancarlo Comi, Massimo Filippi*

**P03.064** Disruption of the Default Mode Network in Patients with Primary Progressive and Secondary Progressive Multiple Sclerosis *Martina Absinta, Maria Rocca, Paola Valsasina, Gianna Riccitelli, Federica Agosta, Paolo Rossi, Filippo Martinelli-Boneschi, Andrea Falini, Giancarlo Comi, Massimo Filippi*

**P03.065** Contrast Enhanced Susceptibility Weighted Imaging (SWI) Increases Detection of Iron Deposition in Patients with Multiple Sclerosis. A Pilot Study *Claudiu Schirda, Christopher Magnano, Navdeep Nayyar, Jennifer Cox, Michael Dwyer, Robert Zivadinov*

**P03.066** T2 Hyperintensities: Extensive Screening Is Not Necessary To Determine the Diagnosis *Annabelle Chaussenot, Frederic Berthier, Christine Lebrun Frenay*

**P03.067** Application of an Advanced Hidden Markov Chain Approach for Automatic Quantification of Lesions Detection in a Multimodal Magnetic Resonance Imaging Approach in Multiple Sclerosis *Stephanie Bricq, Christophe Collet, Jean-Paul Armspach, Lucien Rumbach*

**P03.068** Relationship between Clinical Aspects in Early Phases of Relapsing-Remitting Multiple Sclerosis and Subsequent Brain Volume Changes *Mario Quarantelli, Roberta Lanzillo, Anna Prinster, Carmine Mollica, Giuseppe Orefice, Arturo Brunetti, Giovanni Vacca, Marco Salvatore, Vincenzo Brescia Morra*

**P03.069** Diffusion Tensor Imaging of the Corticospinal Tracts in Early Relapsing Remitting Multiple Sclerosis: Correlation of Diffusion Parameters with Motor Function *Kyle Kern, Joseph Sarcona, Barbara Giesser, Michael Montag, Amrapali Arshanapalli, Kristi Clark, Nancy Sicotte*

**P03.070** Intracortical Lesion Detection by Advanced MRI Techniques and Correlation with MS Related Cognitive Impairment *Flavia Nelson, Miriam Morales, Parik Gaurav, Francisco Perez, Ponnada Narayana, Jerry Wolinsky*

**P03.071** Natalizumab (Tysabri®) Promotes Remyelination in Patients with Multiple Sclerosis. A Voxel-Wise Magnetization Transfer Imaging Case-Control Study *Robert Zivadinov, Michael Dwyer, Niels Bergsland, Sara Hussein, Jennifer Cox, Jacqueline Durfee, Navdeep Nayyar, David Hojnacki, Komal Hashmi, Mari Heininen-Brown, Lynn Choufeh, Ellen Carl, Bianca Weinstock-Guttman*

**P03.072** Axial and Radial Diffusivity in Patients with Multiple Sclerosis *Sara Hussein, Michael Dwyer, Jennifer Cox, Robert Zivadinov*

**P03.073** Evidence for Enhanced Functional Activity of Cervical Cord in Primary Progressive Multiple Sclerosis *Giulia Longoni, Martina Absinta, Federica Agosta, Paola Valsasina, Domenico Caputo, Massimo Filippi*

**P03.074** Diffusion Tensor Imaging of Corpus Callosum Integrity in Multiple Sclerosis: Correlation with Disease Variables *Sigal Tal, Mark Dolev, Gil Harari, Anat Achiron*

**P03.075** Brain MRI T1/T2 Lesion Ratio Correlates with Disability: Insight into Tissue Injury, and Implications for Trial Design and Therapeutic Strategies *Omar Khan, Fen Bao, Stephanie Hreha, Megha Shah, Jai Perumal, Zahid Latif, Christina Caon, Imad Zak, Alexandros Tselis, Robert Lisak, Scott Millis*

**P03.076** Consortium of Multiple Sclerosis Centers (CMSC) Guidelines for a Standardized MRI Protocol for the Diagnosis and Follow-Up of Multiple Sclerosis: 2008 Revision *Anthony Traboulsee, Lael Stone, Jack Simon, Jerry Wolinsky, Paul O'Connor, Ernst-Wilhelm Radue, David Li*

**P03.077** Effect of Glatiramer Acetate on Microglial Activation as Measured by PET in Multiple Sclerosis *John Ratchford, Christopher Endres, Dima Hammoud, Crystal Watkins, Martin Pomper, Peter Calabresi*

**P03.078** The Spectrum of Cognitive Impairment and Its Relation to Brain Morphology Including Iron Deposition in Multiple Sclerosis *Michael Khalil, Christian Enzinger, Christian Langkammer, Katja Petrovic, Marisa Löffelner, Maria Tscherner, Margit Jehna, Mirja Wallner-Blazek, Stefan Ropele, Reinhold Schmidt, Siegrid Fuchs, Franz Fazekas*

**P03.079** Quality of Life in Multiple Sclerosis Is Associated with White Matter Lesion Burden and Brain Volume on Brain MRI *Ellen Mowry, Azadeh Beheshtian, Emmanuelle Waubant, Douglas Goodin, Bruce Cree, Pamela Qualley, Michaela George, Refujia Gomez, Stephen Hauser, Darin Okuda, Daniel Pelletier*



**P03.080** Cortical Atrophy as a Neural Correlate of Fatigue in Multiple Sclerosis: A 3.0 T Imaging Study *Clelia Pellicano, Antonio Gallo, Xiaobai Li, Vasiliki Ikonomidou, Iordanis Evangelou, Joan Ohayon, Susan Sterne, Mary Ehrmantraut, Fred Cantor, Henry McFarland, Francesca Bagnato*

**P03.081** A Sensitive, Noise-Resistant Method for Identifying Voxel-Wise Changes in Magnetization Transfer Ratio *Michael Dwyer, Niels Bergsland, Sara Hussein, Jacqueline Durfee, Bianca Weinstock-Guttman, Robert Zivadinov*

**P03.082** Splenium of the Corpus Callosum Affected in Early Relapsing Remitting Multiple Sclerosis: Changes Detected with Diffusion Tensor Imaging and Thickness Measures *Kyle Kern, Evan Momen, Kristi Clark, Barbara Giesser, Michael Montag, Amrapali Arshanapalli, Yonggang Shi, Nancy Sicotte*

**P03.083** Six-Year Prospective Multi-Voxel Brain MRS Study of Two Cohorts in RRMS To Examine the Effect of Glatiramer Acetate on Neuronal/Axonal Metabolic Injury *Jai Perumal, Stephanie Hreha, Yimin Shen, Yang Xuan, Christina Caon, Fen Bao, Zahid Latif, Alexandros Tselis, Imad Zak, Omar Khan*

**P03.084** Longitudinal Imaging of Myelin Repair and Axonal Loss in Multiple Sclerosis *Thomas Cronin, Jian Lin, Xiaofeng Wang, Ken Sakaie, Mark Lowe, Michael Phillips, Robert Fox*

**P03.085** Rate of Change in Diffusion Tensor MRI Parameters in the Corpus Callosum in Multiple Sclerosis *Daniel Harrison, Daniel Reich, Arzu Ozturk, Peter Calabresi*

**P03.086** Dirty Appearing White Matter on 1.5 and 3 Tesla Brain MRI in Multiple Sclerosis. A Morphological Quantitative Comparison Study *Laura Ranza, Niels Bergsland, Michael Dwyer, Carol DiPerri, Jennifer Cox, Sara Hussein, Stefano Bastianello, Roberto Bergamaschi, Robert Zivadinov*

**P03.087** Semi-Automated Lesion Activity Analysis (SALAA) in Patients with Multiple Sclerosis *David Wack, Michael Dwyer, Jacqueline Durfee, Sara Hussein, Robert Zivadinov*

**Neuroimaging and Parkinson's Disease**

**P03.088** Diagnostic Efficacy and Safety of 123I-Altropine SPECT Neuroimaging in Parkinson Syndrome (PS) *Mark Hurtt, Susan Flint*

**P03.089** Dopaminergic Denervation Pattern in Parkinson's Patients with and without Depression – A Comparative Study *Sujith Thazha Kuniyil, Carol Lane, Edwin Mac, Michael Schulzer, Allan Young, Jess McKenzie, Jon Stoessl*

**P03.090** Quantitative Magnetic Resonance Spectroscopic Imaging in Parkinson's Disease, Progressive Supranuclear Palsy and Multiple System Atrophy *Carlos Guevara, Camilla Blain, Daniel Stahl, David Lythgoe, Gareth Barker, P. Nigel Leigh*

**P03.091** Cortical Abnormalities in De-Novo Different Motor Subtypes of Parkinson's Disease: A VBM Based MR Study *Claudio Lucetti, Carlo Tessa, Paolo Del Dotto, Marco Giannelli, Riccardo Della Nave, Caterina Berti, Chiara Logi, Andrea Ginestroni, Mario Mascalchi, Ubaldo Bonuccelli*

**P03.092** Cerebral Cholinergic Deficits in Parkinsonian Syndromes *Sid Gilman, Robert Koeppe, Bin Nan, Chia-Ning Wang, Larry Junck, Ronald Chervin, Flavia Consens, Arijit Bhaumik*

**P03.093** Comparative Value of Brain MRI and 123I-MIBG Myocardial Scintigraphy in Distinguishing amongst Lewy Body Disease, Progressive Supranuclear Palsy and Corticobasal Degeneration *Mitsuhiro Yoshita, Daisuke Noto, Kazuya Takahashi, Masahito Yamada*

**P03.094** Parkinson and Alzheimer-Selective Hyposmia Measures Have Different Neurochemical Substrates in Patients with Parkinson's Disease *Vikas Kotagal, Martijn Muller, Robert Koeppe, Kirk Frey, Roger Albin, Nicolaas Bohnen*

**P03.095** Brainstem FLAIR Hyperintensity in Frontotemporal Dementia and Parkinsonism Linked to Chromosome 17 (FTDP-17) *Katherine Schweitzer, Jerzy Slowinski, Bradley Boeve, Christian Wider, Clifford Jack, Hitoshi Shinotoh, Ryan Uitti, Audrey Strongosky, Daniel Broderick, Zbigniew Wszolek*

**P03.096** Increased Striatal 6-[18F] Fluorodopa Uptake in Parkinson Disease with vs. without Neurogenic Orthostatic Hypotension *David Goldstein, Courtney Holmes, LaToya Sewell, Irwin Kopin*

**P03.097** A Fast Gray Matter Acquisition T1 Inversion Recovery (FGATIR) Magnetic Resonance Imaging (MRI) Sequence for Direct High Resolution Visualization of Subcortical Structures *Atchar Sudhyadhom, Ihtsham Haq, Kelly Foote, Michael Okun, Frank Bova*

**Aging and Dementia: Imaging I**

**P03.098** Effect of Bapineuzumab on MRI Measures of Cerebral Volume Change in Patients with Alzheimer's Disease *Nick Fox, Charles DeCarli, Ronald Black, Michael Grundman*

**P03.099** Focal Reduction in Frontal White Matter Fractional Anisotropy Corresponds to Slower Processing Speed in Normal Older Adults *Geoffrey Kerchner, Caroline Racine, Sandra Hale, Victor Laluz, Reva Wilhelm, Stephen Hauser, Bruce Miller, Joel Kramer*

**P03.100** Intracranial Volume and Brain Structure Effects on Cognition in Diverse Older Persons *Dan Mungas, Bruce Reed, Sarah Farias, Owen Carmichael, Kimberly Carter, Charles DeCarli*

**P03.101** Thinning of the Insular Cortex in Frontotemporal Lobar Degeneration *Scott McGinnis, Akram Bakkour, Alyson Negreira, Daisy Sapolsky, Bradford Dickerson*

**P03.102** Enhanced CBF Changes by Donepezil Treatment Correlate with Cognitive Improvement in Mild Alzheimer's Disease *Piero Antuono, Jennifer Jones, Chunming Xie, Wenjun Li, Zhilin Wu, Thomas McRae, Shi-Jiang Li*

**P03.103** Diffusion Tensor Imaging Characteristics of Dementia with Lewy Bodies and Alzheimer's Disease *Kejal Kantarci, Ramesh Avula, Ali Samikoglu, Maria Shiung, Scott Przybelski, Stephen Weigand, Heidi Ward, Prashanthi Vemuri, David Knopman, Bradley Boeve, Ronald Petersen, Clifford Jack*

**P03.104** Anosognosia for Behavioral Disturbances in Frontotemporal Dementia and Corticobasal Syndrome: A Voxel-Based Morphometry Study *Giovanna Zamboni, Jordan Grafman, Frank Krueger, Kristine Knutson, Eduard Huey*

**P03.105** Patterns and Rates of Brain Atrophy in Frontotemporal Dementia with Mutations in MAPT or PGRN *Jennifer Whitwell, Clifford Jack, Bradley Boeve, Matthew Senjem, Matthew Baker, Rosa Rademakers, Robert Ivnik, David Knopman, Zbigniew Wszolek, Ronald Petersen, Keith Josephs*

**P03.106** Measurement of Grey Matter Water Diffusion in Frontotemporal Dementia Variants and Alzheimer's Disease *Jennifer Whitwell, Ramesh Avula, Kejal Kantarci, Ali Samikoglu, Stephen Weigand, Heidi Ward, Keith Josephs, Prashanthi Vemuri, David Knopman, Bradley Boeve, Ronald Petersen, Clifford Jack*

**P03.107** Grey Matter Atrophy and Clinical Correlations in Definite Alzheimer's Disease and Lewy Body Variant AD *Mikel Olabarrieta, Seong-Hye Choi, Oscar Lopez, Victoria Maruca, Steven Dekosky, Ronald Hamilton, James Becker*

**P03.108** Age-Related Decline in Visuospatial Processing Speed Is Associated with Decreased White Matter Volume in the Right Parahippocampal Region and Right Temporal Lobe *Victor Laluz, Sandra Hale, Reva Wilhelm, Kari Haws, Stephen Wilson, Stephen Hauser, Bruce Miller, Joel Kramer, Caroline Racine*

**P03.109** 11C-PiB PET and Hippocampal Volumes Are Complementary in Distinguishing Dementia with Lewy Bodies and Alzheimer's Disease *Kejal Kantarci, Val Lowe, Matthew Senjem, Maria Shiung, Stephen Weigand, Brad Kemp, David Knopman, Bradley Boeve, Ronald Petersen, Clifford Jack*

**P03.110** Neural Substrates for Topographical Disorientation in the Mild Cognitive Impairment: A Voxel Based Morphometry Study *So Young Moon, Sang Mi Lee, Dahaye Park*

**P03.111** Memantine Treatment in Patients with Alzheimer's Disease Is Associated with a Slower Right Hippocampal Volume Loss: An Open-Label, Multi-Center Trial *Michael Weiner, Stephen Graham, Robert Hofbauer, Sung Yu, Shaoyi Li, Hai-An Hsu, Joyce Suhy, James Perhach*

**P03.112** Spatially-Localized Hippocampal Atrophy Measures Correlate with Domain-Specific Cognitive Decline in AD and MCI *Jing Xie, Charles DeCarli, Evan Fletcher, Dan Mungas, Bruce Reed, Oliver Martinez, Maria Persiananova, Dan Alcantara, Nina Amenta, Owen Carmichael*

**P03.113** Neural Correlates of Lexical-Semantic Memory in Mild Alzheimer's Disease and Amnesic Mild Cognitive Impairment: A Voxel-Based Morphometry Study *Marcio Balthazar, Clarissa Yasuda, Fabricio Pereira, Fernando Cendes, Benito Damasceno*

**P03.114** Distinct Patterns of Cortical Atrophy According to Pathology in Logopenic Progressive Aphasia and Progressive Non-Fluent Aphasia *Corey McMillan, William Hu, David Libon, Virginia Lee, John Trojanowski, Murray Grossman*

**P03.115** Accuracy of Dementia Diagnosis: A Direct Comparison of Radiologists and a Computerized Method *Cynthia Stonnington, Stefan Klöppel, Josephine Barnes, Frederick Chen, Carlton Chu, Catriona Good, Irina Mader, L. Mitchell, Ameet Patel, Catherine Roberts, Nick Fox, Clifford Jack, Jr., John Ashburner, Richard Frackowiak*

**P03.116** Diagnosis of Alzheimer's Disease by Neuroimaging: Volumetric Versus Visual Rating System *Qian Shen, Elizabeth Potter, Jason Appel, Nisha Bhatia, Warren Barker, Yougui Wu, Elizabeth Schofield, Maria Greig, David Loewenstein, Wiewhao Zhao, Ranjan Duara*

**P03.117** Sensorimotor Network Rewiring in Patients with Mild Cognitive Impairment and Alzheimer's Disease *Federica Agosta, Maria Rocca, Elisabetta Pagani, Martina Absinta, Maria Luisa Gorno-Tempini, Giuseppe Magnani, Alessandra Marcone, Monica Falautano, Giancarlo Comi, Massimo Filippi*

#### Imaging: Ischemic and Hemorrhagic Stroke

**P03.118** Superficial Siderosis *Julie Khoury, Dan Capampangan, David Dodick, Erika Driver-Dunkley, Kent Nelson, Joseph Hoxworth, Maria Aguilar*

**P03.119** Symptom Presentation and CT Scan Findings of Patients with Intracerebral Hemorrhage *Ravneet Dhillon, Jain Anunaya, Adetolu Odufuye, M. Fernanda Bellolio, Alejandro Rabinstein, Rachel Gilmore, Sailaja Enduri, Luis Serrano, Veena Manivannan, Balavani Palamari, Neeraja Yerragonda, Raghav Chandra, Wyatt Decker, Latha Stead*

**P03.120** An Eye Ball Estimation of Intracerebral Hemorrhages *Jefferson Miley, Haitham Hussein, Adam Todd, Erik Uhlmann, Douglas Valenta, Osman Kozak, Gabriela Vazquez, Mustapha Ezzeddine*

**P03.121** Acute Ischemic Infarction Complicating Intracerebral Hemorrhage – Is Aggressive Blood Pressure Lowering To Blame? *Rajesh Gupta, Sayona John, Richard Temes, Vivien Lee, Shyam Prabhakaran*

**P03.122** Radiologic Characteristics of Biopsy Definite CNS Vasculitis *Raphael Carandang, Leonard Calabrese, Anthony Furlan*

**P03.123** Stroke during Transcranial Doppler Shunt Study *Gunjan Parikh, Tzu-Ching Wu, Mohamed Teleb, James Frey*

**P03.124** Temporal Progression of Silent Microbleeds in Patients with Symptomatic Cerebrovascular Disease *Alejandro Ponz, Rosario Gil, Raquel Chamarro, Jose Miguel Santonja, Anna Piera, Begoña Lopez*

**P03.125** Predictors of Stroke and Its Significance in the Outcome of Tuberculous Meningitis *Jayantee Kalita, Usha Misra, Pradeep Nair*

**P03.126** Ischemic Lesion Localization Due to Cardioembolic or Large Vessel Sources: Voxel Based Lesion Symptom Mapping Approach *Sylvia Hermans, Patrick Dupont, Vincent Thijs*

**P03.127** Establishing a Threshold of Hippoatenuation for Identifying the Ischemic Brain Tissue on ASPECTS Regions *Marisol Ferrúa, Analía Calle, Rosa Ansani, Diego Haberman, Rafael Zamora, Francisco Klein, Luciano Sposato*

#### Cerebrovascular Imaging

**P03.128** Sequential Magnetic Resonance Imaging Refutes the Notion That Proximal Thrombus Extension Is the Underlying Mechanism in Progressive Paramedian Lacunar Infarctions *Bryan Ludwig, Edip Gurol, Enrique Leira, Harold Adams*

**P03.129** Basilar Artery Atherosclerotic Plaques in Pontine Infarction: An HR MRI Study *Isabelle Klein, Philippa Lavallée, Elisabeth Schouman-Claeys, Pierre Amarenco*

**P03.130** Evaluation of Cerebrovascular Reactivity with Real Time BOLD MRI in Children *William Logan, Bejoy Thomas, Logi Vidarsson, Elizabeth Donner, Manohar Shroff*

**P03.131** Is There Any Difference of Susceptibility Vessel Sign on T2\*-Weighted Gradient Echo Imaging? Cardioembolic Versus Atherosclerotic Occlusion *Jun-Gyu Yang, Kyung-Hee Cho, Hyuk-Won Chang, Chul-Ho Sohn, Sung-Il Sohn*

**P03.132** Lesion Patterns, Perfusion-Diffusion Mismatch, and Lesion Growth of Border-Zone Infarcts According to Underlying Stroke Etiology *Hoyon Sohn, Sung-Hee Yoo, Dong-Wha Kang*

**P03.133** Comparison of Susceptibility-Weighted Imaging (SWI) and T2-Weighted Gradient-Echo Sequence (GE) in a Prospective Series of Ten Patients with Familial Cerebral Cavernomas Angiomas (FCCM) *Pierre Labauge, Nicolas Menjot de Champfleuf, Christophe Langlois, Denis Hoa, Emmanuelle Lebars, Alain Bonafe, Hugues Duffau*

**P03.134** CT Angiography and Aortic Arch Atherosclerosis *Dan Capampangan, Ameet Patel, Steven Lester, Lesly Pearce, Bart Demaerschalk, David Dodick, Terri Kiernan, Timothy Ingall, Maria Aguilar*

**P03.135** Incidental Findings on Cerebral Angiography Performed for Wada Testing *Shaun Smart, Reza Behrouz, Selim Benbadis, James Leffler*

**P03.136** Initial Experience with Combined 64-Slice CT Perfusion (CTP) and CT Angiography (CTA) in Routine Practice. Potential and Pitfalls *David Tong, Jack Rose, Jackie Phan, Ann Bedenk, Jerome Barakos, Daniel McDermott*

**P03.137** Leptomeningeal Collateral Response and Extent of Ischemic Penumbra in Patients with Acute Middle Cerebral Artery Occlusion *Rakesh Khatri, Gustavo Rodriguez, M. Fared Suri, Alexandros Georgiadis, Gabriela Vazquez, Adnan Qureshi, Mustapha Ezzeddine*

**P03.138** Estimating Permeability from Perfusion Weighted Images as a Marker for Subsequent Intracranial Hemorrhage in Acute Stroke *Richard Leigh, Argye Hillis, Peter Barker*

**P03.139** Sensitivity of CT for Detecting Posterior Fossa Infarcts *David Hwang, Gisele Silva, Karen Furie, David Greer*

**P03.140** MR Angiography in Ischemic Stroke Patients from North India *Usha Misra, Jayantee Kalita, Gyanendra Kumar, Vikas Bansal, Sunil Jain, Bishwanath Kumar*

**P03.141** Prior Endarterectomy Is a Predictor of the Absence of Carotid Stent Restenosis *Michael Katsnelson, Andrea Rosso, Dan Gzesh*

**P03.142** Combined Perihematoma Edema and Hematoma Volume as Predictor of Late Outcome in Patients with Spontaneous Intracerebral Hemorrhage (SICH) *Ahmed El-Gengaihy, Hussam Yacoub, Bahareh Hassanzadeh, Rasha Fahmy, Jawad Kirmani*

**P03.143** CT Perfusion Abnormalities in TIA Patients: A Marker of Stroke Risk *Jordan Samuels, Bethany McClenathan, Vivien Lee, Shyam Prabhakaran*

**P03.144** Association between Carotid Plaque Burden and Large Artery Atherosclerosis in Acute Ischemic Stroke *Hyo Suk Nam, Jae Jung Lee, Yo Han Jung, Jae Hoon Yang, Young Dae Kim, Ji Hoe Heo*

**P03.145** Assessment of Measurement Techniques for Degree of Stenosis of Carotid Artery *Jennifer Zick, Nauman Tariq, Gabriela Vazquez, Gustavo Rodriguez, Afshin Divani*

**P03.146** Diffusion Negative FDG PETCT Positive Strokes *Lakshmi Narasimhan Ranganathan, Srinavasaraman Govindarajan, Suriyakumar Govindarajulu, Amol Galge, Rajamani Kumarasamy, Anand Krishnamoorthy*

**P03.147** Is Quality of MES More Important Than Its Quantity? Relative Energy Index of Microembolic Signal Better Predicts DWI Lesion Volume and Clinical Outcome of Acute Ischemic Stroke Than Frequency of Microembolic Signal Does *Youngbin Choi, Maher Saqqur, Ali Al-Khathaami, Jayme Kosior, Eileen Stewart, Caroline Stephenson, Talip Asil, Jean-Martin Boulanger, Andrew Demchuk*

#### Stroke Subtypes

**P03.148** Predictors of PEG Tube Placement in Acute Ischemic Stroke *Devon Conway, Nishant Ranawat, Michael Degeorgia, Amer Alshekhlee*

**P03.149** Data Mining Physiologic and Clinical Variables from Hospital Information Sets To Improve Quality of Stroke Care *Monica Sapo, Farzad Buxey, Neil Martin, Rodelito Alfonso, Latisha Ali, David Liebeskind, Bruce Ovbiagele, Jeffrey Saver*

**P03.150** Right Hemisphere Stroke Patients May Present with Many and Varied Cognitive Syndromes *Michael Hoffmann, Ren Chen*

**P03.151** Is the Etiological Spectrum of Embolic Stroke Changing in India? Stroke Registry-Based Study *Amitav Rath, Jagarlapudi M. K. Murthy, Amrit B. Saxena*

**P03.152** Platelet Activation in Subtypes of Acute Ischemic Stroke: A Flow Cytometry Analysis *Anand Vaishnav, Suellen Ferraris*

**P03.153** Stroke Subtypes and Risk Factors in Sri Lanka – Experience of a Stroke Unit *Udaya Ranawaka, Muditha Weerakody, Iruka Dissanayake, Harshani Perera, Jagath Wijesekera*

**P03.154** Pure Motor Upper Limb Weakness and Infarction in the Precentral Gyrus: Mechanism of Stroke *Maria Stefanidou, Aleksandra Pikula, Ioannis Karakis, Jose Romero, Carlos Kase*

**P03.155** Comparison of Lacunar Infarct with Branch Atheromatous Occlusion *Sung Rae Kim, So-Hyun Kim, Il-Gon Kim, Eun-Cheol Song, Seong Hye Choi, Choong-Kun Ha, Joung-Ho Rha*



**P03.156** Intravenous Thrombolysis in Cocaine Associated Ischemic Stroke *Alberto Ramos, Yolanda Reyes-Iglesias, Gustavo Ortiz, Sebastian Koch*

**Infections/AIDS/Prion Disease I**

**P03.157** Community-Acquired Bacterial Meningitis: A Five-Year Experience at a University Referral Hospital *Sandeep Khot, Thanh Ton, Joseph Zunt*

**P03.158** Septic Encephalopathy with Multiple Microabscesses in Patient with Klebsiella Sepsis *Hyo Suk Nam, Tae Sung Lim, Young Hwa Choi, Eung Yeop Kim, Ji Hoe Heo*

**P03.159** Brain Abscess Due to Uncommon Pathogens in Immunocompetent Individuals: A Perspective Study from a Developing Country *Sundaram Challa, V. Lakshmi, M. K. Panigrahi, A. K. Purohit*

**P03.160** Microfasciculation: A Peculiar Nerve Response in Leprosy Nerve Damage *Márcia Jardim, Robson Vital, Ariane Oliveira, Mildred Medeiros, Suzana Corte-Real, Lucineia Alves, Maria Pessolani, José Nery, Anna Sales, Euzenir Sarno, Sérgio Antunes*

**P03.161** Disseminated Pyomyositis: A Rare Cause of Weakness and Muscle Tenderness with Normal CK and Aldolase Levels *Fazeel Siddiqui, Brajesh Agrawal, Thomas Ala*

**P03.162** Acute Disseminated Encephalomyelitis (ADEM): A Prospective Study on 122 Adults *Sabrina Ravaglia, Stefano Bastianello, Eleonora Tavazzi, Arrigo Moglia, Mauro Ceroni, Enrico Marchioni*

**P03.163** Reactivation of Herpes Viruses in Multiple Sclerosis Patients on Natalizumab Therapy *Nicoline Schiess, Jianchao Zong, Gary Hayward, Peter Calabresi, Avindra Nath*

**P03.164** Treatable Solitary Blindness: An Unusual Initial Manifestation of Herpes Simplex Virus Type 2 (HSV2) Meningoencephalitis in a Cancer Patient *Lilit Mnatsakanyan, Fernando Goldenberg, Jeffrey Frank*

**P03.165** Sandfly Virus Meningoencephalitis *Asaf Peretz, Miriam Lorberbaum, Hanna Bin, Hagit Peleg, Boris Shihman, Israel Steiner*

**P03.166** Lyme Dementia *Frederic Blanc, Catherine Kleitz, Nadine Longato, Barbara Jung, Nadjette Cremler, François Sellal, Stephane Kremer, Izzie Namer, Jerome De Seze*

**P03.167** Variant Creutzfeldt-Jakob Disease in France and the United Kingdom: Evidence for the Involvement of the Same Agent Strain *Jean-Philippe Brandel, Craig Heath, Mark Head, Etienne Levavasseur, Richard Knight, Jean-Louis Laplanche, Jan Langeveld, James Ironside, Jean-Jacques Hauw, Jan Mackenzie, Annick Alperovitch, Robert Will, Stéphane Haik*

**P03.168** What Is the Prognostic Significance of Alien Hand Sign in Creutzfeldt-Jakob Disease? *Burton Kennedy, Francis Walker*

**P03.169** Characterization of Movement Disorders in Familial Creutzfeldt-Jakob Disease (fCJD) *Oren Cohen, Joab Chapman, Zeev Nitsan, Lilach Ephraty, Rakefet Tsbary, Shmuel Appel, Amos Korczyn, Ester Kahana, Isak Prohovnik*

**P03.170** Atypical MRI and CSF Presentation in a Patient with Gerstmann-Sträussler-Scheinker Syndrome *Arielle Kurzweil, Eric Lindzen, Tomas Holmlund, Bianca Weinstock-Guttman*

**P03.171** Lack of In Vivo Microglial Activation in Fatal Familial Insomnia as Revealed by [11C]-PK11195 PET *Daniela Perani, Valentina Garibotto, Ioana Florea, Mario Matarrese, Andrea Panzacchi, Rosa Maria Moresco, Ferruccio Fazio, Ignazio Roiter, Pietro Cortelli*

**P03.172** Disruption of White-Matter Pathways in fCJD *Isak Prohovnik, Hedok Lee, Oren Cohen, Chen Hoffmann, Hanna Rosenmann, Joab Chapman*

**P03.173** Diffusion Tensor Imaging in Patients with Creutzfeldt-Jakob Disease *Koji Fujita, Shunya Nakane, Masafumi Harada, Tatsuhiko Yuasa, Yuishin Izumi, Ryuji Kaji*

**P03.174** Correlation between Subcortical Atrophy and Survival of CJD Patients *Isak Prohovnik, Oren Cohen, Chen Hoffmann, Hedok Lee, Hanna Rosenmann, Esther Kahana, Joab Chapman*

**P03.175** Potential Risk Factors for Sporadic Creutzfeldt-Jakob Disease *Yusei Shiga, Yoshikazu Nakamura, Kinya Hisanaga, Masahito Yamada, Hidehiro Mizusawa*

**P03.176** Pro-Active Prion Exposure Risk Reduction in Patients Undergoing Brain Biopsy: It's the Cases That You Don't Suspect That Pose the Greatest Risk *J. Goodman, Suzanne Powell*



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## Poster Session IV

7:00 a.m.–10:00 a.m.

### Contemporary Clinical Issues and Case Studies Plenary Session

9:00 a.m.–12:00 p.m.

Washington State Convention and Trade Center, Exhibit Hall 4A



**Moderator: Stefan M. Pulst, MD, FAAN, Chair, Science Committee and Scientific Program Subcommittee**

This session 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. In addition to the

Contemporary Clinical Issues discussion, a case study format addresses topics of interest.

**"Parental Dementia and Alzheimer Disease Are Associated with Poorer Memory in Middle-Aged Adults: The Framingham Offspring Study"**

Stephanie Debette, MD, PhD, Lille, France  
Discussant: David A. Bennett, MD, Chicago, IL

**"The Inclusion of Women of Childbearing Potential (WOCBP) in Clinical Trials With Neurologic Diseases and Procedures"**

Barbara P. Karp, MD, Potomac, MD  
Discussant: Karl D. Kieburtz, MD, FAAN, Rochester, NY

In addition to the Contemporary Clinical Issues discussion, a case study format will address the following topics:

**"Sudden Unexplained Death in Epilepsy"**

Elizabeth Donner, MD, FRCPC, Toronto, ON

**"Use of mTOR Inhibitor in the Treatment of Tuberous Sclerosis Complex"**

David N. Franz, MD, Cincinnati, OH

**"Can the Sunshine Vitamin Throw Light on MS? The Case for Vitamin D in MS Prevention"**

Alberto Ascherio, MD, PhD, Boston, MA

**"Extending the Time Window for Thrombolytic Therapy for Acute Stroke"**

Patrick D. Lyden MD, FAAN, San Diego, CA

## **NEW!** Poster Session V

11:30 a.m.–2:30 p.m.

## Exhibits

11:30 a.m.–5:00 p.m.

### Complimentary luncheon

12:00 p.m.–2:00 p.m.

Washington State Convention and Trade Center, Exhibit Halls 4B-4F

See the latest in pharmaceutical products, medical equipment, publications, and products to assist with practice management, teaching methods, and research activities.

### American Academy of Neurology & American Academy of Neurology Foundation Awards Luncheon

12:00 p.m.–1:30 p.m.

Grand Ballroom A-D

Sheraton Seattle Hotel



Join AAN leaders as they honor the recipients of the 2009 AAN Awards. From enterprising high school students to world renowned researchers, this program recognizes some of the top accomplishments in neuroscience research. The Public Leadership in Neurology Award recipient and speaker for 2009 will be Paul G. Allen, co-founder of Microsoft, in recognition of his commitment to brain research. Owner of the Seattle Seahawks

NFL and Portland Trail Blazers NBA franchises, the Sounders FC soccer team—as well as the founder of the Experience Music Project and Science Fiction Museum & Hall of Fame in Seattle—Allen is being recognized for his strong commitment to brain research, including his \$100 million contribution to the founding of the Allen Institute for Brain Science in his hometown of Seattle.

Allen's commitment to nonprofit organizations—exemplified by his nearly \$1 billion in lifetime giving—has earned him the status as one of the top philanthropists in America. After being diagnosed with Hodgkin's lymphoma in 1982 and achieving remission after 22 months of radiation treatments, Allen became particularly motivated to support scientific research and medicine. He launched his first foundation in 1988 to focus specifically on medical research, a broad range of health and human service needs, and the arts.

Past keynote speakers on the importance of neurological research for diseases include Tedy Bruschi, NFL player and stroke survivor; Dame Julie Andrews, Academy Award-winning actress and supporter for Huntington's Chorea and the Hereditary Disease Foundation; Cuba Gooding, Jr., actor and supporter for MS research; Leeza Gibbons, television and radio journalist and advocate for people with Alzheimer's disease; the famed concert pianist and conductor Maestro Leon Fleischer, who continues to play the piano despite dystonia; Mayo Clinic researcher Anthony Windebank, MD; and advocate for Parkinson's disease research Michael J. Fox.

# WEDNESDAY, APRIL 29 HIGHLIGHTS

Tickets are available for \$50. Buy a ticket and show your support for award recipients. Student and Junior members of the AAN may attend this event at no cost by requesting a ticket.

## 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.

To reserve a department table, download the form at [www.aan.com/go/am/special/luncheon](http://www.aan.com/go/am/special/luncheon). If you have questions about reserving a department table, contact Nancy Poechmann at [npoechmann@aan.com](mailto:npoechmann@aan.com) or (651) 695-2812.

## Poster Session VI

4:00 p.m.–7:00 p.m.

## Controversial Issues in Practice Session: Health Care Reform for the Obama Administration and a New Congress—First 100 Days and Beyond

5:15 p.m.–7:00 p.m.

Opportunities abound for big changes in health care with the new administration in 2009. President Obama has named health reform as a top priority and has committed to change in the very first days of his presidency. Attend this session to learn about how changes will impact neurology.

## **NEW!** AAN Foundation Wine Tasting and Auction

7:00 p.m.–9:30 p.m.

Grand Ballroom, Sheraton Hotel

This exclusive event will offer wine tasting from several Pacific Northwest-based vineyards. Enjoy an array of food, music, and fun. Bid on a variety of silent auction prizes including fine art, wine, entertainment, gifts, and more. The evening culminates with a live auction of exciting prizes. Proceeds benefit the AAN Foundation Research Program. Tickets are limited. Register early.

Tickets are \$100 per guest.

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**Parkinson's Disease and Movement Disorders**

**P04.001** Analysis of the Parkinson's Disease Genes, LRRK2 and GBA, in Essential Tremor *Lorraine Clark, Naeun Park, Sergey Kisselev, Barbara Ross, Eileen Rios, Joseph Lee, Elan Louis*

**P04.002** Postural Instability and Gait Difficulty (PIGD) Score Is Independently Associated with Both Cerebellar Cholinergic and Nigrostriatal Dopaminergic Activity in PD *Nicolaas Bohnen, Martijn Muller, Robert Koeppe, Kirk Frey, Roger Albin*

**P04.003** Impaired Vestibulocervical Reflexes Possibly Contribute to Postural Instability in Parkinson Disease *Lea Pollak Pollak*

**P04.004** An Ambulatory Persistence Power Curve: Motor Planning Affects Ambulatory Persistence in Healthy Older Adults and Parkinson's Disease *Tim O'Connor, Petros Xanthopoulos, Kenneth Heilman, Valeria Drago, Panos Pardalos, Frank Skidmore*

**P04.005** Cortical Items in the Parkinson's Disease-Cognitive Rating Scale (PD-CRS) Correlate with Hippocampal Volume Atrophy in Parkinson's Disease with Dementia *Javier Pagonabarraga, Gisela Llebaria, Beatriz Gómez-Ansón, López-Mourelo Olga, Ramon Rotger, Miguel Delfino, Jaime Kulisevsky*

**P04.006** Regional White Matter Hyperintensities and Cognitive Function in Early Parkinson Disease. A Case-Control Study *Turi Dalaker, Jan Larsen, Michael Dwyer, Dag Aarsland, Mona Beyer, Guido Alves, Kolbjorn Bronnick, Ole-Bjorn Tysnes, Robert Zivadinov*

**P04.007** Higher Responder Rates with Levodopa/Carbidopa/Entacapone Compared with Levodopa/Carbidopa When Given as First-Line Levodopa Therapy in Patients with Early Parkinson's Disease *Mikko Kuoppamäki, Robert Hauser, Linda Mancione, Nalina Dronamraju, Algirdas Kakariaka*

**P04.008** SNT-MC17/Idebenone in the Treatment of Friedreich's Ataxia: Initial Safety Data of a 6-Month US Phase 3 Clinical Study *David Lynch, Susan Perlman, Geoffrey Holder, Thomas Meier*

**P04.009** Asymmetry of Interhemispheric Interactions in Drug Naïve Asymmetric PD: A Study on Ipsilateral Silent Period to TMS *Letizia Leocani, Francesca Spagnolo, Raffaella Chieffo, Elisabetta Coppi, Laura Straffi, Giancarlo Comi, Maria Antonietta Volonté*

**P04.010** Common Allelic Variation in SLC2A9 and Parkinson's Disease *Peter Pramstaller, Christine Klein, Caroline Hayward, Maurizio Facheris, Veronique Vitart, Susen Winkler, Claudia Volpato, Johann Hagenah, Vladimir Kostic, Andrew Hicks, Alan Wright, Harry Campbell*

**Parkinson's Disease: Non-Motor Symptoms**

**P04.011** The PARS Study: Association between Impaired Olfaction and Other Prodromal Features of Parkinson's Disease *Andrew Siderowf, Danna Jennings, Kenneth Marek, Matthew Stern, Pars Investigators*

**P04.012** Cognitive Change without Dementia in Parkinson's Disease: Evidence for Neuropsychological Subtypes *James Leverenz, Martha Glisky, Brooke Gerton, Cyrus Zabetian, Debby Tsuang, Alida Griffith, Pinky Agarwal, Karen Olson, Jeffrey Shaw, Steve Millard, G. Watson*

**P04.013** Is There Difference in Gastric Emptying of Parkinson's Disease Patients under Long-Term L-Dopa Therapy between with and without Motor Fluctuations? An Analysis Using the <sup>13</sup>C-acetate Breath Test *Yuji Tanaka, Hiroshi Nishida, Megumi Yamada, Takeo Sakurai, Yuichi Hayashi, Akio Kimura, Isao Hozumi, Takashi Inuzuka*

**P04.014** Apathy and Executive Function in Parkinson's Disease without Dementia Are Not Correlated in Young Patients *Merce Martinez-Corral, Javier Pagonabarraga, Gisela Llebaria, Berta Pascual-Sedano, Jaime Kulisevsky*

**P04.015** Impulse Control Disorders: Long-Term Outcomes in Parkinson's Disease Patients *Alex Desautels, Michel Panisset*

**P04.016** Cognitive Procedural Learning and Long-Term Memory in Patients with Parkinson's Disease Extensively Trained in the Tower of Hanoi Puzzle *Sharon Hassin-Baer, Avi Karni, Oren Cohen, Eli Vakil*

**P04.017** Neuropsychological Correlates of Everyday Functioning in Parkinson's Disease *Laura Brennan, Katia Duey, Emily Rosenthal, Howard Hurtig, Daniel Weintraub, John Duda, Christopher Clark, Jason Karlawish, Andrew Siderowf*

**P04.018** Screening for Orthostatic Hypotension in Patients with Parkinson's Disease May Help To Decrease Morbidity and Mortality: Database Analysis from an Acute Rehabilitation Facility *Kesha Wilford, Alissa Leonard, Terry Ellis, Joy DePiero, Douglas Katz, Anna Hohler*

**P04.019** Emotion Recognition in Early Parkinson Disease *María Roca, Teresa Torralva, Anabel Chade, Oscar Gershanik, Gonzalo Gómez Arévalo, Facundo Manes*

**P04.020** Late-Life Cognitive Function in Non-Demented Elderly Men and the Incidence of Parkinson's Disease *G. Webster Ross, Robert Abbott, Helen Petrovitch, Caroline Tanner, Kamal Masaki, Lon White*

**Aging and Dementia: Imaging II**

**P04.021** Diffusion Tensor Imaging in Subcortical Vascular Mild Cognitive Impairment and Subcortical Ischemic Vascular Dementia *So-Hyun Kim, Sung-Rae Kim, Seong Hye Choi, Joung-Ho Rha, Choong-Kun Ha*

**P04.022** Independent Effects of Age and Alzheimer's Disease on Gray Matter Volume *Cyrus Raji, Oscar Lopez, Lewis Kuller, Owen Carmichael, James Becker*

**P04.023** Longitudinal Changes in Cognition and Cerebrovascular Disease in the Alzheimer's Disease Neuroimaging Initiative *Owen Carmichael, David Drucker, Christopher Schwarz, Evan Fletcher, Oliver Martinez, Mitsuhiro Yoshita, Jing He, Charles DeCarli*

**P04.024** Mapping Effects of Body Mass Index, Insulinemia, and Diabetes Mellitus on Brain Structure in Cognitively Normal Elders *April Ho, Cyrus Raji, Neelroop Parikshak, James Becker, Oscar Lopez, Lewis Kuller, Xue Hua, Alex Leow, Arthur Toga, Paul Thompson*

**P04.025** Regional Brain and Ischemic Lesion Volumes in Women with Cognitive Impairment Following Exposure to Conjugated Equine Estrogen Therapies (CEE): The Women's Health Initiative Magnetic Resonance Imaging Study (WHIMS-MRI) *Cheryl Bushnell, Hilary Tindle, Mark Espeland, Sarah Jamillo, Elias Melhem, Susan Resnick*

**P04.026** Vascular and Metabolic Associations within the ADNI Dataset *Beth Kuczynski, Evan Fletcher, Cindee Madison, Susan Landau, Charles DeCarli*

**P04.027** Education and Occupation Provide Reserve Capacity in Frontotemporal Dementia *Barbara Borroni, Enrico Premi, Chiara Agosti, Antonella Alberici, Valentina Garibotto, Barbara Paghera, Silvia Lucchini, Daniela Perani, Alessandro Padovani*

**P04.028** Reduction of AChE Activity in Neurodegenerative Diseases: A [11C]MP4A PET Comparative Study in aMCI, pAD and LBD *Valentina Garibotto, Ioana Florea, Alessandra Marcone, Rosa Maria Moresco, Assunta Carpinelli, Andrea Panzacchi, Giada Caramatti, Stefano Cappa, Sandro Iannaccone, Ferruccio Fazio, Daniela Perani*

**P04.029** Cerebral Cortical Complexity Measures in Normal Aging and Alzheimer's Disease *Richard King, Kristen Kennedy, Karen Rodrigue, Naftali Raz, Denise Park*

**P04.030** [11C]PIB-PET in the Differential Diagnosis of Alzheimer's Disease and Frontotemporal Lobar Degeneration: An Update *Gil Rabinovici, Ansgar Furst, Elizabeth Mormino, James O'Neill, Tyler Steed, Maria Gorno Tempini, Bruce Miller, William Jagust*

**P04.031** Brain Localization of Cognitive Domains with Diffusion MRI *Ely Simon, Efrat Sasson, Glen Doniger, Ofer Pasternak, Yaniv Assaf*

**P04.032** Cognitive Impairment Risk: White Matter Hyperintensity Progression vs. Baseline Volume *Lisa Silbert, Catherine Nelson, Louis Perkins, Diane Howieson, Hiroko Dodge, Jeffrey Kaye*

**P04.033** Aberrant Tau Pathology Underlies 1H MR Spectroscopic Alterations in Alzheimer's Disease *Melissa Murray, Dennis Dickson, Clifford Jack, Jr., Kejal Kantarci*

**P04.034** The Cortical Signatures of Frontotemporal Dementias: Regionally-Specific Thinning Relates to Symptom Typing and Severity *Akram Bakkour, Daisy Sapolsky, Alyson Negreira, Paige Nalipinski, David Caplan, John Growdon, Bradley Hyman, Bradford Dickerson*

**P04.035** White Matter Changes in Persons Who Will Develop Dementia *Cyrus Raji, Oscar Lopez, Lewis Kuller, James Becker*

**P04.036** Metabolic Compensation in Alzheimer's Disease *Anna Caroli, Marco Lorenzi, Cristina Geroldi, Flavio Nobili, Barbara Paghera, Matteo Bonetti, Maria Cotelli, Giovanni Frisoni*

**P04.037** Iron as a Potential Pathogen and Biomarker in Frontotemporal Dementia Using High-Field T2 MRI *Aashish Kabra, Sonia Brar, David Henderson, Earl Zimmerman*

**P04.038** Intact Autoregulation of Cerebral Blood Flow in Mild Alzheimer's Disease *Allyson Zazulia, Tom Videen, John Morris, William Powers*



**P04.039** White Matter Hyperintensities on MRI Are Related to the Severity of Medial Temporal Atrophy, a Biomarker of Neurodegenerative Disease *Jason Appel, Nisha Bhatia, Warren Barker, Elizabeth Potter, Qian Shen, Yougui Wu, Elizabeth Schofield, Maria Greig, David Loewenstein, Ranjan Duara*

**P04.040** High Resolution Hippocampal Subfield Anatomy in Dementia Using 7T MRI *Geoffrey Kerchner, Christopher Hess, Kathryn Hammond, Duan Xu, Douglas Kelley, Daniel Vigneron, Sarah Nelson, Bruce Miller*

## Headache II

**P04.041** Extracellular Sodium Increases Neuron Excitability in Migraine *Michael Harrington, Xianghong Yang, Robert Cowan, Alfred Fonteh*

**P04.042** Are There Differences between Cephalic and Extracerebral Cutaneous Allodynia in Chronic Migraine? *Nathalie Guy, Ana Marques, Radhouane Dallel, Pierre Clavelou*

**P04.043** Cervicogenic Headache: A Possible Manifestation of Peripheral Vestibular Dysfunction? *Neil Cherian, Mark Stillman, John Oas, Frank Gargano, Vince Whalen, Stewart Tepper*

**P04.044** Migraine with Aura: Mutation Analysis of the SLC1A3 Gene *Fusun Cakir, Fethi Idiman, Afig Berdeli*

**P04.045** Are Subclinical White Matter Hyperintensities in Migraine Patients a Marker of Severity Disease? *Renata Rao, Paolo Liberini, Anna Rosati, Elisabetta Venturelli, Stefano Gipponi, Eluisa Sapia, Claudia Ambrosi, Alessandro Padovani*

**P04.046** Processing Visual Stimuli in Cluster Headache: A Combined Functional and Tractography Study at 3 T *Maria Rocca, Martina Absinta, Bruno Colombo, Elisabetta Pagani, Andrea Falini, Giancarlo Comi, Massimo Filippi*

**P04.047** Hypothalamic Changes in Patients with Cluster Headache: A Diffusion Tensor Imaging Study *Shuu-Jiun Wang, Jiing-Feng Lirng, Jong-Ling Fuh, Ching-Po Lin*

**P04.048** The Role of Oxidative Stress in Pediatric Migraine *Fusun Alehan, Ilknur Erol, Derya Aldemir, Ersin Ogus*

**P04.049** Mechanisms of Occipital Nerve Stimulation (ONS): A Double-Blind, Placebo-Controlled, Crossover Study Using Naloxone and Flumazenil *Brian Burns, Juana Marin, Peter Goadsby*

**P04.050** Prevalence and Consistency of Non-ICHD Migraine-Associated Symptoms across Four Migraine Attacks *David Dodick, Robert Kaniecki, Ninan Mathew, Frederick Derosier, Jonathan White, Susan McDonald*

**P04.051** Invasive Sphenoid Aspergillosis Presented as Cluster Headache *Min Zhu, Michael Swerdlow*

**P04.052** The Frequency and Clinical Characteristics of Chronic Headache among Medical Students in a Nigerian University *Adekunle Mustapha, Michael Fawale*

**P04.053** Type D Carotid-Cavernous Fistula Presenting with Cluster-Like Headache: A Case Report *Jithin George, Sreedharan Harikrishnan, William Adams, Stuart Weatherby*

**P04.054** Headache in Patients with Myasthenia Gravis (MG) *Yoshinori Nishimoto, Shigeaki Suzuki, Kimiaki Utsugisawa, Yuriko Nagane, Toshihiro Shimizu, Mamoru Shibata, Norihiro Suzuki*

**P04.055** Fulminant Pseudotumor Cerebri Presenting with Atypical Ataxia and Hyperreflexia: A Case Report: A Case of Focal Findings and Bilateral Transverse Sinus Stenosis Not Seen on MRV *Mohamed Teleb, Gunjan Parikh, Steve Chung*

**P04.056** Occipital Neuralgia as an Isolated Symptom of Craniocervical Junction Meningioma *Nam-Hee Kim, Myung-Goo Ji, Min-Jeong Kim*

**P04.057** Delayed Diagnosis in Pediatric Headache: A Six-Month Cross-Sectional Outpatient Survey *Bruno Colombo, Dacia Dalla Libera, Pietro Annovazzi, Donatella De Feo, Raffaele Tampanella, Giancarlo Comi*

**P04.058** Intercostal Pain in Cluster Headache *Michael Marmura, Scott Pello, William Young*

**P04.059** The Prevalence of Neck Pain in Migraine *Anne Calhoun, Sutapa Ford, Cori Millen, Young Truong, Yonghong Nie, Alan Finkel*

**P04.060** The Effects of Comorbid Disorders on the Associations of Migraines and Other Headaches with Work Performance in a US National Survey *Ronald Kessler, Michael Runken, Vicki Shahly, Paul Stang*

**P04.061** The Curitiba 2007 Headache Public Task Force: The Results of a Teaching Seminar for General Practitioners and a Three-Day Supervised Outpatient Clinic for 1358 Patients *Pedro Kowacs, Elcio Piovesan, Carlos Twardowsky, Renata Ducci, Raphael Cirino, Fátima Handar, Eliane Chomatias, Inês Marty*

**P04.062** Menstrually Related Migraine Manifesting as Status Migrainosus *John Rothrock, Diane Andress-Rothrock, Silvia Weibelt*

**P04.063** Diagnosis of Menstrual Migraine in Patients with Previously Undiagnosed Menstrually Related Migraine and Pure Menstrual Migraine. Clinical-Based Study in Czech Republic *David Dolezil*

**P04.064** Prevalence of Trigeminal Neuralgia and Persistent Idiopathic Facial Pain in a Population-Based Sample *Daniel Mueller, Mark Obermann, Min-Suk Yoon, Franziska Poitz, Niels Hansen, Marc-Andre Slomke, Hans-Christoph Diener, Zaza Katsarava*

**P04.065** Prevalence of Facial Pain in Migraine: A Population-Based Study *Min-Suk Yoon, Daniel Müller, Nils Hansen, Franziska Poitz, Peter Dommès, Hans Diener, Zaza Katsarava, Mark Obermann*

**P04.066** Abdominal Obesity, Smoking, and Migraine in Women 20-39: NHANES 1999-2004 *Andrea Rosso, B. Peterlin*

**P04.067** The Significant Comorbidity of Right-to-Left Shunt in Chronic Migraine *Raya Terry, Stephanie Nahas, Ashley Kim, Tanner Van Dell, Stephen Silberstein, Anthony Guarino, William Young*

**P04.068** Headache Disability among Adolescents: A Student Population-Based Study *Shuu-Jiun Wang, Jong-Ling Fuh, Shiang-Ru Lu, Yi-Chu Liao, Shih-Pin Chen*

**P04.069** Association between Migraine and Restless Legs Syndrome in Women *Markus Schuerks, Klaus Berger, Robert Glynn, Julie Buring, Tobias Kurth*

**P04.070** Diet Restriction in Migraine Based on IgG Antibodies Against Food Antigens: A Clinical Double-Blind, Randomized, Crossover Trial *Betul Baykal, Kadriye Alpay, Mustafa Ertas, Elif Orhan, Didem Ustay*

## Neuro-Ophthalmology/Neuro-Otology

**P04.071** Why Do Men Have Idiopathic Intracranial Hypertension (IIH)? A Case-Control Study *J. Alexander Fraser, Beau Bruce, Janet Rucker, Lisa-Ann Fraser, Edward Atkins, Nancy Newman, Valerie Biousse*

**P04.072** The Old and the Restless: Atypical Idiopathic Intracranial Hypertension (IIH) *Beau Bruce, Sachin Kedar, Gregory Van Stavern, David Monaghan, Marie Acierno, Ronald Braswell, Pisit Preechawat, James Corbett, Nancy Newman, Valerie Biousse*

**P04.073** Axonal mtDNA Copy Number Correlates with the Neurodegenerative Pattern in Optic Nerve Cross-Sections of Leber's Hereditary Optic Neuropathy Patients *Valerio Carelli, Fred Ross-Cisneros, Mariangela Sebastiani, Claudia Travaglini, Kevin Tozer, Solange Salomao, Milton Moraes, Milton Moraes-Filho, Adriana Berezovskiy, Rubens Belfort, Jr., Alfredo Sadun, Giulia D'Amati, Carla Giordano*

**P04.074** Visual-Evoked Potentials with High- and Low-Contrast Stimuli in the Evaluation of Demyelinating Optic Neuropathy *Matthew Thurtell, Elisa Bala, R. Leigh*

**P04.075** Recovery of Vision in Leber's Hereditary Optic Neuropathy *Valerio Carelli, Michele Carbonelli, Fred Ross-Cisneros, Maria Lucia Valentino, Chiara La Morgia, Pietro Cortelli, Pasquale Montagna, Solange Salomao, Milton Moraes, Milton Moraes-Filho, Adriana Berezovsky, Rubens Belfort, Jr., Alfredo Sadun, Giacomo Savini, Piero Barboni*

**P04.076** MS Functional Composite Scores with a Visual Component Added Capture Axonal Loss in Patients with Multiple Sclerosis *Sally Chang, Esther Bisker, Michael Loguidice, Dina Jacobs, Clyde Markowitz, Steven Galetta, Maureen Maguire, Laura Balcer*

**P04.077** Visual Attributes Following an Acute Optic Neuritis Episode *Noa Raz, Shlomo Dotan, Tal Ben-Olie, David Arkadir, Adi Vaknin, Sylvie Chokron, Netta Levin*

**P04.078** A Review of the Symptom of Photophobia in an Eye Clinic *Thomas Buchanan, Kathleen Digre, Judith Warner, Bradley Katz*

**P04.079** Treatment of Non-Arteritic Anterior Ischemic Optic Neuropathy (NAION): Current Practice in the United States *Edward Atkins, Beau Bruce, Nancy Newman, Valerie Biousse*

**P04.080** The Association of CSF Opening Pressure (OP) with Patient Characteristics, Presentation and Visual Outcome in Idiopathic Intracranial Hypertension (IIH) *Sachin Kedar, Deepta Ghate, David Monaghan, James Corbett*

**P04.081** A Case of Asaccadia with Supranuclear Gaze Palsy after Cardiac Surgery *Joo Young Kwon, Jung Eun Kim, Jee Hyang Jeong*

**P04.082** Fiber Tractography of the Medial Longitudinal Fasciculus in Multiple Sclerosis Subjects with Internuclear Ophthalmoplegia *Jonathan McNulty, Roisin Lonergan, John Bannigan, Patrick Brennan, Michael Hutchinson, Risteard O'Laoidhe, Niall Tubridy*

**P04.083** Diagnostic Decision Support To Reduce Stroke Misdiagnosis among Acutely Dizzy Patients: A Cost Effectiveness Analysis *David Newman-Toker, Gregory Butchy, Harold Lehmann, Eric Aldrich, Arjun Chanmugam, Kevin Frick*

**P04.084** Calibrated Finger Rub Auditory Screening Test (CALFRASST) *Diego Torres-Russotto, William Landau, Gary Harding, Barbara Bohne, Kai Sun, Philip Sinatra*

**P04.085** Saccade Abnormalities and Sequencing Ability in Patients with Spinocerebellar Ataxia Type 2 Compared with Other Hereditary Spinocerebellar Ataxias *Alessandra Rufa, Pamela Federighi, Elena Pretegianni, Nicola Polizzotto, Giacomo Veneri, Gabriele Cevenini, Antonio Federico*

**P04.086** Ophthalmoplegia and Downbeat Nystagmus in Stiff-Person Syndrome *Janet Rucker, Aimee Szewka*

**P04.087** Isolated Nodular Infarction *In Soo Moon, Ji Soo Kim, Kwang Dong Choi, Min-Jeong Kim, Sun-Young Oh, Hyung Lee, Hak-Seung Lee*

**P04.088** Midbrain Ocular Motor Disturbances Heralding Atypical Presentation of PSP-Richardson Syndrome (PSP-RS) with Heavy tau Load *Angela Hardwick, Janet Rucker, Katarzyna Gustaw-Rothenberg, Mark Cohen, R. Leigh, Robert Friedland*

**P04.089** Fatigue-Induced Changes of Saccadic Conjugacy in MS Patients with Internuclear Ophthalmoplegia (INO) *Manuela Matta, John Leigh, Maura Pugliatti, Isidoro Aiello, Alessandro Serra*

**P04.090** Pathogenesis of Superior Oblique Myokymia in a Patient with Multiple Sclerosis Involves the CNS *John Pula, William Shaffer, Anthony Reder, Adil Javed*

**P04.091** Abnormal Eye Movements in Kennedy's Disease *Matthew Thurtell, Erik Piro, R. Leigh*

#### Multiple Sclerosis: Neuromyelitis Optica

**P04.092** Plasma Exchange for Neuromyelitis Optica with Anti-Aquaporin-4 Antibody *Ichiro Nakashima, Toshiyuki Takahashi, Shuhei Nishiyama, Sayuko Kasahara, Chihiro Suzuki, Tatsuro Misu, Yasuto Itoyama, Kazuo Fujihara*

**P04.093** Comparison of Visual Field Defects in Neuromyelitis Optica and Multiple Sclerosis: Altitudinal Hemianopsia May Occur in Neuromyelitis Optica *Takafumi Hosokawa, Hideto Nakajima, Masakazu Sugino, Fumiharu Kimura, Toshiaki Hanafusa, Toshiyuki Takahashi*

**P04.094** Optic Neuritis or Myelitis Associated with NMO-IgG Antibodies: High Risk Syndrome or False Positive? *Jerome De Seze, Nicolas Collongues, Romain Marignier, Helene Zephir, Frederic Blanc, Marc Debouverie, Olivier Outteryck, Marie Fleury, Aurélie Ruet, Florent Borgel, Eric Thouvenot, Thibault Moreau, Gilles Defer, Jean Pelletier, Marc Debouverie, Pierre Labauge, Olivier Gout, William Camu, Jerome Grimaud, David Brassat, Bruno Brochet, Patrick Vermersch, Christian Confavreux*

**P04.095** Neuromyelitis Optica with a Pediatric Onset *Jerome De Seze, Nicolas Collongues, Romain Marignier, Helene Zephir, Frederic Blanc, Olivier Outteryck, Sandra Vukusic, Marie Fleury, Cyril Mignot, Caroline Papeix, Bruno Barosso, Aurélie Ruet, Eric Thouvenot, Bruno Brochet, William Camu, Jean Pelletier, Diana Rodriguez, Patrick Vermersch, Christian Confavreux*

**P04.096** Interferon-beta Induces Brain-Derived Neurotrophic Factor in Plasma of Multiple Sclerosis Patients but Not of Neuromyelitis Optica Patients *Yuko Shimizu, Sachiko Kubo, Chiaki Kabasawa, Masaki Kobayashi, Kohei Ota, Shinichiro Uchiyama*

**P04.097** Magnetic Resonance Imaging and Diffusion Tensor Imaging in Neuromyelitis Optica *Xiao zhu Lin, Stephane Kremer, Jerome De Seze, Jeremy Jeantroux, Frédéric Blanc, Laurent Ballonzoli, Claude Speeg, Jean Louis Dietemann*

**P04.098** Spectroscopy-MR Evaluation in Patients with Neuromyelitis Optica *Izzie Namer, Frederic Blanc, Stephane Kremer, Nicolas Collongues, Marie Fleury, Jerome De Seze*

**P04.099** Effect of Rituximab on Relapse Rate and Disability in Neuromyelitis Optica (NMO) *Gurdesh Bedi, Andrew Brown, Sylvia Delgado, Nida Usmani, William Sheremata*

**P04.100** Determination of the Binding Epitope of Anti-Aquaporin 4 Antibody *Keiko Tanaka, Takashi Tani, Mika Tsujita, Kenji Sakimura, Masami Tanaka, Masatoyo Nishizawa*

**P04.101** Brain Volume Evaluation in Neuromyelitis Optica *Stephane Kremer, François Rousseau, Nicolas Collongues, Frédéric Blanc, Marie Fleury, Jean-Paul Armspach, Jerome De Seze*

**P04.102** A Novel Bio-Assay To Determine and Characterize the Antibodies to Aquaporin-4 *Sudhakar Kalluri, Rajneesh Srivastava, Sabine Cepok, Til Menge, Bruce Cree, Achim Berthele, Bernhard Hemmer*

**P04.103** The Anti-AQP4 Antibody Can Cause Damage of Blood-Brain-Barrier? *Miho Akaza, Keiko Tanaka, Masami Tanaka, Izumi Kawachi, Teruhiko Sekiguchi, Kazutaka Nishina, Tamako Misawa, Hidehiro Mizusawa, Masatoyo Nishizawa, Takanori Yokota*

**P04.104** Neuromyelitis Optica and Idiopathic Thrombocytopenic Purpura *John Pula, William Shaffer, Anthony Reder, Adil Javed*

**P04.105** Neuromyelitis (NMO) Associated with Destructive Brain Lesions in Three Cases *William Sheremata, Andrew Brown, Gurdesh Bedi, Sylvia Delgado*

**P04.106** The Clinical Features of Serum Anti-Aquaporin 4 Antibody Positive Patients *Sachiko Kubo, Yuko Shimizu, Takashi Ohashi, Kohei Ota, Shinichiro Uchiyama*

#### Peripheral Nerve III

**P04.107** Diagnosis, Treatment and Outcomes in Chronic Inflammatory Demyelinating Polyradiculoneuropathy (CIDP): A Survey of 316 Patients *Carol Koski, Trey Avery, Estelle Benson*

**P04.108** Mycophenolate Mofetil for Chronic Inflammatory Demyelinating Polyneuropathy *Gurdesh Bedi, Andrew Brown, Tao Tong, Khema Sharma*

**P04.109** The Spectrum of Guillain Barre Syndrome (GBS) in North India Is Similar as in the West *Jayantee Kalita, Ushakant Misra, Marami Das, Ritu Agarwal*

**P04.110** "Mild" Guillain-Barré Syndrome – When Is It Safe To Manage on an Outpatient Basis? *Zaeem Siddiqi, Asif Jamil, Jeremy Beach, Donald Voaklander*

**P04.111** Postsurgical Neuropathy Is Not Always Mechanical, but Can Be Inflammatory *Nathan Staff, JaNear Engelstad, P. James Dyck*

**P04.112** Persistent Fatigue after Recovery from GBS – Incidence and Risk Factors *Zaeem Siddiqi, Asif Jamil, Jeremy Beach, Donald Voaklander*

**P04.113** Correlations between Nerve Conduction Parameters (NCP) and Clinical Efficacy Outcomes in Patients with Chronic Inflammatory Demyelinating Polyneuropathy (CIDP) *Vera Bril, Marinos Dalakas, Chunqin Deng, Peter Donofrio, Kim Hanna, Hans-Peter Hartung, Richard Hughes, Hans Katzberg, Norman Latov, Ingemar Merckies, Pieter Van Doorn*

**P04.114** Chronic Fatigue after Guillain-Barré Syndrome – Role of Autonomic Dysfunction *Zaeem Siddiqi, Asif Jamil, Jeremy Beach, Don Voaklander*

**P04.115** Treatment of Experimental Autoimmune Neuritis with Clodronate (Bonefos) *Aviva Katzav, Hofit Bina, Joab Chapman*

**P04.116** Long Term Efficacy of Plasma Exchanges as Third Line Therapy in Chronic Demyelinating (CIDP) Neuropathies *Pierre Lozeron, Françoise Driss, Catherine Lacroix, Christian Denier, David Adams*

#### Anterior Horn: Biomarkers and Outcome Measures

**P04.117** Use of the ALSFRS-r as a Primary Outcome Measure *Eric Sorenson, Jayawant Mandrekar, William Bamlet, Anthony Windebank*

**P04.118** Severity and Functional Ability Scale for Amyotrophic Lateral Sclerosis Patients: Preliminary Results *Marco Orsini, Giseli Quintanilha, Carlos Henrique Reis, Valeria Silveira, Fabio Porto, Acary Oliveira, Osvaldo Nascimento, Marcos De Freitas*

**P04.119** Prognostic Markers in Amyotrophic Lateral Sclerosis: Proteome Analysis of Cerebrospinal Fluid *Johannes Brettschneider, Mogel Helga, Vera Lehmsiek, Albert Ludolph, Hayrettin Tumani*

**P04.120** Serum N-Acetyl-Aspartate Levels in Amyotrophic Lateral Sclerosis *Rosanna Tortelli, Maddalena Ruggieri, Antonio Leo, D'Errico Eustachio, Edmondo Ceci, Carla Tortorella, Rosa Capozzo, Paolo Livrea, Giancarlo Loggrosino, Isabella Simone*

**P04.121** Diffusion Tensor Imaging (DTI) Measures in the Corticospinal Tracts and Their Correlations with Upper Motor Neuron Function Measures in Patients with ALS *Khema Sharma, Varan Govind, Sulaiman Sheriff, Brian Bowen, Andrew Maudsley*

**P04.122** Diffusion Tensor Imaging of Basal Ganglia and Thalamus in Patients with ALS *Khema Sharma, Varan Govind, Sulaiman Sheriff, Brian Bowen, Andrew Maudsley*

**P04.123** Cervical Cord Atrophy Correlates with Motor Cortex Pathology and Predicts Disease Progression in ALS: Implications for Treatment Trials in ALS *Stephanie Hreha, Fen Bao, Megan Mackenzie, Zahid Latif, Yuan Yang, Imad Zak, Ronald Bailey, Christina Caon, Michael McCaffrey, Agnes Acsadi, Richard Lewis, Omar Khan*



**P04.124** TMS in ALS: Methodological and Pathophysiological Findings *Carlo Civaldi, Alessandra Collini, Letizia Mazzini, Francesco Monaco, Roberto Cantello*

**P04.125** Proton Magnetic Resonance Spectroscopy in Kennedy Disease *Jie-Yuan Li, Chieh-Hsun Lee, Ping-Hong Lai*

**P04.126** Differences in Brain Activation on fMRI in ALS Patients with and without Cognitive Dysfunction *Paramjit Singh, Rup Tandan*

## Stroke Biomarkers

**P04.127** Differences in Coated-Platelet Production between Subtypes of Ischemic Stroke *Gabriela Purcarin, Rajiv Padmanabhan, Andrea Vincent, George Dale, Calin Prodan*

**P04.128** Bilateral Carotid Dissections and Multiple Infarcts: An Unusual Presentation of Ehlers-Danlos Syndrome Type IV in an Adult Patient *Carolin Dohle, Joachim Baehring*

**P04.129** Lack of Correlation between Leapfrog Hospital Quality Ratings and JCAHO Stroke Certification *Abraham Kuruvilla, Seemant Chaturvedi*

**P04.130** Cerebrovascular Reactivity and Cerebral Autoregulation Are Based on Two Distinct Physiological Mechanisms *Emmanuel Carrera, Leslie Lee, Sotirios Giannopoulos, Randolph Marshall*

**P04.131** Serum Homocysteine Levels Are Associated with the Presence of Cerebral Microbleeds in Ischemic Stroke and TIA Patients *Siryung Han, David Liebeskind, Bruce Ovbiagele, Latisha Ali, Doojin Kim, Shamir Shah, Arbi Ohanian, John Panagotacos, Jeffrey Saver*

**P04.132** Natural Neurotropic Autoantibodies in the Serum of Patients with Dementia after Stroke *Alla Guekht, Vera Alferova, Alexander Poletaev, Eugene Gusev*

**P04.133** Stroke Lesions in Cancer Patients with Elevated Serum D-dimer Levels *Seon-gyeong Kim, Soo-kyoung Kim, Jin-Myoung Seok, Oh-young Bang, Kwang-ho Lee, Gyeong-moon Kim, Chin-Sang Chung*

**P04.134** Matrix Metalloproteinase-9 as a Marker for Acute Ischemic Stroke: A Systematic Review *Maria Ramos-Fernandez, M. Fernanda Bellolio, Latha Stead*

**P04.135** Usefulness of Plasma B-Type Natriuretic Peptide Level To Identify Cardioembolic Stroke *Seo Hyun Kim, Joung-Min Chon, Hyun-Chan Jang, Ji-Yong Lee, Sung-Soo Lee*

**P04.136** Cytokine Profile in Patients with Silent Brain Infarctions (SBI) *Clotilde Balucani, Monica Acciarresi, Davide Chiasserini, Katuscia Nardi, Sara Mastrocola, Paolo Calabresi, Paola Sarchielli, Lucilla Parnetti*

## Multiple Sclerosis: Biomarkers

**P04.137** CSF Proteome Analysis in Clinically Isolated Syndrome (CIS): Biomarkers for Conversion to Definite Multiple Sclerosis *Hayrettin TUMANI, Vera Lehmensiek, Daniela Rau, Ivonne Guttman, Christian Palm, Sigurd Suessmuth, Johannes Bretschneider*

**P04.138** The Impact of Neutralizing Antibodies within Five Years of Treatment with Interferon Beta-1b Initiated at the First Event Suggestive of Multiple Sclerosis *Mark Freedman, Chris Polman, Gilles Edan, Hans-Peter Hartung, Ludwig Kappos, David Miller, Xavier Montalban, Carola Metzger, Vivian Lanius, Christoph Pohl, Rupert Sandbrink*

**P04.139** Is an Absent MxA Response to Interferon- $\beta$  a Reliable Marker of Lost Bioactivity in MS Patients with Neutralizing Antibodies? *Dan Hesse, Finn Sellebjerg, Joy Mendel-Hartvig, Per Sorensen*

**P04.140** APOE- $\epsilon 4$  Is Not Associated with Cognitive Impairment in Relapsing-Remitting Multiple Sclerosis *Emilio Portaccio, Benedetta Goretti, Valentina Zipoli, Benedetta Nacmias, Maria Laura Stromillo, Maria Bartolozzi, Gianfranco Siracusa, Leonello Guidi, Antonio Federico, Sandro Sorbi, Nicola De Stefano, Maria Pia Amato*

**P04.141** Effects of Repeated Intrathecal Triamcinolone Acetonide Application on Cerebrospinal Fluid Biomarkers of Axonal Damage and Glial Activity in Multiple Sclerosis Patients *Mazen Abu-Mugheisib, Hayrettin TUMANI, Axel Petzold, Frank Kamin, Wolfgang Koehler, Frank Hoffmann, Reiner Benecke, Uwe Zettl*

**P04.142** Serum Vitamin D Levels Are Associated with Multiple Sclerosis Disease Severity *Bijal Mehta, Allison Drake, Barbara Teter, Murali Ramanathan, Nupur Batra, Nitin Agarwal, Robert Zivadinov, Bianca Weinstock-Guttman*

**P04.143** Immunological and Anti-Natalizumab Antibody Testing in a Large Cohort of Natalizumab-Treated MS Patients *Annette Wundes, Dora Krasucki, Sylvia Lucas*

## Infections/AIDS/Prion Disease II

**P04.144** Intra-Cellular Factors Determine Herpes Simplex Virus Type 1 (HSV-1) Neurotropism *Israël Steiner, Mytal Cohen, Efrat Braun, Amos Panet*

**P04.145** Epicatechin Protects Neurons Against Mitochondrial Toxins *Samir Nath, Tanya Malpic-Llanos, Joseph Steiner*

**P04.146** Opiate Interactions in SCID Mice with HIV Encephalitis *William Tyor, Andrew Sas, Robert Jones, Ruqiang Xu, Pamela Knapp, Kurt Hauser*

**P04.147** Host Immunity and Diversity of *Treponema pallidum* in Blood and CSF in HIV-Infected Individuals with Syphilis *Christina Marra, Snehal Nariya, Lauren Tantaló, Lorenzo Giacani, Sharon Sahi, Sheila Lukehart, John Mittler*

**P04.148** Apolipoprotein E Genotype Influences Neuronal Antigen Expression by Maturing Human Fetal Neurons Exposed to HIV-1 *Micheline McCarthy, Ricardo Martinez*

**P04.149** HIV-1 Exposure Impairs Neurotrophin Responsiveness in Maturing Human Fetal Neurons *Micheline McCarthy, Ricardo Martinez*

**P04.150** Cerebrospinal Fluid Levels of Chemokines in HIV Infected Patients with and without Opportunistic Infection of the Central Nervous System *Paulo Christo, Jose Livramento, Thales Bretas, Antonio Teixeira*

**P04.151** Recreational Use of Marijuana Is Associated with Decreased SOD in CSF of HIV-Seropositive Women *Valerie Wojna, Mayra Fernandez, Raul Mayo, Dianedis Toro, Loyda Melendez, Avindra Nath*

**P04.152** HIV Disease Necessitating HAART Modifies the Neuropsychological Benefit of Computerized Cognitive Rehabilitation Therapy in Ugandan Children with HIV *Michael Boivin, Sujal Parikh, Rachelle Busman, Paul Bangirana, Robert Opoka, Joseph Wong, Bruno Giordani*

**P04.153** Primary Neurological Manifestations in Anti-Retroviral Therapy Naive HIV-Infection in a Resource Limited Setting *Sivakumar Rajappa, Sanjeev Sivakumar*

**P04.154** Initiation of Antiretroviral Therapy Reduces Cerebrospinal Fluid Protein Levels in Non-Demented HIV-1 Infected Patients *Kathryn Crozier, Mark Segal, Evelyn Lee, Richard Price, Serena Spudich*

**P04.155** Fulminant Encephalopathy with Basal Ganglia Hyperintensities in HIV-Infected Cocaine Users (FEB-HIC) *Avindra Nath, Scott Newsome, Jeffrey Rumbaugh*

**P04.156** Frequency and Pattern of Neuropsychological Performance in a Group of HIV Positive Brazilian Patients *Paulo Christo, Gleysse De Paula, Ilana Werneck, Amanda Lara, Carlos Antunes*

**P04.157** MRI and Clinical Outcomes in Progressive Multifocal Leukoencephalopathy with Immune Reconstitution Inflammatory Syndrome (PML-IRIS): Good, Bad, and Ugly *Daniel Harrison, Scott Newsome, Nicole Schiess, Justin McArthur, David Clifford, Avindra Nath*

**P04.158** JC Virus and Asymmetric Cerebellar Atrophy *Lynn Kataria, Mark Lin, Christian Woods, Leon Lai, Robert Laureno*

**P04.159** Neurological Manifestations in HIV/HTLV-Coinfected Patients *Marcus Tullius Silva, Maria José Andrada-Serpa, Beatriz Grinsztejn, Elizabeth Neves, Ramza Harab, Ana Claudia Leite, Jose Henrique Pilotto, Dayse Campos, Eliane Braga, Valdilea Veloso dos Santos, Abelardo Araújo*

**P04.160** Pregabalin in the Treatment of Painful HIV Neuropathy: A Randomized, Double-Blind, Placebo-Controlled Trial *David Simpson, Giovanni Schifitto, David Clifford, Kevin Murphy, Edith Durso-De Cruz, Paul Glue, Ed Whalen, 1066 HIV Neuropathy Study Group*

**P04.161** Burkitt's Lymphoma in an HIV-Infected Patient Presenting as Oculomotor Nerve Palsy: A Case Report *Manu Hegde, Scott Josephson, Serena Spudich*

**P04.162** Toxoplasmosis Myopathy as a Manifestation of HIV Immune Reconstitution Inflammatory Syndrome *Doris Kung, Erica Hubenthal, Samuel Shelburne, Jerry Goodman, Justin Kwan, Joseph Kass*

## Neurologic Manifestations of Systemic Disease II

**P04.163** Alzheimer A $\beta$  Pathology in an Animal Model of Diabetic Neuropathy *Peter Frederikse, Claudine Bitel, Yicheng Feng, Patrick Wong, Nizar Souayah*

**P04.164** Natalizumab for the Stabilization of Susac Syndrome: A Case Report *Michael Lee, Lilyana Amezcua*

**P04.165** Predictors and Outcome of Posterior Reversible Encephalopathy in Patients with Thrombotic Thrombocytopenic Purpura *Tamika Burrus, Eelco Wijdicks, Alejandro Rabinstein*

**P04.166** Atypical Presentation of Posterior Reversible Leukoencephalopathy Syndrome (PRES) *Kayalvizhi Vijayakumar, Prab Prabhakar*

**P04.167** In Search of Biomarkers for Assessing the Progression of SCA1: A Pilot Study Using Diffusion Tensor Imaging (DTI) *Ana Solodkin, Christopher Gomez*

**P04.168** Longitudinally Extensive Myelopathy with Lower Motor Neuron Damage Associated with Infliximab Use *Logan McDanel, Alexander Landfield, Jeff Kraakevik, Jau-Shin Lou, Dennis Bourdette*

**P04.169** Is It SLE, MS, NMO, ADEM, AMAN or an Overlap Syndrome? Detailed Report on a Case with Systemic Lupus Erythematosus and Positive NMO-Antibodies *Alexander Kunz, Marlene Tschernatsch, Franz Blaes, Peter Wipfler, Georg Pilz, Stefan Golaszewski, Oliver Lesicky, Gunther Ladurner, Joerg Kraus*

**P04.170** Unusual Presentation of Neurosarcoidosis – A Case Report *Zeenat Jaisani, Cornelia Mihai, Bijal Mehta, David Hojnacki, Peter Ostrow, Fredrick Munschauer*

**P04.171** Metronidazole-Induced Reversible Cerebellar Syndrome *Justyna Sama, A. Keith Brownell, Sarah Furtado*

**P04.172** Efficacy of Vinblastine in CNS Langerhans Cell Histiocytosis (LCH) *Sophie Ng Wing Tin, Nadine Martin-Duverneuil, Ahmed Idbaih, Catherine Garel, Maria Ribeiro, Hubert Ducou Le Pointe, Jean Donadieu, Khê Hoang-Xuan*

**P04.173** A Landmark Clinical Trial of a Novel Small Molecule Transthyretin Stabilizer, Fx-1006A, in Patients with TTR Amyloid Polyneuropathy: A Phase II/III, Randomized, Double-Blind, Placebo-Controlled Study *Teresa Coelho, Luis Maia, Ana Martins da Silva, Márcia Waddington-Cruz, Violaine Planté-Bordeneuve, Ole Suhr, Josep Campistol, Isabel Conceição, Hartmut Schmidt, Pedro Trigo, Donna Grogan, Jeff Packman*

**P04.174** THAOS – Transthyretin Amyloidosis Outcomes Survey, a New Global, Web-Based Registry *Violaine Plante-Bordeneuve, Teresa Coelho, Bo-Goran Ericzon, Rodney Falk, Shu-ichi Ikeda, Mathew Maurer, Ole Suhr, Pedro Trigo, Donna Grogan*

**P04.175** Acute Amnesia with Isolated Bilateral Hippocampal MRI Signal Abnormalities: A Case Series Highlighting Two Distinct Etiologies *Alexander Landfield, Eric Edgar, Kurt Lindsay, Michael Krueger, Vijayshree Yadav, Dennis Bourdette*

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**Neurologic Education: Student and Resident Education**

**P05.001** Actors or Real Patients: Which Is Better for Medical Student Education? *Rosario Riel-Romero, Richard Zweig, Andrew Chesson, Gloria Caldito, Jane Eggerstedt*

**P05.002** Choosing a Neurology Residency Program: What Variables Are Important? A Survey Study *Sandipan Pati, Andrew J. Westwood, Anubhav Sharma, A. Piasecka, Joseph Sirven*

**P05.003** Neurology Residency Training Programs in Argentina *Guido Falcone, Maria Fernandez, Galeno Rojas, Juan Tartari, Maria Ysraelit, Jorge Correale*

**P05.004** Neurological Grand Rounds: Current State of Affairs *Richard Choi, David Tabby, Andrea Rosso*

**P05.005** Mayo Brothers on the Six Core Competencies: A Theoretical Look Back into the Future *David Capobianco, Cynthia Bodkin*

**P05.006** Searching for Unicorns: The Neurologist as Diagnostician for Rare Disorders *Dennis Mosier, Robert Smith*

**Neurologic Education: Technology and Education**

**P05.007** The Clinician-Educator's Portfolio: Needs Assessment and Information Dissemination *Gregg Meekins*

**P05.008** Automated Data Mining: An Innovative and Efficient Web-Based Approach To Maintain Resident Case Logs *Ramesh Madhavan, Pratik Bhattacharya, Lakshmi Shankar, Maneesh Singhal, Renee Van Stavern*

**P05.009** Parkinson's Disease on the Internet: An Evaluation of the Readability, Quality, and Technical Content of Patient Information *Brandon Barton*

**P05.010** FrontalCortex.com: A Website for Online Learning in Neurology *J. Douglas Miles*

**P05.011** A Shared Solution for Delivering a Uniformed Curriculum to Neurology Residents in Geographically Distinct Locations *David Capobianco, Christopher Boes, David Dodick*

**P05.012** Geriatric Neurology Web Module for Third-Year Neurology Clerkship *Heather Anderson, Mary McDonald*

**Ethics and Pain**

**P05.013** Ranolazine Attenuates Complete Freund's Adjuvant-Induced Mechanical Hyperalgesia *Harry Gould III, Gregory Casey, Jomar Roberts, Ivan Diamond, Dennis Paul*

**P05.014** Differences in Pain Parameters among Patients with Complex Regional Pain Syndrome, Lumbar or Cervical Radiculopathy and Healthy Controls *Marie Wolanin, Robert Schwartzman, Vasko Gulevski, Guillermo Alexander, John Grothusen*

**P05.015** Neurologic Safety of Treatment with NGX-4010, a High-Concentration Capsaicin Patch, in Patients with Postherpetic Neuralgia *Misha-Miroslav Backonja, Jeffrey Tobias*

**P05.016** TRO19622, a Mitochondrial Targeted Neuroprotective Compound, Prevents and Reverses Paclitaxel-Induced Painful Peripheral Neuropathy *Rebecca Pruss, Thierry Bordet, Wenhua Xiao, Gary Bennett*

**P05.017** A Double-Blinded, Placebo-Controlled, Cross over Study of Ketamine, Fentanyl and Diazepam in Experimental Pain in 21 Healthy Males *Juana Marin, Evelyn Kinsella, Peter Goadsby*

**P05.018** Mental Motor Imagery as an Index of Arm and Leg Pain Severity *H. Branch Coslett, Adam Burkey*

**P05.019** Long-Term Treatment of Diabetic Neuropathy with Lacosamide: Results from Two Long-Term Open-Label Trials *Ronald Graf, Wendy Frye, Jeffrey Simpson, Gary Jay, Karen Simpson, Barbara Tzschaschel, Sabine Bongardt, Brigitte Koch*

**P05.020** Milnacipran Has Low Potential for Drug-Drug Interactions *Antonia Periclou, Stephen Coutts, Srinivas Rao, Robert Palmer, Kim Thacker, Joel Trugman*

**P05.021** Identification of Symptom Clusters in Patients with Fibromyalgia *Robert Bennett, Irwin Russell, Joseph Cappelleri, Andrew Bushmakin, Gergana Zlateva, Alesia Sadosky*

**P05.022** Pregabalin in Fibromyalgia – Systematic Review of Efficacy and Safety from Company Clinical Trial Reports *Sebastian Straube, Sheena Derry, Robert Moore, Henry McQuay*

**P05.023** The Effect of Milnacipran on Cognitive Function and Fatigue in Fibromyalgia Patients *Kim Thacker, Joel Trugman, Srinivas Rao, Yong Wang*

**P05.024** The Effect of Milnacipran on Pain Modulation in Fibromyalgia: An fMRI Analysis *Richard Gracely, Frank Petzke, Hanke Marcus, Karin Jensen, Eva Kosek, Martin Ingvar, Ernest Choy, Steven Williams, Olivier Vitton, M. Groc, Yves Mainguy, Joel Trugman, Srinivas Rao*

**History of Neurology**

**P05.025** The Quicksand of Forgetfulness – Semantic Dementia in One Hundred Years of Solitude *Katya Rascovsky, Isela Pardo, Scott Grossman, Bruce Miller*

**P05.026** Silas Weir Mitchell and His Research on the Cerebellum *Don Todman*

**P05.027** Association of Mercurial Exposure in Leo Kanner's Original Case Series Entitled "Autistic Disturbances of Affective Contact" *Jay Rosenberg, Daniel Olmsted, Mark Blaxill*

**P05.028** Does Susac's Syndrome Explain Goya's Artistic Evolution? *Michael Dobbs*

**P05.029** The Contribution of Ibn Zuhr (Avenaor) to the Progress of Neuroscience *Akram Shhadeh, Sonia Souayah, Nizar Souayah*

**P05.030** Contribution of Near Eastern Scholars to Neurology: El Zahrawi (Albucasis) 993-1064 AD *Sonia Souayah, Akram Shhadeh, Nizar Souayah*

**P05.031** Yeast Therapy for Beriberi and Pellagra *Douglas Lanska*

**P05.032** The Tripartite Origins of the Asymmetric Tonic Reflex: Gesell, Gerstmann and Magnus *Michael Shevell*

**P05.033** Contributions of Wilford Hall Medical Center to the Field of Neurology *Jeffrey McClean, Lyell Jones*

**P05.034** The Vaccine Panic That Wasn't *Robert Herndon*

**P05.035** Jean-Martin Charcot: Sarcasm and Skepticism *Helio Teive, Renato Munhoz, Lineu Werneck*

**P05.036** The First Steps of Clinical Neurology in Argentina *Ricardo Allegri, Cecilia Serrano*

**P05.037** Sin City and Show Girls: The Genesis for Lumbar Microdiscectomy *Eric Farbman*

**P05.038** Mens Imperator: New Thoughts on the Old Problem of Caligula's 'Madness' *Inge Loy-English*

**P05.039** The Stepping Test – A Historical Review *Christian Grommes, Devon Conway*

**P05.040** Medical Researcher William Brebner: Occupational Exposure from a Monkey Bite Resulting in Fatal Herpes B Virus Encephalomyelitis in New York City in 1932 *Alan Jackson*

**Peripheral Nerve IV**

**P05.041** Botulinum Toxin (Type A) for the Treatment of Diabetic Peripheral Neuropathic Pain *Michael Jacoby, Bruce Hughes, Edward Finnerty*

**P05.042** Impact of Postherpetic Neuralgia (PHN) and Painful Diabetic Peripheral Neuropathy (DPN) on Healthcare Costs *Christopher Panarites, Robert Dworkin, Sissi Pham, Daniel Malone, Edward Armstrong*

**P05.043** Time to Opioid Use among Patients with Diabetic Peripheral Neuropathic Pain Who Initiated Duloxetine Versus Other Treatments *Yang Zhao, Luke Boulanger, Ning Wu, Kimberly Fraser*

**P05.044** Ultrastructural Study of the Phrenic Nerve in Streptozotocin-Induced Diabetic Rats: Effects of Insulin Treatment *Valeria Paula Fazan, Omar Rodrigues Filho, Caroline Jordão, Kenneth Moore*

**P05.045** A New Marker for Chronic Demyelination in Diabetic Neuropathy *Nizar Souayah, Abu Nasar, Nataliya Krivitskaya, Peter Siao-Tick-Chong, Russell Chin, Amer Alshekhlee, Hafiz Khan, Sami Khella, Timothy Cunningham*

**P05.046** Clinical, Electrophysiologic and Skin Biopsy Findings in Cryptogenic Sensorimotor Polyneuropathy Compared to Diabetic Polyneuropathy and Normal Controls *Mamatha Pasnoor, Laura Herbelin, Megan Johnson, Janelle Ryals, Mazen Dimachkie, Doug Wright, Richard Barohn*

**P05.047** Efficacy and Safety of Tapentadol ER for Diabetic Peripheral Neuropathic Pain: Results of a Randomized-Withdrawal, Double-Blind, Placebo-Controlled Phase III Study *Mila Etropolski, Douglas Shapiro, Akiko Okamoto, Christine Rauschkolb-Loeffler, Juergen Haeussler*

**P05.048** Axonal Polyneuropathies: Etiologies and Relevance of Paraclinical Investigations in a Cohort of 420 Patients *Marianne Giroux, Arnaud Lacour, Tanya Stojkovic, Helene Zephir, Olivier Outterryck, Patrick Vermersch*

**P05.049** Neuropathy in a Population with Inflammatory Bowel Disease in Olmstead County, Minnesota *Juan Figueroa, Edward Loftus, P. James B. Dyck, Christopher Klein*



**P05.050** A Prospective Controlled Population-Based Radiographic Study of Lower Limb Arterial Calcification in Patients with and without Diabetes Mellitus and Risk Covariates *Joon-Shik Moon, John Beabout, Ronald Swee, Vicky Clark, Jenny Davies, Peter O'Brien, Peter Dyck*

**P05.051** Leprosy Neuropathy: Clinical and Electrophysiological Evaluation before and after Multidrug Therapy *Robson Vital, Marcia Jardim, Ximena Illarramendi, Euzenir Sarno, Osvaldo Nascimeno*

**P05.052** Nerve Conduction Studies in Leprosy Contactants *Wilson Marques, Vanessa Marques, Renata Furini, Norma Foss*

**P05.053** Characteristics of the Mononeuropathy Multiplex Associated with Acute Parvovirus B19 Infection *Timothee Lenglet, Thierry Maisonobe, Karine Viala, Julien Haroche, David Grabli, Zahir Amoura, Jean-Charles Piette, Pierre Bouche*

**P05.054** Chemotherapy-Related Polyneuropathy Effect on Quality of Life in Patients with Lymphoma *Byung-Jo Kim, S. Charles Cho, Hak-Jae Roh, Yuen So*

**P05.055** Pain Contributes to Motor Symptoms in Carpal Tunnel Syndrome *Stefano Tamburin, Carlo Cacciatori, Silvia Marani, Antonio Fiaschi, Giampietro Zanette*

**P05.056** Pregabalin Is Effective in the Treatment of Posttraumatic Peripheral Neuropathic Pain *Robert van Seventer, Flemming Bach, Cory Toth, Michael Serpell, Ian McKenzie, Jane Temple, T. Kevin Murphy*

**P05.057** The Distribution of Lesions among 281 Neuralgic Amyotrophy Patients *Mark Ferrante, Asa Wilbourn*

**P05.058** The Demographic Features of Neuralgic Amyotrophy *Mark Ferrante, Asa Wilbourn*

**P05.059** Predictors of Neuropathy after Lung Transplantation *Victoria Lawson, Laura Voth, Susan Moffat-Bruce, David Nunley, Patrick Ross, Staci Carter, Amy Pope-Harman*

**P05.060** Self-Mutilation in a Patient with Mitochondrial Disease *Semra Saygi, Fusun Alehan, Beril Talim*

### Surgical Treatment of Movement Disorders

**P05.061** Objective Measurements of Rigidity in Parkinson's Disease after Subthalamic Nucleus Stimulation *Helard Miranda, Andrew Duker, Fredy Revilla*

**P05.062** Response of Periodic Limb Movements While Awake (PLMW) to Intra-Operative Pallidal Stimulation: Case Report and Video *Bryan Klassen, Virgilio Evidente, Mark Lyons*

**P05.063** Greater Improvements across Quality of Life Domains Following Unilateral Deep Brain Stimulation Surgery in the GPi as Compared to the STN: Results from a Randomized, Controlled Trial in Parkinson Disease *Laura Zahodne, Michael Okun, Kelly Foote, Hubert Fernandez, Ramon Rodriguez, Lindsey Kirsch-Darrow, Samuel Wu, Dawn Bowers*

**P05.064** A Controlled Study of the Long-Term Cognitive Outcome of Bilateral Subthalamic Nucleus Deep Brain Stimulation *Amy Williams, Gladys Arzola, Adriana Strutt, Richard Simpson, Joseph Jankovic, Michele York*

**P05.065** Longitudinal Change in Apathy Following Deep Brain Stimulation for Parkinson's Disease *Lindsey Kirsch-Darrow, Michael Marsiske, Michael Okun, Kelly Foote, Dawn Bowers*

**P05.066** Resonance in Subthalamo-Cortical Circuits in Parkinson's Disease *Alexandre Eusebio, Alek Pogosyan, Shouyan Wang, Bruno Averbach, Louise Doyle Gaynor, Stéphanie Cantiniaux, Tatiana Witjas, Patricia Limousin, Jean-Philippe Azulay, Peter Brown*

**P05.067** Differential Effects of 5 Hz and 1 Hz Premotor Repetitive Transcranial Magnetic Stimulation (rTMS) on Cortical Excitability and Physical Fatigability in PD *Jau-Shin Lou, Diana Dimitrova, Grace Arnold, Heather Belding, John Nutt, Byung Park*

**P05.068** Repetitive Transcranial Magnetic Stimulation in Parkinson's Disease *Madhuri Behari, Mounita Bagchi, Aparajit Dey, Manvir Bhatia, Garima Shukla*

**P05.069** STN Stimulation Effects on Pneumophonic Coordination in Parkinson's Disease: An Acoustic and Aerodynamic Study *François Viallet, Moustapha Sarr, Ludovic Jankowski, Alain Purson, Serge Pinto, Bernard Teston*

**P05.070** Weight Changes Associated with Unilateral STN DBS and Advanced PD *Harrison Walker, Michael Lyerly, Eric Lee, Natividad Stover, Gary Cutter, Barton Guthrie, Ray Watts*

**P05.071** Weight Change Following Deep Brain Stimulation for Movement Disorders *Roy Strowd III, Michael Cartwright, Leah Passmore, Thomas Ellis, Stephen Tatter, Mustafa Siddiqui*

**P05.072** Study of Orthostatic Regulation in Patients with Parkinson's Disease Receiving Deep Brain Stimulation *Laura Wu, Jyhong Gabriel Hou, Eugene Lai*

### Epilepsy: Characteristics, Therapy, and Outcomes

**P05.073** Long Term Efficacy with Vagus Nerve Stimulation in Adults and the Elderly with Refractory Epilepsy: A Comparative Analysis *Sandipan Pati, Richard Zimmerman, Katherine Noe, Joseph Dratzkowski, Amy Theiler, Deborah Shulman, Lisa Tapsell, Joseph Sirven*

**P05.074** Seizure Incidence and EEG Characteristics in the Pediatric Stroke Population *Rani Singh, Nassim Zecavati, Jennifer Pettiford, Steven Weinstein, Jessica Carpenter*

**P05.075** Neuroimaging Findings in Children with Benign Focal Epileptiform Discharges *Rani Sarkis, Elaine Wyllie, Richard Burgess, Tobias Loddenkemper*

**P05.076** Dose Response to Oxcarbazepine in Children with Newly Diagnosed Partial Epilepsy *Ridwan Alam, Fatema Serajee, A. H. M. Huq*

**P05.077** Population Pharmacokinetics of Lacosamide in Subjects with Partial-Onset Seizures: Results from Two Phase III Trials *Brunhild Nickel, Jochen Zisowsky, Willi Cawello, Mark Lovern, Laura Sargentini-Maier*

**P05.078** Assessment of Phenytoin Use for In-Hospital Seizures at an Academic Medical Center *Madeline Fields, Jacqueline French, Shani Zitter, Ashish Joshi, Daniel Labovitz*

**P05.079** Carisbamate as Adjunctive Treatment for Partial Onset Seizures in Adults: Pharmacokinetic/Pharmacodynamic Modeling of Efficacy Based on Three Randomized, Placebo-Controlled Trials *Edward Faught, Michael Sperling, Filip De Ridder, Jennifer Schmitt, Hui Kimko, Gerald Novak*

**P05.080** Behavioral Treatment Can Reduce Seizures and Improve Quality of Life for Epilepsy Patients *Siegward Elsas, Gaddiel Navarro, Garrett White, Barry Oken*

**P05.081** Safety and Tolerability of Lacosamide: A Summary of Adverse Events in Epilepsy Clinical Trials *Pamela Doty, Victor Biton, Nathan Fountain, Felix Rosenow, Antonio Gil-Nagel, Timothy Sullivan, David Hebert*

**P05.082** Diurnal Seizure Periodicity in Primary Idiopathic and Symptomatic Generalized Epilepsies *Heather Wolff, Erik St. Louis, Mark Granner, M. Zimmerman*

### Epilepsy: Classification, Therapy, and Health Outcomes

**P05.083** Epilepsy Cost of Illness in the U.S. Privately Insured *Howard Birnbaum, Jasmina Ivanova, Yohanne Kidolezi, Ying Qiu, Sue Caleo*

**P05.084** UCB Antiepileptic Drug Pregnancy Registry *Kathryn Bronstein, Ilo Leppik, Georgia Montouris, Page Pennell, Shilpa Alekar*

**P05.085** Evaluating FDA Bioequivalence Standards for Generic Carbamazepine Formulations *Kelly Chuang, Gregory Krauss, Ying Cao*

**P05.086** Comparison of Two Classifications of Postoperative Seizure Outcome, Engel vs ILAE Classification, Following Epilepsy Surgery in Adults with Medically Refractory Epilepsy *Chaohua Yan, James Valeriano, Kevin Kelly, Carol Lane, Jack Wilberger*

**P05.087** Utility of the Measurement of Monoamine Neurotransmitter Metabolites and Other Specific Biomarkers in CSF from Infants and Children with Early Onset Epilepsy *Keith Hyland, Lauren Hyland, John Shoffner*

**P05.088** Attitudes to Epilepsy Surgery in Jamaican Patients with Localization-Related Epilepsy *Amza Ali, Susanna Bortolusso-Ali*

**P05.089** Cingulate Gyrus Epilepsy: Clinical, Neurophysiological and Behavioral Aspects with Surgical Outcomes *Rafeed Alkawadri, Bruce Mickey, Christopher Madden, Paul Van Ness*

**P05.090** The Effects of Conversion from Enzyme-Inducing Anticonvulsants to Topiramate on Serum Lipids and C-Reactive Protein *Scott Mintzer, Christopher Skidmore, Sara Rankin, Michael Sperling*

**P05.091** Differential Effects of Rufinamide in Adults with Partial Onset Seizures as a Function of Concomitant Antiepileptic Drug Therapy: A Post-Hoc Analysis *Martin Brodie, Honglan Li, Wenquan Wang, Milind Narurkar, Sharon Richardson*

**P05.092** Refractory Status Epilepticus (RSE) in Developing Country: Experience from a Tertiary Care Centre from South India *Sanjib Sinha, D. Prashantha, K. Thennarasu, G. Umamaheshwara Rao, P. Satishchandra*

### Improving Stroke Outcome

**P05.093** Cerebral Venous Thrombosis: Clinical Presentation and Outcome in a Prospective Series *Tag-Eldin Sokrab, Mohamed-Nagib Idris, Etedal Ibrahim, Samira Mirgani, Maha Elzibair, Rasha Osman, Maaz Abdalatif*

**P05.094** Stroke Arrival Time to a Tertiary Care Emergency Room in Islamabad, Pakistan – Quick Enough but of No Gain *Ismail Khatri, Ayesha Vohra, Faika Usman, Sidra Sheikh, Saliha Saeed, Arsalan Ahmad*

**P05.095** Left Atrial Enlargement in Relationship to Atrial Fibrillation and Other Demographic Factors in Acute Ischemic Stroke and TIA Patients *Shaneela Malik, William Hicks, Andrew Russman, Lonni Schultz, Jayna Gardner, Angelos Katramados, Panayiotis Mitsias, Patrica Penstone, Brian Silver*

**P05.096** Barriers in Seeking Early Stroke Treatment: Assessment of an Urban Underserved Population *Amanda Castle, Amie Hsia, Dorothy Edwards, Alexander Dromerick, Chelsea Kidwell*

**P05.097** Bilateral Thalamic Infarction Treatment with Modafinil *Kristina Damauer, Iftekhar Ahmed*

**P05.098** Stroke in Generation X: Etiology and Clinical Outcome of Stroke in Patients under 45 Years *Brian van Adel, Jamie Silva, Linda Gould, Wieslaw Oczkowski*

**P05.099** Urban Versus Rural Trends in tPA Use for Acute Ischemic Stroke in Washington State *Megan Donohue, Sara Schepp, David Tirschwell*

**P05.100** The Influence of Age on Racial Disparities in Stroke in South Carolina *Wuwei Feng, Paul Nietert, Robert Adams*

**P05.101** LuNAR Strokes: Late Night Activity Regarding Stroke Codes *Gilda Tafreshi, Rema Raman, Karin Ernstrom, Brett Meyer*

**P05.102** Frequency and Association of Coexisting Heart Failure on Stroke Outcomes in the United States: 1995–2005 *Gabriela Vazquez, Patrick Pulicino, Adnan Qureshi, Afshin Divani*

### Stroke Outcomes

**P05.103** Increased Mortality for Weekend Admission for Subarachnoid Hemorrhage (SAH) or Intracranial Hemorrhage (ICH) *Richard Dubinsky, Sue Lai, Hilary Dubinsky*

**P05.104** Are Hispanics at Higher Risk of Symptomatic Intracranial Hemorrhage after tPA for Acute Ischemic Stroke? The Combined UT–Houston and UCSD Experience *Sheryl Martin-Schild, Karen Albright, Jennifer Emond, Rema Raman, Brett Meyer, Patrick Lyden, James Grotta, Sean Savitz*

**P05.105** Gender and Ischemic Stroke among Alaska Native People: Similar Risk Profile and Outcomes *Janet Johnston, Ronnie Horner, Lisa Bulkow, Brian Trimble*

**P05.106** Racial Differences in Ischemic Stroke Subtype Classification: An MRI-Based Approach *Sarah Song, Chelsea Kidwell*

**P05.107** Asymptomatic Peripheral Arterial Disease Predicts Vascular Events in Stroke/TIA Patients *Souvik Sen, Donald Lynch, Jr., Effie Kaltsas, Jennifer Simmons, Omid Akhavan, Jongyeol Kim, Walter Tan*

**P05.108** Emergency Department Misdiagnosis of Cerebrovascular Events in the Era of Modern Neuroimaging: A Systematic Review *David Newman-Toker, Karen Robinson, Jonathan Edlow*

**P05.109** Incidence of Stroke and Stroke Subtypes in a Multi-Ethnic Population. Results from Stroke among Hispanic and African-American Regional Populations (SHARP) Study *M. Fareed Suri, Gabriela Vazquez, Shafiuddin Ahmed, Adnan Qureshi*

**P05.110** Stroke in Young, Asian Women; Risk Factors, Sub Types, Presentation and Outcome *Moahamd Wasay, Subash Kaul, N. Ramani, Padma Gunaratne, Bindu Menon, Ahmed Khalifa, Niphon Pongvarin, Mohammad Saadatnia, Robert Gan, Alper Dai, Man Mehndiratta*

**P05.111** The Occurrence of Stroke in an Adult Cohort of Sickle Cell Disease Patients *Antoine Gueguen, Matthieu Mahevas, Ruben Nzouakou, Anoosha Habibi, François Lionnet, Jean Antoine Ribeil, Robert Girot, Frederic Galacteros, Pablo Bartolucci*

**P05.112** Cholesterol Level and Hemorrhagic Transformation after Ischemic Stroke *Marco D'Amelio, Valeria Terruso, Norma Di Benedetto, Giorgia Famoso, Maria Antonietta Mazzola, Paolo Aridon, Paolo Ragonese, Giovanni Savettieri*

### Risk and Outcomes in Ischemic Stroke

**P05.113** Predictors of Cerebral Ischemic Events in Patients with Asymptomatic Carotid Artery Stenosis: Systematic Review *Eric Ehrensperger, Christina Wolfson, Robert Cote*

**P05.114** Non-Invasive Positive Airway Pressure for Primary Stroke Prevention in Obstructive Sleep Apnea *Eric Hernandez, Pablo Castillo, Adnan Qureshi, Mark Mahowald*

**P05.115** A Retrospective Analysis of Antithrombotic Use in the Peri-Procedural Period of Colonoscopy in Stroke and TIA Patient *Basel Assaad, Veronica Kemerko, Nithin Thummala, Lonni Schultz, Mohammed Rehman, Renzo Figari, Mohamed Heder, Arun Chandok, Ann Silverman, Brian Silver*

**P05.116** Blood Pressure as a Predictor of Poor Functional Outcome in a Puerto Rican Stroke Cohort *Maria Ramos-Fernandez, M. Fernanda Belloio, Latha Stead*

**P05.117** Sex Difference in Arterial Stiffness and Correlation with Systolic Blood Pressure *Sandra Morovic, Miljenka Jurasic, Vida Demarin*

**P05.118** Antithrombotic Medication Utilization and Relationship to Outcomes among Patients with Carotid Dissection in United States *Yousef Mohammad, M. Fareed Suri, Muhammad Zeeshan Memon, Adnan Qureshi*

**P05.119** Informal Advice Can Influence How and When TIA Patients Present for Medical Assessment *Dulka Manawadu, David Collas*

**P05.120** Association of ABCD2 Score with the Presence of Steno-Occlusive Disease among Patients with Transient Ischemic Attacks *Douglas Valenta, Gabriela Vazquez, Gustavo Rodriguez, Kamakshi Lakshminarayan, M. Fareed Suri, Adnan Qureshi*

### Multiple Sclerosis: Outcomes and Scales II

**P05.121** Is Cognition Differentially Affected in Female Versus Male Multiple Sclerosis Patients? *Anat Achiron, Joab Chapman, Glen Doniger, Eran Berkovitz, Mor Lavie, Ely Simon, Yermi Harel*

**P05.122** Cognitive Impairment in Multiple Sclerosis Early after the Second Episode Does Not Predict Disability Five Years Later *Bruno Brochet, Melissa Bonnet, Aurélie Ruet, Jean Christophe Ouallet, Mathilde Deloire*

**P05.123** A Retrospective Analysis in Patients with Relapsing-Remitting Multiple Sclerosis – Results of the Data Collection in Multiple Sclerosis “TYPIC” *Mathias Maurer, Petra Schicklmaier, Gabriele Niemczyk, Stefan Schwab*

**P05.124** Long-Term Effect of Interferon-Beta on Disease Severity in Relapsing-Remitting Multiple Sclerosis Patients *Liliana Patrucco, Juan Rojas, Edgardo Cristiano*

**P05.125** Longitudinal Worsening in Fatigue Is Not Associated with Cognitive Deterioration in Multiple Sclerosis *Sarah Morrow, Bianca Weinstock-Guttman, Fredrick Munschauer, Ralph Benedict*

**P05.126** Long-Term Effects of Interferon Beta-1a Dose on Relapse Rate in Relapsing-Remitting Multiple Sclerosis: Results from a Post-Hoc Analysis of PRISMS Study Data *Douglas Jeffery, Victor Rivera*

**P05.127** Association between Multiple Sclerosis and Candida Species: Evidence from a Case-Control Study *Julián Benito-León, Diana Pisa, Patricia Calleja, Ruth Alonso, María Díaz-Sánchez, M. L. Borbolla, M. Algora, Luis Carrasco*

**P05.128** Natalizumab Reduces Clinical and MRI Disease Activity in Second Line Treatment of Relapsing-Remitting Multiple Sclerosis: Results of a Multicenter Study *Norman Putzki, Oezguer Yaldizli, Mathias Maurer, Sabine Kuckert, Simone Cursiefen, Barbara Tettenborn, Volker Limmroth*

**P05.129** Comparison of Multiple Sclerosis (MS) Relapses and Total Medical Costs for Users of Glatiramer Acetate and Beta Interferons: Two-Year Analysis of a U.S. Managed Care Database *Kenneth Johnson*

**P05.130** Cognitive Aspects in Relapsing-Remitting Multiple Sclerosis (RRMS) Patients Treated with Immunomodulatory Drugs: 24-Month Follow-Up of the ITACA Study *Monica Falautano, Sabrina Canale, Clelia Di Serio, Agnese Fiorino, Vittorio Martinelli, Lucia Moiola, Marta Radaelli, Giancarlo Comi*

**P05.131** The Interferon Beta-1b 16-Year Long-Term Follow-Up Study: Measuring Efficacy after Controlling for Bias in Long-Term Follow-Up Trials *Douglas Goodin, Jason Jones, George Ebers, David Li, Anthony Traboulsee, Anthony Reder, Dawn Langdon, Karola Beckmann, Andreas Konieczny, Volker Knappertz*

**P05.132** A Clinical Retrospective Report on Mitoxantrone Treatment in Active Multiple Sclerosis Patients *Stanley Hum, Yves Lapierre*

**P05.133** A Post-Hoc Analysis of Cumulative Dose Effects of Subcutaneous Interferon Beta-1a on Clinical and MRI Outcomes in Relapsing-Remitting Multiple Sclerosis: Results over the Long Term *Douglas Jeffery, Victor Rivera*



**P05.134** Suspected Cardiotoxicity during Mitoxantrone Treatment for Multiple Sclerosis in British Columbia, Canada *Elaine Kingwell, Bonnie Leung, Saul Isserow, Jane Geddes, Peter Rieckmann, Helen Tremlett*

**P05.135** Effect of Natalizumab on Relapse Outcomes in Patients with Relapsing MS Who Experience MRI Activity during Treatment *David Bates, Emmanuel Bartholome, Amy Pace, Robert Hyde, Christophe Hotermans*

**P05.136** Treatment with Oral Fingolimod (FTY720), 0.5 or 1.25 mg, for 14 Days Has No Effect on Airway Resistance *Robert Schmouder, Cherrie Liu, Olivier David, Nan Wang*

**P05.137** Improvement in Quality-of-Life Outcomes with Natalizumab in Multiple Sclerosis Patients with Highly Active Disease *Bernd Kieseier, Norman Putzki, David Bates, Michael Hutchinson, Amy Pace, Robert Hyde*

**P05.138** Improved Quality of Life in Patients with Relapsing-Remitting Multiple Sclerosis on Long-Term Intramuscular Interferon Beta-1a: A 15-Year Study *Bianca Weinstock-Guttman, Robert Bermel, Dennis Bourdette, Pamela Foulds, Phil You, Richard Rudick*

**P05.139** Comparing Patient-Reported and Physician-Reported EDSS Scores in Patients from ASSURANCE *Bianca Weinstock-Guttman, Robert Bermel, Dennis Bourdette, Pamela Foulds, Phil You, Richard Rudick*

**P05.140** The Efficacy of Natalizumab in Patients with Relapsing Multiple Sclerosis in a Clinical Practice Setting *John Foley*

**P05.141** Acute and Chronic Response to Levodopa in Diffuse Lewy Body Disease (DLB) *Claudio Lucetti, Chiara Logi, Paolo Del Dotto, Caterina Berti, Roberto Ceravolo, Cristina Dolciotti, Filippo Baldacci, Giuseppe Rossi, Ubaldo Bonuccelli*

**P05.142** Effect of Subcutaneous Interferon Beta-1a on Multiple Sclerosis Severity: Findings from the PRISMS Study *Joseph Herbert*

**P05.143** Multiple Sclerosis: Cognitive Function Evaluated by Computerized Cognitive Assessment Battery *Mark Gudesblatt, Myassar Zarif, Barbara Bumstead, Joshua Loewenstein, Anne Dunne, Lori Fafard, Laura Graffiti, Carol Seidel, Lourdes Cruz, Serina Fahie, Joan Bohuslaw, Chris Burke, Jocelyn Caputo, Glen Doniger, Ely Simon*

**P05.144** Change in Health-Related Quality of Life in Multiple Sclerosis Patients Receiving Natalizumab *Judith Stephenson, Krihika Rajagopalan, Sonalee Agarwal, Siddhesh Kamat*

**P05.145** Factors Influencing Quality of Life and Coping Processes of Patients with Multiple Sclerosis: Baseline Data of an International, Observational Study *Carlo Pozzilli, Carolin Miltenburger, Oliver Gunther, Joerg Bugge, Ugo Ecari*

**P05.146** Which Is the Best Indication to Early Treat with Interferon  $\beta$  the Clinically Isolated Syndromes Based on the Clinical Onset? A Cochrane Meta-Analysis *Marinella Clerico, Fabrizio Faggiano, Jacqueline Palace, Maria Tintore-Subirana, Luca Durelli*

**P05.147** Extensive Erosive Dermatitis Associated with Hypereosinophilia under Natalizumab Treatment *Helene Zephir, Olivier Carpentier, Olivier Outteryck, Arnaud Lacour, Didier Ferriby, Patrick Vermersch*

**P05.148** Immunomodulatory Drug Treatment in Multiple Sclerosis: Effect on Survival *David Orion, Joab Chapman, Mark Dolev, Rakefet Tsabari, Anat Achiron*

**P05.149** Development of a New Semantic Category Assessment Instrument in the Global/Local Processing: Preliminary Data of Multiple Sclerosis Subjects *Teresa Ambrosio, Maria Esmeralda Quartuccio, Claudio Gasperini, Massimiliano Prencipe, Ada Francia*

**P05.150** The Effect of Disease-Modifying Therapy on Disability Status in a Longitudinal Retrospective Analysis of a Multiple Sclerosis Center Database *Michael Wells, Stephen Kirzinger, Gary Cobbs*

**P05.151** Cognitive Impairment and Mental Fatigue in Multiple Sclerosis and Myasthenia Gravis *Serkan Ozakbas, Berril Donmez Colakoglu, Esra Coskuner Poyraz, Billur Celik, Muhtesem Gedizlioglu, Egemen Idiman*

**P05.152** Use of MRI in Clinical Decision-Making in Multiple Sclerosis *Hallie Kendis, D. Lynn, Anne Cross, Benjamin Greenberg, Michael Racke*

**P05.153** Health Care Utilization and Cost Comparison of Patients with Multiple Sclerosis Treated with Natalizumab or Interferon Beta 1a SC: A Propensity Score Matched Analysis *Beth Nordstrom, Kathy Fraeman, Contessa Fincher, Dennis Meletiche*

**P05.154** Long-Term Improvement in the Disability of Worsening MS Patients with Plasma Exchange: Results of a 25-Year Follow-up Study *Bhupendra Khatri, Michael McQuillen, Sergey Tarima, Mary Dukic, John Kramer*

**P05.155** Clinical Course in Multiple Sclerosis Patients Presenting with a History of Progressive Disease *Krupa Pandey, Colleen Farrell, Christine Hannigan, Tracy DeAngelis, Stephen Krieger, Aaron Miller, Fred Lublin*

## Multiple Sclerosis: Visual Outcomes

**P05.156** Correlation between N-acetylaspartate (NAA) Levels and RNFL Thickness Measures in a Large Multiple Sclerosis (MS) Cohort *Ari Green, Radhika Srinivasan, Sarah Nelson, Darin Okuda, Douglas Goodin, Stephen Hauser, Daniel Pelletier*

**P05.157** Diffusion Tensor and Magnetization Transfer MRI of the Human Optic Nerve In Vivo Correlates with Retinal Nerve Fiber Layer Thickness in Multiple Sclerosis *Seth Smith, Zoe Williams, Daniel Reich, John Ratchford, Sheena Farrell, Eliza Gordon-Lipkin, Peter van Zijl, Neil Miller, Peter Calabresi*

**P05.158** Associations between Retinal Nerve Fiber Layer Abnormalities and Neurologists' Assessments of Optic Disc Pallor and Afferent Pupillary Defects *Deanna Cettomai, Girish Hiremath, John Ratchford, Arun Venkatesan, Benjamin Greenberg, Carlos Pardo-Villamizar, Douglas Kerr, Justin McArthur, Peter Calabresi*

**P05.159** Low-Contrast Letter Acuity Scores Correlate Better with Severity of Multiple Sclerosis *Girish Hiremath, John Ratchford, Christina Warner, Peter Calabresi*

**P05.160** Evidence for Axonal Loss and Prominent Color Vision Deficits in Children with Multiple Sclerosis or Clinically Isolated Syndrome *Kendall Nash, Sara Teasdale, Dorothee Chabas, Jonathan Strober, Emmanuelle Waubant, Ari Green*

**P05.161** Retinal Nerve Fibre Layer Thickness and Optic Nerve Lesions in Acute Monosymptomatic Optic Neuritis *Klaus Kallenbach, Dan Fuglø, Helle Simonsen, Birgit Sander, Henrik Larsson, Michael Larsen, Jette Frederiksen*

**P05.162** A Comparison of Cirrus vs. Stratus Optical Coherence Tomography for Measuring Retinal Changes *Christina Warner, Girish Hiremath, Stephanie Syc, Sheena Farrell, Amy Conger, Teresa Frohman, Esther Bisker, Laura Balcer, Elliot Frohman, Peter Calabresi*

**P05.163** Reproducibility of Cirrus Optical Coherence Tomography (OCT) in Multiple Sclerosis *Stephanie Syc, Christina Warner, Girish Hiremath, Sheena Farrell, Laura Balcer, Elliot Frohman, Peter Calabresi*

**P05.164** Reproducibility of Serial Optical Coherence Tomography without Pharmacologic Pupillary Dilatation *Salim Abboud, Robert Bermel, Diane Ivancic, Tammy Skaramagas, Jeffrey Cohen*

**P05.165** Adverse Impact of Visual Comorbidities on Visual Disability in MS *Ruth-Ann Marrie, Gary Cutter, Tuula Tyry, Denise Campagnolo, Timothy Vollmer*

**P05.166** Visual Quality of Life and Its Correlates for Patients with Multiple Sclerosis *Ben Newman Wright, Arnold Wilkins, Yannis Zoukos, Thomas Thomaidis*

## Aging and Dementia: Clinical I

**P05.167** Roles of Education and Medial Temporal Atrophy in the Diagnosis of Amnesic MCI and Mild Dementia *James Mortimer, Amy Borenstein, David Loewenstein, Elizabeth Potter, Jason Appel, Maria Greig, Yougui Wu, Ashok Raj, Elizabeth Schofield, Ranjan Duara*

**P05.168** Time Course of Diagnostic Features of Lewy Body Disease *Glenn Smith, Bradley Boeve, Shane Pankratz, Kelly Jacobson, Jeremiah Aakre, Ferman Tanis*

**P05.169** The ADAS-cog's Performance as a Measure – Lessons from the ADNI Study: Part 2 – Evaluation Using Modern Psychometric Methods *Stefan Cano, Holly Posner, Paul Aisen, Ola Selnes, Yaakov Stern, Ronald Thomas, Michael Weiner, John Zajicek, Scott Zeger, Jeremy Hobart*

**P05.170** A Phase III, Placebo-Controlled, Double-Blind, Randomized Trial Assessing the Effect of Tramiprosate on Hippocampus Volume Change in Patients with Mild-to-Moderate Alzheimer's Disease (The Alphase Study) *Serge Gauthier, Paul Aisen, Steven Ferris, Denis Garceau, Daniel Saumier, Anh Duong, John Sampalis*

**P05.171** How Well Does the ADAS-cog Measure the Spectrum of Alzheimer's Disease Severity? An Item Response Theory Analysis *Jared Benge, Steve Balsis, Lisa Geraci, Paul Massman, Rachele Doody*

**P05.172** Long-Term Cognitive Impairment, MRI Findings and History of Coronary Artery Bypass Grafting Surgery (CABG) *Ranjan Duara, Warren Barker, Nisha Bhatia, Elizabeth Potter, Jason Appel, Qian Shen, Ashok Raj, Michael Malek-Ahmadi, Yougui Wu, Elizabeth Schofield, Maria Greig, David Loewenstein*

**P05.173** White Matter Hyperintensities Are Associated with Impaired Attention and Gait in Normally Functioning Elderly Subjects *Melissa Murray, Matthew Senjem, John Hollman, Maria Shiung, Stephen Weigand, Dennis Dickson, Ronald Petersen, Clifford Jack*

**P05.174** Screening for REM Sleep Behavior Disorder in Patients with Cognitive Impairment and/or Parkinsonism: Updated Validation Data on the Mayo Sleep Questionnaire *Bradley Boeve, Jennifer Molano, Tanis Ferman, Glenn Smith, Siong-Chi Lin, Kevin Bieniek, Wael Haidar, Maja Tippmann-Peikert, David Knopman, Neill Graff-Radford, Vernon Pankratz, Yonas Geda, Ronald Petersen, Michael Silber*

**P05.175** Two Distinct Variants of Right Temporal Frontotemporal Lobar Degeneration *Keith Josephs, Jennifer Whitwell, David Knopman, Bradley Boeve, Joseph Parisi, Dennis Dickson, Robert Ivnik, Glenn Smith, Clifford Jack, Ronald Petersen*

**P05.176** Mild Cognitive Impairment +/- Subsequent Dementia Associated with Underlying Lewy Body Disease *Jennifer Molano, Bradley Boeve, Tanis Ferman, Glenn Smith, Joseph Parisi, Dennis Dickson, David Knopman, Neill Graff-Radford, Yonas Geda, Robert Ivnik, John Lucas, Ronald Petersen*

## Looking to the Future...

### AAN Center for Health Policy

Guidelines, Practice, and Advocacy Open House

“Digital Demos” Presentation

*Technology Solutions That You Can Afford*

Monday, April 27, 2009

3:00 p.m.–5:30 p.m.

Sheraton Ballroom

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- NEW! Attend the “Digital Demos” presentation, where your fellow neurologist colleagues will present low-cost, easy-to-implement electronic office solutions that can help move your practice into the 21<sup>st</sup> century and take advantage of Medicare PQRI bonuses.
- View guideline and practice poster presentations, talk to guideline authors, and take home free copies of practice tools, coding resources, and tips on how to improve your practice.
- Learn what the Academy is doing on Capitol Hill to advocate for you and the future of your profession and talk with physicians who have been to Capitol Hill.
- Enter to win FREE 2010 Annual Meeting registration and other exciting prizes!

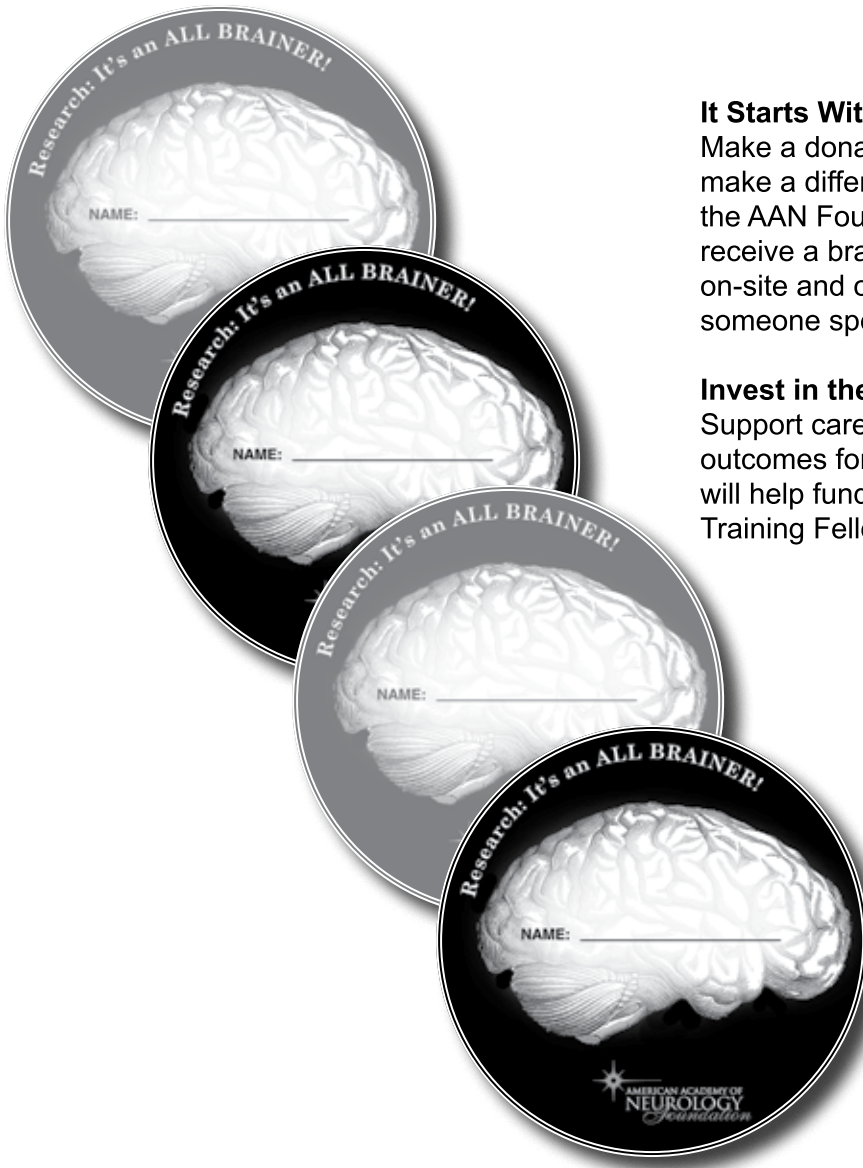
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# INTEGRATED NEUROSCIENCE SESSION: ADVANCES IN HEADACHE

Wednesday, April 29 / 2:00 p.m.–6:00 p.m.

Coordinators: David Dodick, MD and Peter Goadsby, MD, PhD

## Platform Session / 2:00 p.m.–3:30 p.m. / Room 3AB

|                                                                                                                                                                                                                                                                                                             |                  |                                                                                                                                                                                                           |                  |                                                                                                                                                                                                                                                                                                                                                       |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| <b>2:00 p.m.</b><br>Migraine Symptoms in Middle-Age Predict Brain Infarcts in Late-Life: A 25-Year Longitudinal Population-Based MRI Study <i>Ann Scher, Anna Ghambaryan, Sigurdur Sigurdsson, Larus Gudmundsson, Gudny Eiriksdottir, Thor Aspelund, Mark van Buchem, Vilmondur Gudnason, Lenore Launer</i> | <b>IN4-1.001</b> | <b>2:15 p.m.</b><br>MRI with Intrathecal Gadolinium To Detect a Cerebrospinal Fluid Leak: Results of a Prospective Open Label Single Centre Observational Cohort <i>Ludo Vanopdenbosch, Jan Casselman</i> | <b>IN4-1.002</b> | <b>2:45 p.m.</b><br>Clinical and Neuroimaging Evidence of Interictal Cerebellar Dysfunction in FHM 2 <i>Daniela Grimaldi, Caterina Tonon, Sabina Cevoli, Giulia Pierangeli, Emil Malucelli, Giovanni Rizzo, Rossana Terlizzi, Elisa Sancisi, Stefano Zanigni, Stefano Soriani, Pasquale Montagna, Bruno Barbiroli, Raffaele Lodi, Pietro Cortelli</i> | <b>IN4-1.004</b> | <b>3:15 p.m.</b><br>Clinical Profile of the Novel Oral CGRP Receptor Antagonist Telcagepant for the Acute Treatment of Migraine in Two Phase III Randomized Placebo-Controlled Trials <i>Tony Ho, Michel Ferrari, David Dodick, Robert Shapiro, Hans-Christopher Diener, Sylvia Lucas, Vince Galet, James Kost, Xiaoyin Fan, Heather Leibensperger, Samar Froman, Kaiyin Fei, Christopher Assaid, Christopher Lines, Hille Koppen, Paul Winner, Kathryn Connor</i> | <b>IN4-1.006</b> |
|                                                                                                                                                                                                                                                                                                             |                  | <b>2:30 p.m.</b><br>Interictal Sensitization in Migraine <i>Todd Schwedt, Robert Gereau IV, Missy Krauss, Evan Kharasch</i>                                                                               | <b>IN4-1.003</b> | <b>3:00 p.m.</b><br>Transcranial Magnetic Stimulation for the Treatment of Migraine Aura <i>Philip Holland, Carol Schembri, Joe Fredrick, Peter Goadsby</i>                                                                                                                                                                                           | <b>IN4-1.005</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                  |

## Poster Session / 3:30 p.m.–4:30 p.m. / Room 3AB

|                                                                                                                                                                                                                   |                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>IN4-2.001</b> Single Nucleotide Polymorphisms of the Serotonin Transporter Gene in Migraine <i>Bettina Bayerer, Hans-Christopher Diener, Volker Limmroth</i>                                                   | <b>IN4-2.004</b> Gray Matter Decrease in Patients with Trigeminal Neuralgia <i>Mark Obermann, Daniel Müller, Thomas Zwarg, Elke Gizewski, Rea Rodriguez-Racke, Hans-Christoph Diener, Arne May, Zaza Katsarava</i>                | <b>IN4-2.007</b> Cerebral Venous Sinuses Diameter Variation in Response to Lumbar Puncture in Idiopathic Intracranial Hypertension <i>Anat Horev, Gal Ifergane, Itzik Wirguin, Ilan Shelef</i>                                                                                                                                      | <b>IN4-2.009</b> Hemicrania Continua and Unilateral Chronic Migraine Indometacin Negative: A Clinical Comparison Study <i>Elisabetta Cittadini, Peter Goadsby</i> |
| <b>IN4-2.002</b> Aura Does Not Predict Right-to-Left Shunt in Patients with Chronic Migraine <i>Ashley Kim, William Young, Tanner Van Dell, Raya Terry, Stephen Silberstein, Anthony Guarino, Stephanie Nahas</i> | <b>IN4-2.005</b> Occipital Nerve Stimulation (ONS) for Treatment of Intractable Chronic Migraine (ICM): Three-Month Results from the ONSTIM Feasibility Study <i>Joel Saper, Peter Goadsby, David Dodick, Stephen Silberstein</i> | <b>IN4-2.008</b> Refractory Chronic Cluster Headache Treated by Deep Brain Stimulation: A French Multicentric Randomized Placebo-Controlled Double-Blind Trial <i>Michel Lanteri-Minet, Denys Fontaine, Nelly Fabre, Gilles Géraud, Serge Blond, Christian Lucas, François Dubois, Patrick Mertens, Malou Navez, Yves Lazorthes</i> | <b>IN4-2.010</b> New Daily Persistent Headache in the Pediatric Population <i>Eric Kung, Stewart Tepper, Alan Rapoport, Fred Sheftell, Marcelo Bigal</i>          |
| <b>IN4-2.003</b> Auditory Hallucinations in Adults with Migraine <i>Sara Tarshish, Matthew Robbins, Brian Grosberg</i>                                                                                            | <b>IN4-2.006</b> Ictal Brain 5-HT <sub>1A</sub> Receptor Binding in Migraineurs <i>Genevieve Demarquay, Amelie Lothe, Jean-Pierre Royet, Nicolas Costes, Gerard Mick, François Manguiere, Philippe Ryvlin</i>                     |                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                   |

## Presentation of the Harold Wolff-John Graham Award: An Award for Headache/Facial Pain Research / 4:30 p.m. / Room 3AB

Sponsored by the American Academy of Neurology and endowed by Endo Pharmaceuticals.

Recipient:

**Mark Obermann, MD**

Essen, Germany

## Invited Speaker Session\* / 4:45 p.m. – 6:00 p.m. / Room 3AB

|                            |                                                                                            |
|----------------------------|--------------------------------------------------------------------------------------------|
| <b>4:45 p.m.–5:05 p.m.</b> | The Origin of Migraine Pain <i>Rami Burstein, PhD</i>                                      |
| <b>5:05 p.m.–5:25 p.m.</b> | Migraine Aura: Recent Developments and Mechanistic Understanding <i>Andrew Charles, MD</i> |
| <b>5:25 p.m.–5:45 p.m.</b> | The Migraine Pipeline: An Update <i>Peter Goadsby, MD, PhD</i>                             |
| <b>5:45 p.m.–6:00 p.m.</b> | Panel Discussion                                                                           |

\*Current as of February 23, 2009



## S21 Multiple Sclerosis: Clinical Trials

### Room 6B

**2:00 p.m. Presentation of the 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: David Miller, FRCP London, United Kingdom*

**2:30 p.m. S21.003**

**Efficacy and Safety of Rituximab in Patients with Primary Progressive Multiple Sclerosis (PPMS): Results of a Randomized Double-Blind Placebo-Controlled Multicenter Trial** *Kathleen Hawker, Paul O'Connor, Mark Freedman, Peter Calabresi, Jack Antel, Jack Simon, Stephen Hauser, Emmanuelle Waubant, Timothy Vollmer, Hillel Panitch, Zhang Jiameng, Peter Chin, Craig Smith*

**2:45 p.m. S21.004**

**Oral Fingolimod (FTY720) Versus Interferon Beta-1a in Relapsing-Remitting Multiple Sclerosis: Results from a Phase III Study (TRANSFORMS)** *Jeffrey Cohen, Jean Pelletier, Ludwig Kappos, Xavier Montalban, Hans-Peter Hartung, Giancarlo Comi, Bhupendra Khatri, Frederik Barkhof, Tracy Stites, James Jin, Stacy Wu, Shreeram Aradhya, TRANSFORMS Study Group*

**3:00 p.m. S21.005**

**The CombiRx Cohort at Baseline with Clinical and MRI Differences by Diagnostic Criteria** *Fred Lublin, Stacey Cofield, Gary Cutter, Robin Conwit, Ponnada Narayana, Flavia Nelson, Jerry Wolinsky*

**3:15 p.m. S21.006**

**A Single Center, Randomized, Double-Blinded, Placebo-Controlled Crossover Pilot Study of the Effects of American Ginseng on Multiple Sclerosis Fatigue** *Edward Kim, Jesus Lovera, Laura Schaben, Dennis Bourdette, Ruth Whitham*

## S22 Aging and Dementia: Genetics

### Room 6C

**2:00 p.m. Presentation of the Potamkin Prize for Research in Pick's, Alzheimer's, and Related Diseases**

*Sponsored by the American Academy of Neurology, the AAN Foundation, and funded through the philanthropy of the Potamkin Family.*

*Recipients: Robert Vassar, PhD Chicago, IL Michael Wolfe, PhD Boston, MA Berislav Zlokovic, MD, PhD Rochester, NY*

**2:30 p.m. S22.003**

**Genetic Variability in Cholesteryl Ester Transfer Protein (CETP) Reduces the Risk of Incident Dementia: Results from the Einstein Aging Study (EAS)** *Amy Sanders, Cuiling Wang, Mindy Katz, Laurie Ozelius, Nir Barzilai, Carol Derby, Richard Lipton*

**2:45 p.m. S22.004**

**Variations in the Progranulin Gene Affect Global Gene Expression in Frontotemporal Lobar Degeneration** *Alice Chen-Plotkin, Felix Geser, Joshua Plotkin, Christopher Clark, Linda Kwong, Wuxing Yuan, Murray Grossman, Vivianna Van Deerlin, John Trojanowski, Virginia Lee*

**3:00 p.m. S22.005**

**Clinical Heterogeneity in a Chromosome 9 Linked FTD-ALS Family** *Adam Boxer, Rosa Rademakers, Bradley Boeve, Howard Feldman, Matthew Baker, Dean Foti, Eric McDade, Jennifer Molano, Anna Karydas, Richard Crook, Jill Goldman, Pheth Sengdy, William Seeley, Stephen DeArmond, Bruce Miller, Ian Mackenzie*

**3:15 p.m. S22.006**

**X-Linked Corticobasal Degeneration and tau Deposition in a Family with Severe Autism and Mutation in the SLC9A6 Gene** *James Garbern, Manuela Neumann, John Trojanowski, Virginia Lee, Charles Schwartz, Gerald Feldman, William Kupsky, Anders Sima*

## S23 Parkinson's Disease: Epidemiology

### Room 6A

**2:00 p.m. S23.001**  
**Cumulative Exposure to Lead and Risk of Parkinson's Disease** *Marc Weisskopf, Jennifer Weuve, Huiling Nie, Marie-Helene Saint-Hilaire, Lewis Sudarsky, David Simon, Bonnie Hersh, Joel Schwartz, Robert Wright, Robert Feldman, Howard Hu*

**2:15 p.m. S23.002**

**Role of Endogenous and Exogenous Hormone Exposure on the Risk of Parkinson Disease: Results from the Women's Health Initiative Observational Study** *Rachel Saunders-Pullman, Carol Derby, Nanette Santoro, Susan Bressman, Brian Chiu, Richard Lipton, Sylvia Wassertheil-Smoller*

**2:30 p.m. S23.003**

**Levodopa-Associated Upregulation of Methylmalonic Acid Levels Correlate with Severity of Peripheral Neuropathy in Patients with Idiopathic Parkinson's Disease** *Kim Brithaupt, George Francis, Oksana Suchowersky, Douglas Zochodne, Cory Toth*

**2:45 p.m. S23.004**

**Predictors of Depression in Early Parkinson's Disease** *Ergun Uc, Michael McDermott, Daniel Weintraub, Laura Marsh, John Growdon, Kelvin Chou, Peggy Auinger, Karen Marder, Parkinson Study Group*

**3:00 p.m. S23.005**

**$\alpha$ -Synuclein (SNCA) Genotype Modifies the Association between Head Injury and Parkinson's Disease (PD)** *Samuel Goldman, Freya Kamel, Grace Bhudhikanok, Monica Korell, Lori Sterling, Jane Hoppin, David Umbach, G. Ross, Dale Sandler, Aaron Blair, J. Langston, Caroline Tanner*

**3:15 p.m. S23.006**

**WITHDRAWN**

## S24 Stroke Epidemiology I

### Room 608/609

**2:00 p.m. Presentation of the Founders Award**

*Sponsored by the American Academy of Neurology Alliance.*

*Recipient: Kazuma Nagakawa, MD San Francisco, CA*

**S24.001 Transfer Function**

**Analysis of Dynamic Cerebral Autoregulation in Non-Traumatic Intracerebral Hemorrhage** *Kazuma Nagakawa, Jorge Serrador, Farzaneh Sorond*

**2:15 p.m. S24.002**

**Stroke Incidence Is Decreasing in Whites, but Stable in Blacks: A Preliminary Population-Based Estimate of Temporal Trends in Stroke Incidence** *Dawn Kleindorfer, Kathleen Alwell, Jane Khoury, Charles Moomaw, Daniel Woo, Opeolu Adeoye, Matthew Flaherty, Pooja Khatri, Simona Ferioli, Joseph Broderick, Brett Kissela*

**2:30 p.m. S24.003**

**Sex Differences in Functional Outcomes after Ischemic Stroke: The Role of Ischemic Lesion Volume, Age, NIHSS and Pre Stroke Modified Rankin Scale Scores** *Gisele Silva, Fabricio Lima, Erica Camargo, Elkan Halpern, Michael Lev, Wade Smith, Karen Furie*

**2:45 p.m. S24.004**

**Are Memory Impairment and Depressive Symptoms Independent Predictors of Incident Stroke?** *M. Glymour*

**3:00 p.m. S24.005**

**Preoperative Statin Use Does Not Reduce Stroke and Encephalopathy after Coronary Artery Bypass Grafting** *Matthew Koenig, Maura Grega, Maryanne Bailey, Luu Pham, Scott Zeger, William Baumgartner, Guy McKhann*

**3:15 p.m. S24.006**

**Very Long-Term Survival and Vascular Risk in Patients with a Previous Young Stroke** *Frank-Erik De Leeuw, Renate Arntz, Noortje Maaijwee, Henny Schoonderwaldt, Lucille Dorresteijn*

## S25 Muscular Dystrophies

### Room 606/607

**2:00 p.m. S25.001**  
**Muscle Pain and Myoglobinuria Are Common in Patients with FKRP Mutations** *Katherine Mathews, Carrie Stephan, Karla Laubenthal, Steven Moore*

**2:15 p.m. S25.002**

**Pulmonary Function Characteristics of 255 Boys with Becker and Duchenne Muscular Dystrophy by Age Groups, Ambulatory Status and Steroid Use: Baseline Data from the CINRG Longitudinal Study Project** *Richard Abresch, Craig McDonald, Erik Henricson, Jay Han, Robert Leshner, Diana Escobar, Eric Hoffman, Avital Cnaan, Adrienne Arrieta, Fengming Hu, Angela Zimmerman, Tina Duong, Jill Mayhew, Julaine Florence*

**2:30 p.m. S25.003**

**Combining Stem Cells and Exon Skipping and Approach To Treat Muscular Dystrophies** *Mirella Meregalli, Andrea Farini, Marzia Belicchi, Rachid Benchaouir, Giuseppe D'Antona, Daniele Parolini, Simona Maciotta, Paola Razini, Roberto Bottinelli, Luis Garcia, Nereo Bresolin, Yvan Torrente*

**2:45 p.m. S25.004**

**Phenotypes of Myofibrillar and Reducing Body Myopathies Due to Mutations in Four and a-Half LIM Protein 1 (FHL1) Gene** *Catarina Quinzii, Sherien Shalaby, Arthur Hays, Kurenai Tanji, Yukiko Hayashi, Tatsuro Izumi, Utako Takechi, Christopher Min, Ichizo Nishino, Eduardo Bonilla, Michio Hirano*

**3:00 p.m. S25.005**

**Redefining Clinical Phenotype in a Large Cohort of Italian Non-Dystrophic Myotonic Patients** *Valeria Sansone, Sabrina Lucchiarini, Alice Zanolini, Serena Pagliarini, Barbara Fossati, Marta Panzeri, Stefania Corti, Francesca Magri, Nereo Bresolin, Giacomo Comi, Giovanni Meola*

**3:15 p.m. S25.006**

**Recognizing Novel Features of Dysferlinopathies Facilitating Diagnosis** *Xiomara Rosales, Julie Gastier-Foster, Jerry Mendell*

**S26 Epilepsy: Co-Morbidities, Epidemiology, and Health Outcomes**

**Room 611/612**

**2:00 p.m. Presentation of the Dreifuss-Perry 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:*  
**Michael Wong, MD, PhD**  
St. Louis, MO

**2:15 p.m. S26.002**  
Depression and Health Outcomes in Epilepsy: A Randomized Trial *Frank Gilliam, Kevin Black, Jewell Carter, Victoria Vahle, Alison Randall, Yvette Sheline, Wei-Yann Tsai, Patrick Lustman*

**2:30 p.m. S26.003**  
Prevalence of Epilepsy as a Co-Morbidity of Neurological Disorders in Nursing Home Residents *Angela Birnbaum, Ilo Leppik, Susan Harms, Shuzhen Li, Lynn Eberly*

**2:45 p.m. S26.004**  
The Indirect Cost Burden of Epilepsy in the United States *Howard Birnbaum, Jasmina Ivanova, Yohanne Kidolezi, Sue Caleo*

**3:00 p.m. S26.005**  
Incidence of Injury and Cost of Care for Patients Seeking Emergent Care for Epilepsy in a United States Managed Care Setting *Woodie Zachry III, Quynhchau Doan, Brien Smith, Jerry Clewell, Jenny Griffith*

**3:15 p.m. S26.006**  
Psychogenic Nonepileptic Seizures and Psychogenic Movement Disorders: Are They the Same Patients? *Jennifer Hopp, Molly Price, Karen Anderson, Ann Gruber-Baldini, Jingkun Zhu, Whitney Hammers, Allan Krumholz, Lisa Shulman*

**S27 Peripheral Nerve II**

**Room 605/610**

**2:00 p.m. S27.001**  
Neuroprotective Effects of Erythropoietin in Preclinical Models of Autoimmune Neuropathy *Gang Zhang, Helmar Lehmann, Kazim Sheikh*

**2:15 p.m. S27.002**  
Metabolic Syndrome in Small Fiber Sensory Neuropathy *Lan Zhou, Joshua Sperling*

**2:30 p.m. S27.003**  
Outcomes and Electrodiagnostic Testing of Sensory-Predominant Polyradiculoneuropathy in Pork Processing Workers; Improvement over Time *Jennifer Tracy, Daniel Lachance, Jane Norell, JaNean Engelstad, P. James Dyck*

**2:45 p.m. S27.004**  
Association of Metformin, Upregulation of Methylmalonic Acid Levels and Clinically Worsened Diabetic Peripheral Neuropathy *Daryl Wile, Cory Toth*

**3:00 p.m. S27.005**  
Prevalence, Correlates and Impact of Neuropathic Pain in HIV Infection: The CHARTER Study *Ronald Ellis, Debralee Rosario, David Clifford, Justin McArthur, David Simpson, Terry Alexander, Benjamin Gelman, Ann Collier, Christina Marra, Beau Ances, Igor Grant*

**3:15 p.m. S27.006**  
Infliximab Associated Motor Neuropathy Typically Has Monophasic Improving Course with Drug Discontinuation *Steven Kosa, Christopher Klein*

**S28 Behavioral Neurology I**

**Room 602/603**

**2:00 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:*  
**Bradley Schlaggar, MD, PhD**  
St. Louis, MO

**2:15 p.m. S28.002**  
Executive Dysfunction in Parkinson's Disease Is More Closely Associated with Cortical Cholinergic Than with Nigrostriatal Dopaminergic Denervation *Vikas Kotagal, Martijn Muller, Robert Koeppe, Kirk Frey, Roger Albin, Nicolaas Bohnen*

**2:30 p.m. S28.003**  
Never Resting Brain: Simultaneous Representation of Two Alpha Related Processes in Humans *Eti Ben-Simon, Ilana Podlipsky, Andrey Zhdanov, Talma Hendler*

**2:45 p.m. S28.004**  
Double Dissociation in the Anatomy of Disinhibition and Executive Functioning *Casey Krueger, Victor Laluz, Howard Rosen, Bruce Miller, Joel Kramer*

**3:00 p.m. S28.005**  
The Contributions of the Visual Word Form Area to Skilled Reading *Steven Rapcsak, Esther Kim, Maya Henry, Sarah Andersen, Pélagie Beeson*

**3:15 p.m. S28.006**  
Diffusion Tensor-Based Tractography of Language Networks in Semantic Dementia *Federica Agosta, Roland Henry, Raffaella Migliaccio, John Neuhaus, Bruce Miller, Nina Dronkers, Simona Brambati, Massimo Filippi, Stephen Wilson, Jennifer Ogar, Maria Luisa Gorno-Tempini*

**S29 Neurogenetics**

**Room 613/614**

**2:00 p.m. S29.001**  
Nerve Excitability Measurements Can Distinguish Genetic Channelopathies in the Episodic Ataxias *Susan Tomlinson, S. Tan, Dimitri Kullmann, David Burke, Michael Hanna, Hugh Bostock*

**2:15 p.m. S29.002**  
NT-3 Gene Therapy Improves Peripheral Nerve Pathology and Function in Mouse Model for Charcot-Marie-Tooth (CMT) Neuropathy *Zarife Sahenk, Jerry Mendell, Chris Edwards, Brian Kaspar, K. Clark*

**2:30 p.m. S29.003**  
Effects of SCA14-Related PKC $\square$  Mutations on Protein Function and Aggregation *Dong-Hui Chen, Wendy Raskind, Jeannie Nguyen, YunLin Zheng, Randall Woltjer, Gwenn Garden, John Wolff, Nishi Gill, Catherine Morgan, Thomas Bird*

**2:45 p.m. S29.004**  
Cerebellar Ataxia and Elevated Cerebrospinal Free Sialic Acid *Fanny Mochele, Frédéric Sedel, Adeline Vanderver, Udo Engelke, Bing-Zhi Yang, Bart Smits, Frans Verheijen, François Seguin, Alexis Brice, Marie Vanier, Marjan Huizing, Raphael Schiffmann, Alexandra Durr, Ron Wevers*

**3:00 p.m. S29.005**  
KIF1B, the First Neuronally Expressed Gene Associated with Multiple Sclerosis *Ilse Hoppenbrouwers, Yurii Aulchenko, Sriram Ramagopalan, Linda Broer, Naghmeh Jafari, Jan Hillert, Jenny Link, Wangko Lundström, Dessa Sadovnick, Dirk Goossens, Christine van Broeckhoven, Jurgen Del-Favero, George Ebers, Ben Oostra, Cornelia van Duijn, Rogier Hintzen*

**3:15 p.m. S29.006**  
Outcome after Two Years of Enzyme Replacement Therapy (ERT) in 29 Patients with Late-Onset Type II Glycogenosis (GSDII) *Sabrina Ravaglia, Arrigo Moglia, Miriam Rossi, Alfredo Costa, Miriam Rigoldi, Bruno Bembi, Cesare Danesino*

**S30 Neurologic Manifestations of Systemic Disease**

**Room 604**

**2:00 p.m. S30.001**  
Guillain-Barre Syndrome after Vaccination with Gardasil in United States. A Report from the CDC/FDA Vaccine Adverse Event Reporting System *Peter Michas-Martin, Nataliya Krivitskaya, Hafiz Khan, Abu Nasar, Adnan Qureshi, Nizar Souayah*

**2:15 p.m. S30.002**  
Positron Emission Tomography Enhances Cancer Detection in Patients with Paraneoplastic Neurological Disease *Andrew McKeon, Metha Apiwattinakul, Vanda Lennon, Daniel Lachance, Brian Mullan, J. Ahlskog, Bahram Mokri, Jeffrey Britton, Bradley Boeve, Daniel Drubach, Sean Pittock*

**2:30 p.m. S30.003**  
Identification of Antibodies Against Brain Antigens in Sera of Patients with Neuropsychiatric Systemic Lupus Erythematosus *Akio Kimura, Takeo Sakurai, Megumi Yamada, Yuichi Hayashi, Yuji Tanaka, Isao Hozumi, Takashi Inuduka*

**2:45 p.m. S30.004**  
Nationwide Cross-Sectional Study of Multiple System Atrophy (MSA) in Japan *JAMSAC, Yaeko Ichikawa, Yasuo Nakahara, Yoshio Momose, Jun Goto, Shoji Tsuji*

**3:00 p.m. S30.005**  
Silent Cerebral Infarcts Are Not Associated with Magnetic Resonance Imaging-Defined Intracranial Vasculopathy or with Elevated Transcranial Doppler Measurements in Children with Sickle Cell Anemia *Mathula Thangarajh, Dana Fuchs, Robert McKinstry, Michael Noetzel, James Casella, Bruce Vendt, Bruce Barton, Michael DeBaun*

**3:15 p.m. S30.006**  
Autoimmune Disorders Associated with Carbon Monoxide Poisoning *Michael Dobbs, Joseph Berger, Sidney Houff*

## S31 Multiple Sclerosis: Imaging I

Room 6B

**3:45 p.m. S31.001**  
7-Tesla MRI Improves the Detection of Cortical Lesions in Multiple Sclerosis *Emma Tallantyre, Paul Morgan, Jennifer Dixon, Ali Al-Radaideh, Matthew Brookes, Nikos Evangelou, Peter Morris*

**4:00 p.m. S31.002**  
In Vivo Evidence of Glutamate Toxicity in MS: A Longitudinal Spectroscopy Study *Daniel Pelletier, John Kornak, Bill Chu, Darin Okuda, Sarah Nelson, Radhika Srinivasan*

**4:15 p.m. S31.003**  
A Novel MRI Sequence, the Fast Gray Matter Acquisition T1 Inversion Recovery (FGATIR), Is Superior to Fluid Attenuated Inversion Recovery (FLAIR) for the Resolution of White Matter Lesions (WMLs) *Ihtsham Haq, Atchar Sudhyadhom, Nelson Hwynn, Frank Bova, Kelly Foote, Michael Okun*

**4:30 p.m. S31.004**  
Brain Atrophy Predicts Disability Progression in Multiple Sclerosis *Elizabeth Fisher, Jar-Chi Lee, Richard Rudick*

**4:45 p.m. S31.005**  
Flattening of Cerebral Cortex in Multiple Sclerosis: Potential Marker of Early White Matter Injury *Martin Kavec, Danielle Balériaux, Mathieu Vokaer*

## S32 Aging and Dementia: Treatment

Room 6C

**3:45 p.m. S32.001**  
Risk Factors and Clinical Course Associated with Vasogenic Edema in a Phase II Trial of Bapineuzumab *Reisa Sperling, Stephen Salloway, Nick Fox, Jerome Barackos, Kristen Morris, Gordon Francis, Ronald Black, Michael Grundman, Bapineuzumab 201 Clinical Trial Investigators*

**4:00 p.m. S32.002**  
Cognitive and Functional Outcomes from a Phase II Trial of Bapineuzumab in Mild to Moderate Alzheimer's Disease *Stephen Salloway, Reisa Sperling, Keith Gregg, Ronald Black, Michael Grundman*

**4:15 p.m. S32.003**  
A Phase III, Placebo-Controlled, Double-Blind, Randomized Trial of Tramiprosate in the Clinical Management of Patients with Mild-to-Moderate Alzheimer's Disease (the Alphase Study) *Paul Aisen, Serge Gauthier, Steven Ferris, Denis Garceau, Daniel Saumier, Anh Duong, John Sampalis*

**4:30 p.m. S32.004**  
The ADAS-cog's Performance as a Measure – Lessons from the ADNI Study: Part 1 – Evaluation Using Traditional Psychometric Methods *Holly Posner, Stefan Cano, Paul Aisen, Ola Selnes, Yaakov Stern, Ronald Thomas, Michael Weiner, John Zajicek, Scott Zeger, Jeremy Hobart*

**4:45 p.m. S32.005**  
Safety Profile of Bapineuzumab in a Phase II Trial of Mild-to-Moderate Alzheimer's Disease (AD) *Lawrence Honig, Sid Gilman, Kristen Morris, Ronald Black, Michael Grundman, Gordon Francis*

## S33 Movement Disorders: Dystonia

Room 6A

**3:45 p.m. S33.001**  
Impaired Dopaminergic Neurotransmission in Hereditary Torsion Dystonia *Martin Niethammer, Maren Carbon-Correll, Shichun Peng, Deborah Raymond, Vijay Dhawan, Yilong Ma, Tom Chaly, Susan Bressman, David Eidelberg*

**4:00 p.m. S33.002**  
Long-Term Outcome Predictors of Pallidal DBS in Patients with Primary Dystonia: The Role of Age and Disease Duration *Ioannis Isaïas, Jens Volkmann, Andreas Kupsch, Ron Alterman, Jill Ostrem, Philip Starr, Michele Tagliati*

**4:15 p.m. S33.003**  
Minimum Incidence of Primary Spasmodic Dysphonia *Raymond Lo, Caroline Tanner, Zhuqin Gu, Kathleen Albers, Amethyst Leimpeter, Robin Fross, Kathleen Comyns, Grace Liang, Allan Bernstein, Jeff Klingman, Samuel Goldman, Laurie Ozelius, Connie Marras, Susan Bressman, Cynthia Comella, Neil Risch, Lorene Nelson, Christy Ludlow, Brenna McGee, Stephen Van Den Eeden*

**4:30 p.m. S33.004**  
High-Throughput Mutational Analysis of TOR1A in Primary Dystonia *Mark LeDoux, Jianfeng Xiao, Robert Bastian, Joel Perlmutter, Brad Racette, Samer Tabbal, Morvarid Karimi, Randal Paniello, Andrew Blitzer, Sat Dev Batish, Zbigniew Wszolek, Ryan Uitti, Peter Hedera, David Simon, Daniel Tarsy, Daniel Truong, Karen Frei, Ronald Pfeiffer, Suzhen Gong, Yu Zhao*

**4:45 p.m. S33.005**  
Pediatric Safety Experience with MYOBLOC® *William Birmingham, Edgar Salazar-Grueso*

## S34 Stroke Epidemiology II

Room 608/609

**3:45 p.m. S34.001**  
Left Ventricular Systolic Dysfunction and the Risk of Stroke in the Cardiovascular Health Study *Salvador Cruz-Flores, Ellen O'Meara, Aninda Acharya, Paisith Piriyaawat, John Gottdiener, Richard Kronmal, David Lefkowitz, W. T. Longstreth, Robert Hart*

**4:00 p.m. S34.002**  
Accounting for Do-Not-Resuscitate Orders and Withdrawal of Care in Prognostic Models for Intracerebral Hemorrhage *Thanh Ton, David Tirschwell, Kyra Becker, Claire Creutzfeld, W. T. Longstreth, Jr.*

**4:15 p.m. S34.003**  
Diastolic and Not Systolic Blood Pressure Is Associated with Subclinical Cerebrovascular Damage: The Northern Manhattan Study *Justin Marcus, Hannah Gardener, Mitsuhiro Yoshita, Joanna Guzman, Mitchell Elkind, Ralph Sacco, Charles DeCarli, Clinton Wright*

**4:30 p.m. S34.004**  
Antihypertensive Agent Utilization Patterns after Stroke: Analysis of a Nationwide Sample *Nurses Sanossian, Ling Zheng, Gene Sung, Bruce Ovbiagele*

**4:45 p.m. S34.005**  
Relationship between Alcohol Consumption and Functional Outcomes from Stroke *Pamela Rist, J. Michael Gaziano, Tobias Kurth*

## S35 Anterior Horn: SMA and Kennedy's Disease

Room 606/607

**3:45 p.m. S35.001**  
Phase II Trial of Leuprorelin Acetate in Patients with Spinal and Bulbar Muscular Atrophy *Haruhiko Banno, Masahisa Katsuno, Keisuke Suzuki, Yu Takeuchi, Motoshi Kawashima, Noriaki Suga, Motoko Takamori, Mizuki Ito, Tomohiko Nakamura, Koji Matsuo, Shinichi Yamada, Yumiko Oki, Hiroaki Adachi, Makoto Minamiyama, Masahiro Waza, Naoki Atsuta, Hirohisa Watanabe, Yasushi Fujimoto, Tsutomu Nakashima, Fumiaki Tanaka, Manabu Doyu, Gen Sobue*

**4:00 p.m. S35.002**  
Motoneurons Transplantation with Pharmacological Therapy To Promote Axonal Elongation Improves the Phenotype of a Model of Spinal Muscular Atrophy with Respiratory Distress Type 1 (SMARD1) *Stefania Corti, Monica Nizzardo, Martina Nardini, Chiara Donadoni, Roberto Del Bo, Dimitra Papadimitriou, Federica Locatelli, Nicoletta Mezzina, Nereo Bresolin, Giacomo Comi*

**4:15 p.m. S35.003**  
Mitochondrial Dysfunction in a Neural Cell Model of Spinal Muscular Atrophy *Gyula Acsadi, Xingli Li, Icksoo Lee, Alena Pecinova, Alan Dombkowski, Maik Hüttemann, Graham Parker*

**4:30 p.m. S35.004**  
Safety and Pharmacokinetics (PK) of TRO19622 in Spinal Muscular Atrophy (SMA) Children and Adults *Brigitte Estournet, Brigitte Chabrol, Jean-Marie Cuisset, Claude Cances, Nathalie Strub Wourgaft, Valérie Cuvier, Firas Bassissi, Thierry Bordet, Rebecca Pruss, Jean-Louis Aitbol*

**4:45 p.m. S35.005**  
Confirming Androgen Blockage as a Treatment for Kennedy's Disease *Bernardo Cacho, Guillermo Garcia-Ramos, Bruno Estañol, Horacio Senties*



**S36 Interventional Neurology**

- Room 611/612**
- 3:45 p.m. S36.001**  
Angiographic Effects of Oversized Neuroform™ Stent Placement *Thomas Wolfe, Sindhu Srivatsal, Syed Hussain, Mouhammed Kabbani, Osama Zaidat*
- 4:00 p.m. S36.002**  
Preliminary Experience with the Use of Intra-Arterial Tenecteplase for Acute Ischemic Stroke Treatment *Qaisar Shah, Muhammad Zeeshan Memon, Gabriela Vazquez, Adnan Qureshi*
- 4:15 p.m. S36.003**  
Safety and Efficacy of Second Coil Embolization for Remnant Intracranial Aneurysm after Initial Endovascular Therapy *Dhruvil Pandya, John Lynch, Brian-Fred Fitzsimmons, Prem Kandiah, Thomas Wolfe, Syed Hussain, Osama Zaidat*
- 4:30 p.m. S36.004**  
Paradoxical Responses to Combined Intravenous and Intra-Arterial Therapy Versus Endovascular Therapy Alone in Patients with Acute ICA or MCA Ischemic Stroke *Vivek Misra, Andrew Barreto, Rohan Arora, Miriam Morales, Shuichi Suzuki, Edwin Cacayorin, Peng Chen, Nicole Gonzales, James Grotta, Sean Savitz*
- 4:45 p.m. S36.005**  
Compliant Versus Non-Compliant Balloons for Endovascular Treatment of Vasospasm after Subarachnoid Hemorrhage *Nauman Tariq, Muhammad Qureshi, M. Fareed Suri, Gabriela Vazquez, Jefferson Miley, Ramachandra Tummala, Adnan Qureshi*

**S37 Peripheral Nerve III**

- Room 605/610**
- 3:45 p.m. S37.001**  
Females with Charcot-Marie-Tooth Disease Type 1X Display Two Distinct Phenotypes *Emily Hyman, Stephanie Sottile, Sindhu Ramchandren, Michael Shy, Carly Siskind*
- 4:00 p.m. S37.002**  
Characterization of Dermal Myelinated Nerve Fibers in Patients with CMT1A *Mario Saporta, Istvan Katona, Michael Shy, Jun Li*
- 4:15 p.m. S37.003**  
A Novel Form of Severe Childhood Autosomal Recessive Sensory Neuropathy Associated with Optic Atrophy and Deafness Maps to Chromosome 8q24.22-Term *Myriam Srour, Michael Shevell, Bernard Brais*
- 4:30 p.m. S37.004**  
Cellular Characterization of MPZ Mutations Causing Different Clinical Phenotypes *Yi-Chung Lee, Bing-Wen Soong*
- 4:45 p.m. S37.005**  
Peripheral Nerve Size in Polyneuropathies and Normals: An Ultrasound Study *Craig Zaidman, Muhammad Al-Lozi, Alan Pestronk*

**S38 Behavioral Neurology II**

- Room 602/603**
- 3:45 p.m. S38.001**  
Is Ischemia in Broca's Area Associated with Broca's Aphasia More Reliably in Acute or Chronic Stroke? *Elisa Ochfeld, Lauren Cloutman, Melissa Newhart, Cameron Davis, Argye Hillis*
- 4:00 p.m. S38.002**  
Dissociable Music and Language: A Case Study of a Semantic Dementia Patient with Preserved Musical Abilities *Jessica Weinstein, Phyllis Koenig, Murray Grossman*
- 4:15 p.m. S38.003**  
Speech Errors in Progressive Nonfluent Aphasia *Sharon Ash, Corey McMillan, Delani Gunawardena, Peachie Moore, Christi Farag, Alea Kahn, Lauren Richmond, Brianna Morgan, Murray Grossman*
- 4:30 p.m. S38.004**  
Impairment in Decoding Eye-Region Emotional Content in Mesial Temporal Lobe Epilepsy *Gaetano Cantalupo, Francesca Benuzzi, Guido Rubboli, Carlo Tassinari, Paolo Nichelli, Stefano Meletti*
- 4:45 p.m. S38.005**  
rTMS Treatment of Refractory Depression: Stimulus Laterality Effect Exceeds rTMS Effect *Stephen Nadeau, Nicola Ricciuti, Herbert Ward, Jing Cheng, Dawn Bowers, William Triggs*

**S39 Multiple Sclerosis: Immunology II**

- Room 613/614**
- 3:45 p.m. S39.001**  
Prion Protein Is a Key Regulator of T Cell Activation, Differentiation, and Survival *Wei Hu, Stefan Nessler, Bernhard Hemmer, Todd Eagar, Lawrence Kane, Rutger Leliveld, Andreas Muller-Schiffmann, Anne Gocke, Amy Lovett-Racke, Li-Hong Ben, Rehana Hussain, Andreas Breil, Jeffrey Elliott, Paul Carson, Petra Cravens, Mahendra Singh, Benjamin Petsch, Lothar Stitz, Michael Racke, Carsten Korth, Olaf Stuve*
- 4:00 p.m. S39.002**  
Characterization of Signal Transduction Pathways Involved in Glatiramer Acetate (GA, Copolymer-1, Copaxone®)-Induced Type II Monocyte Differentiation *Nicolas Molnarfi, Thomas Prodhomme, Martin Weber, Scott Zamvil*
- 4:15 p.m. S39.003**  
The Central Nervous System as an Effector Site of Secretory Immunity in Multiple Sclerosis *Dorothee Chabas, Danielle Seilhean, Flore Rozenberg, Tarek Sharshar, Seiji Nishino, Bertrand Fontaine, Olivier Lyon-Caen, Emmanuel Mignot, Canh Quan*
- 4:30 p.m. S39.004**  
Gender Differences in Immunomodulatory Effects of 1,25 Dihydroxyvitamin D3 in Multiple Sclerosis *Jorge Correale, Maria Ysraelit, Maria Gaitán*
- 4:45 p.m. S39.005**  
Anti-Aquaporin-4 Antibody Production from Peripheral B Cells in Neuromyelitis Optica *Chihiro Suzuki, Ichiro Nakashima, Toshiyuki Takahashi, Amit Bar-Or, Yasuto Itoyama, Kazuo Fujihara*

**S40 History of Neurology**

- Room 604**
- 3:45 p.m.**  
**Presentation of the Lawrence C. McHenry Award: An Award for the History of Neurology**  
*Sponsored by the American Academy of Neurology.*  
*Recipient*  
**T. Jock Murray, OC, MD, FRCPC**  
*Halifax, NS, Canada*  
**S40.001** Dr. Samuel Johnson's Stroke *Thomas Murray, Sultan Darvesh*
- 4:15 p.m. S40.003**  
Boothby's Films Showing the Efficacy of Glycine in Myasthenia Gravis *Christopher Boes, Brian Crum*
- 4:30 p.m. S40.004**  
Electrotherapy for Pellagra *Douglas Lanska*
- 4:45 p.m. S40.005**  
Charcot and Vibratory Therapy for Neurological Diseases *Christopher Goetz*



**Headache III**

**P06.001** Global Prevalence of Chronic Migraine: Results of an Internet-Based Survey *Sepideh Varon, Manasee Shah, Ariane Kawata, Teresa Wilcox, Aubrey Manack*

**P06.002** Comparison of Sociodemographic Characteristics of Persons with Chronic Migraine (CM) Versus Episodic Migraine (EM) Globally *Ariane Kawata, Manasee Shah, Teresa Wilcox, Aubrey Manack, Sepideh Varon*

**P06.003** Probable Migraineurs' Ability To Function and Productivity: Comparing a Single-Tablet of Sumatriptan and Naproxen Sodium (SumaRT/Nap) to Placebo *Richard Lipton, Dennis Riff, Sylvia Lucas, Susan McDonald, Jonathan White, Michael Runken*

**P06.004** Comparing Medication Satisfaction among Probable Migraineurs: Prior Treatment Versus Single Tablet Sumatriptan and Naproxen Sodium (SumaRT/Nap) Versus Placebo *Sheena Aurora, Jan Brandes, Nathan Bennett, Jonathan White, Frederick Derosier, Michael Runken*

**P06.005** Cost of Healthcare Utilization for Chronic Migraine and Episodic Migraine: Results from the American Migraine Prevalence and Prevention (AMPP) Study *Richard Lipton, Aubrey Manack, Dawn Buse, Evelyn Chiao, Daniel Serrano, Michael Reed, Catherine Turkel*

**P06.006** Investigation of the Role of mGluR5 Inhibition in Migraine: A Proof of Concept Study of ADX10059 in Acute Treatment of Migraine *Peter Goadsby, Charlotte Keywood*

**P06.007** Clinical Hallmarks of Scopolamine-Induced Migraine *Ken Ikeda, Yuji Kawase, Takanori Takazawa, Yasuo Iwasaki*

**P06.008** Rizatriptan Combined with Caffeine for Acute Migraine *Frederick Freitag, Seymour Diamond*

**P06.009** Migraine Medication Utilization Patterns among Current Triptan Users *Bozena Katic, Marcelo Bigal, Wendy Golden, X. Henry Hu*

**P06.010** Low Dose-Topiramate-Induced Acute Bilateral Reversible Glaucoma: A Case Report *Carlo Lovati, Daniela Galimberti, Claudio Mariani*

**Interventional Neurology II**

**P06.011** Stent without Concomitant Coil Embolization for Anterior Circulation Cerebral Aneurysms *Abraham Kuruvilla, Chethan Venkatasubba Rao, Sunil Manjila, Anthony Lee, John Steele, Murali Guthikonda, Andrew Xavier*

**P06.012** Covered Stent in the Treatment of Internal Carotid Arterio-Venous Fistulae *Chethan Venkatasubba Rao, Charles Braun, John Steele, Amit Kansara, Maggie Jones, Ambooj Tiwari, Andrew Xavier*

**P06.013** Safety and Efficacy of Anticoagulation with Bivalirudin in Neuro-Endovascular Procedures *Muhammad Zeeshan Memon, Alexandros Georgiadis, Gabriela Vazquez, Qaisar Shah, M. Fareed Suri, Adnan Qureshi*

**P06.014** Postmortem Histopathology of a Specifically Designed Intracranial Stent *Syed Hussain, Thomas Wolfe, Osama Zaidat*

**P06.015** Algorithm of Surgical Revascularization of the Brain in Patients with Multiple Occlusive Lesions of Brachiocephal Arteries *Sergey Skrylev, Vladimir Shchipakin, Alexandr Koshcheev, Sergey Protsky*

**P06.016** Angioplasty for Acute Worsening of Vessel Stenosis with Pediatric Moyamoya Syndrome *Lisa El Hakam, John Volpi, Michel Mawad, Gary Clark*

**P06.017** Incidence and Longitudinal Follow-Up of Cerebral Aneurysms in Pediatric Brain Tumor Patients *Muhammad Taqi, Kathleen Helton, Frederick Boop, Thomas Merchant, Brannon Morris*

**P06.018** TCD Monitoring of Intracranial Stenting: A Proposed Technique and Examples of Utility *John Volpi, Zsolt Garami, Richard Klucznik, Orlando Diaz-Daza*

**P06.019** Peri-Procedural Complications during Endovascular Treatment of Intracranial Aneurysms Managed by Interventional Neurologists *Mahmoud Rayes, Khaled Junaid, Ambooj Tiwari, Amit Kansara, Osama Zaidat, Andrew Xavier*

**P06.020** Safety of Treatment of More Multiple Aneurysms in the Same Session *Mahmoud Rayes, Amit Kansara, Ambooj Tiwari, Chethan Rao, Murali Guthikonda, Andrew Xavier*

**P06.021** Selection for Endovascular Acute Stroke Therapy by MR Imaging *Dileep Yavagal, Elka Wiley, Abizer Rodriguez, Hamad Farhat, Sammy Elhammady, Mohammed Ali Aziz-Sultan, Gustavo Ortiz*

**P06.022** The Pattern of Neurological Deficits in the Baseline NIHSS Exam Predict the Likelihood of Finding High-Risk Lesions on Echocardiography *Enrique Leira, Brian Ludwig, Mahmut Gurol, James Torner, Harold Adams, Jr.*

**P06.023** Racial Differences in Response to Endovascular Thrombolysis in Patients with Acute Ischemic Stroke *Vivek Misra, Andrew Barreto, Rohan Arora, Miriam Morales, Shuichi Suzuki, Edwin Cacayorin, Peng Chen, Nicole Gonzales, James Grotta, Sean Savitz*

**P06.024** Outcomes of Patients with Bridging Therapy after Administration of Intravenous Tissue Plasminogen Activator in Patients with Severe Ischemic Stroke *Islam Tafish, Ameer Hassan, Vahid Tohidi, Jawad Kirmani*

**P06.025** Initial Experience with Penumbra System in Interventional Management of Acute Stroke *Ashish Nanda, Kristine Blackham, Jason Wilson, Daniel Hsu, Jeffrey Sunshine, Robert Tarr*

**P06.026** Routine Combined Intravenous and Intraarterial Thrombolysis in Acute Stroke Patients with Arterial Occlusion *Mikael Mazighi, Jean Michel Serfaty, Julien Labreuche, Elena Meseguer, Philippa Lavallee, Lucie Cabrejo, Tarik Slaoui, Isabelle Klein, Jean-Pierre Laissy, Pierre Amarenco*

**P06.027** Safety of Stent Supported Intracranial Revascularization in the Setting of Acute Ischemic Stroke *Ambooj Tiwari, Amit Kansara, Mahmoud Rayes, Chethan Rao, Andrew Xavier, Maggie Jones*

**P06.028** Predictors of Recanalization and Outcome of Multimodal Endovascular Therapy for Acute Ischemic Stroke: Early Treatment Versus Modality *Akram Shhadeh, Avik Sarkar, Ameer Hassan, Bahareh Hassanzadeh, Vahid Tohidi, Steven Hoover, Jawad Kirmani*

**P06.029** Safety and Efficacy of Intraarterial Thrombolytic Infusion beyond Six Hours. A Multicenter Experience *Jawairia Memon, Jefferson Miley, Gustavo Rodriguez, Ramachandra Tummala, Adnan Qureshi*

**P06.030** Changes in NIH Stroke Scale with IV, IA, and Combined Thrombolysis for Acute Ischemic Stroke *Don Smith, Chris Fanale*

**Cerebrovascular Disease: Clinical Aspects**

**P06.031** Cardiovascular Risk Profile and Neuroimages of Vertebrobasilar Dolichoectasia in Japan *Ken Ikeda, Yasuo Iwasaki*

**P06.032** Foix-Chavany-Marie Syndrome: Case Presentations of Biopercular Syndrome with Review of the Literature *Chut Sombutmai, Scott Silliman*

**P06.033** Diagnosing Infective Endocarditis in the Thrombolytic Window of Acute Ischemic Stroke: A Retrospective Case Series from the University of Utah Stroke Database *Kevin Walker, Jacinda Sampson, Jodi Olsen, Elaine Skalabrinn*

**P06.034** Susac Syndrome; Vasculopathy of Retinal, Cochlear and Cerebral Arteries *Nilufer Kale, Murat Icen, Jale Agaoglu, Isil Yazici, Muzaffer Ozturk, Osman Tanik*

**P06.035** Anterior Spinal Artery Syndrome as Complication of Coronary Angiography *Georg Pilz, Peter Wipfler, Olaf Schwarte, Christoph Sulzer, Stephan Golaszewski, Gunther Ladurner, Joerg Kraus*

**P06.036** High Serum Lipoprotein(a) Level as a Potential Predictive Factor for Polyvascular Disease *Pamela Song, Suk-Jae Kim, Jin-Myoung Seok, Byung-Su Kim, Woo-Sub Hwang, Oh-Young Bang, Chin-Sang Chung, Kwang-Ho Lee, Gyeong-Moon Kim*

**P06.037** Imbalance in Distribution of Subjects Recruited Per Center and Risk of Negative Outcomes in Acute Stroke Trials *Nauman Tariq, M. Fareed Suri, Gabriela Vazquez, Jill Novitzke, Adnan Qureshi*

**P06.038** Proper Control of Vascular Risk Factors Delays the Development of Mild Cognitive Impairment *Maria Zurr, Alberto Aleman, Jessica Bekerman, Claudia Alonzo, Marcelo Schapira, Javier Benchimol, Luis Camera, Gabriel Waisman, Edgardo Cristiano*

**P06.039** Differences in the Vascular Risk Factors and In-Hospital Mortality of Patients with Carotid and Vertebral Dissection – Results from the Nationwide Inpatient Survey *Gustavo Rodriguez, Alberto Maud, Jefferson Miley, Mustapha Ezzeddine, Gabriela Vazquez, Adnan Qureshi*

**P06.040** Cocaine Induced Vasculitis: An Unusual MRI Presentation *Zeenat Jaisani, Cornelia Mihai, Jitendra Sharma, Sarabjit Atwal, Fredrick Munschauer*

**Clinical Stroke Case Reports**

**P06.041** A Case of Pseudostroke in an Hereditary Angioedema *Isabelle Bonnaud, Violaine Rouaud, Severine Debais, Maud Pallix, Jean Philippe Cottier, Claire Farber, Bertrand De Toffol*

**P06.042** Nocturnal Blood Pressure Patterns in the Acute Stroke Period Independently Predict Six-Month Incidence of Mortality and Vascular Events *Deidre De Silva, Fung-Peng Woon, Christopher Chen, Hui-Meng Chang, Choon-Meng Ting, Meng-Cheong Wong*

**P06.043** Clinical Features Distinguishing Hemorrhagic and Ischemic Stroke in the First Two Hours after Onset *Nerses Sanossian, Sidney Starkman, Scott Hamilton, David Liebeskind, Latisha Ali, Lucas Restrepo, Gene Sung, Robin Conwit, Jeffrey Saver*

**P06.044** Cruciate Paralysis Caused by Anterior Spinal Artery Stroke: A Case Report *Ryan Punambolam, Philip Teal, Manraj Heran*

**P06.045** Relationships among Coronary, Extra- and Intracranial Atherosclerosis, and Small Vessel Disease: Analysis in Patients Receiving Coronary Artery Bypass Graft Surgery *Eun-Jae Lee, Jae-Won Lee, Dong-Wha Kang*

**P06.046** Multiple Organ Dysfunction Syndrome after Severe Ischemic Stroke: 100 Autopsy-Based Cases *Michael Piradov, Tatyana Gulevskaia, Elena Gnedovskaya, Julia Ryabinkina, Vladimir Morgunov*

**P06.047** Antiplatelet-Related Subdural Hematoma: Clinical Characteristics and Outcome *Murali Krishna Jagaralapudi, Deepak Kurhade, Amitav Rath, Syed Ameer Paspala, T. V. R. Murthy, Amrit Saxena*

**P06.048** Limb-Shaking Transient Ischemic Attack. A Report of Five Patients and Review of 48 Cases *Marisol Ferrúa, Andrea Pisarevsky, Patricia Riccio, Francisco Klein, Roberto Rotta Escalante, Luciano Sposato*

**P06.049** Millard-Gubler Syndrome Associated with a Thrombosed Basilar Artery Aneurysm *Aashish Patel, Brian Silver*

**P06.050** Cerebral Venous Thrombosis in Young, Asian Women; Risk Factors, Presentation and Outcome *Mohammad Wasay, Subash Kaul, Padma Gunaratne, Bindu Menon, Niphon Pongvarin, Abdul Malik, Suneel Kumar, Shahzad Ahmed, Ahmed Khalifa, Mohammad Saadatnia*

#### **Child Neurology: Epidemiology and Clinical Features**

**P06.051** An Update on the Epidemiology and Etiology of Pediatric Stroke *Nassim Zecavati, Rani Singh, Jennifer Pettiford, Steven Weinstein, Jessica Carpenter*

**P06.052** Cardiac Asystole – An Unusual Manifestation of Sandifer's Syndrome Presenting as Seizure Exacerbation *Kayalvizhi Vijayakumar, Prab Prabhakar*

**P06.053** Charcot-Marie-Tooth Neuropathy (CMT) Type 2A2 in Children: A Retrospective Case Series *Lakshmi Beeravolu, Susan Iannaccone, Steven Sparagana*

**P06.054** Expected Transaminase Levels in Muscular Dystrophy with Chronically Elevated Creatine Kinase *Erika Hedderick, Carmen Coombs, Richard Thompson, Thomas Crawford*

**P06.055** Optic Nerve Head Morphology in Perinatal Onset Static Encephalopathy *Deepta Ghate, Sachin Kedar, V. Vedanarayanan, Nils Mungan, Ching Chen, James Corbett*

**P06.056** Determinants of Ambulation in Children with Spastic Quadriplegic Cerebral Palsy: A Population-Based Study *Elisabeth Simard-Tremblay, Michael Shevell*

**P06.057** Duration of Epilepsy during Infancy Correlates with Impaired Cognitive Development *Martina Vendrame, Andreas Alexopoulos, Katrina Boyer, Matt Gregas, Elaine Wyllie, Frances Jensen, Tobias Loddenkemper*

**P06.058** Determinants of Relapse Rate in Children with Multiple Sclerosis *Jennifer Li, Sandra Magalhaes, David Callen, Manohar Shroff, Melissa McGowan, Brenda Banwell*

**P06.059** Visual Motor and Perceptual Abnormalities in Children with Demyelinating Disorders *E. Ann Yeh, Susan Bennett, Linda Shriber, Deepti Vaidya, Rachael Heim, Murali Ramanathan, Bianca Weinstock-Guttman*

**P06.060** Predicting Neurological Development in Preterm Infants from Multiple Pregnancies by the General Movements Method *Omer Bar-Yosef, Monika Marbacher, Jacob Kuint, Lidia Gabis*

#### **Aging and Dementia: Clinical II**

**P06.061** Verbal Episodic Memory Deficits in Semantic Dementia *Lauren Richmond, Brianna Morgan, Rachel Goldmann Gross, David Libon, William Hu, Alea Khan, Peachie Moore, Murray Grossman*

**P06.062** Interhemispheric Differences in Animate Knowledge among Patients with Semantic Dementia *Mario Mendez, Sarah Kremen, Ronald Saul*

**P06.063** Effects of Memantine on Language and Functional Communication in Patients with Moderate to Severe Alzheimer's Disease: A Pooled Analysis *Judith Saxton, Michael Tocco, Robert Hofbauer, Stephen Graham*

**P06.064** Memantine Versus Donepezil in Mild to Moderate Alzheimer's Disease. A Randomized Trial with Magnetic Resonance Spectroscopy *Pedro Modrego, Nicolas Fayed, Jose Errea, Consuelo Rios, Miguel Pina, Manuel Sarasa*

**P06.065** Accurate Identification of Patients with Probable AD Using the Synchronous Neural Interaction Test *Todd Verdoorn, Michael Cassano, Apostolos Georgopoulos, Scott Lewis, J. McCarten, Laura Hemmy, Richard Golden, Donald Rojas, Leslie Moldauer, David Arciniegas*

**P06.066** Differential Impact of Apathy and Depression in the Development of Dementia in Mild Cognitive Impairment Patients *Barbara Vicini Chilovi, Luca Zanetti, Marta Zaffira Conti, Marina Ranzetti, Alessandro Padovani*

**P06.067** Longitudinal Measure of IVIG Treatment Effect in Patients with Alzheimer's and Lewy Body Disease *William Shankle, Junko Hara*

**P06.068** Clinicopathological Characteristics of Pure Hippocampal Sclerosis Dementia and Hippocampal Sclerosis with Alzheimer's Disease *Eric McDade, Keith Josephs, Joseph Parisi, Dennis Dickson, Robert Ivnik, Bradley Boeve, David Knopman, Ronald Petersen*

**P06.069** Autopsy-Proven Progressive Supranuclear Palsy Presenting as Mild Cognitive Impairment *Eric McDade, Bradley Boeve, Joseph Parisi, Gregory Jicha, Dennis Dickson, David Knopman, Keith Josephs, Ronald Petersen*

**P06.070** Prosodic Comprehension in Frontotemporal Degeneration *Lauren Richmond, Brianna Morgan, Alea Khan, Rachel Gross, William Hu, Murray Grossman*

**P06.071** Alzheimer Disease and Frontotemporal Lobar Degeneration Presenting as Logopenic Progressive Aphasia – Clinical, Imaging, and Neuropathologic Analysis *William Hu, Corey McMillan, David Libon, Virginia Lee, John Trojanowski, Murray Grossman*

**P06.072** Retrospective Summary of the Clinical and Research Criteria for Mild Cognitive Impairment (MCI) *Anil Nair, Jami Johnson, Brandon Gavett, Angela Jefferson, Robert Green, Robert Stern*

**P06.073** Obsessive-Compulsive Symptoms in Neurodegenerative Disease *Katya Rascovsky, Michael Wilson, Bruce Miller, William Seeley*

**P06.074** Disease Modifying Effect of Dimebon in Alzheimer's Disease: Results from a 12-Month Study of Dimebon and a Six-Month Open-Label Period Analyzed Using a Staggered Start Approach and a Natural-History Staggered Start (NHSS) Approach *Suzanne Hendrix, Bryan Selby, Lynn Seely, Jeffrey Cummings*

**P06.075** Direct Comparison of Recruitment Efforts Targeted at Primary Care Physicians Versus the Community at Large for Participation in Alzheimer's Disease Clinical Research Studies *Sarah Carr, Roberta Davis, Gregory Cooper, Frederick Schmitt, William Markesbery, Deborah Danner, Gregory Jicha*

**P06.076** Speed on Cognitive Tests Is Associated with Relative Ventricular Enlargement in Normal Pressure Hydrocephalus *Kathryn Sepelyak, Jennifer Heidler-Gary, Cameron Davis, Melissa Newhart, Argye Hillis*

**P06.077** Modifiable Risk Factors for Mild Cognitive Impairment and Dementia Are Increased in Rural Appalachian Compared to Urban Research Subjects *Gregory Jicha, Sarah Carr, Stephanie Freeman, Rob Sprang, William Markesbery*

**P06.078** Survival in Progressive Supranuclear Palsy (PSP) and Frontotemporal Dementia (FTD) with Tau Pathology *Wan Zheng Chiu, Laura Donker Kaat, Harro Seelaar, Agnita Boon, Wouter Kamphorst, John van Swieten*

**P06.079** Impact of Donepezil Therapy on Function in Relation to MMSE in Patients with Alzheimer's Disease *Serge Gauthier, Oscar Lopez, Elias Schwam, Gunhild Waldemar, Roy Jones, David Wilkinson, Richard Zhang, Rachel Schindler*

**P06.080** Neuropsychological Features of Early Dementia with Lewy Bodies *Paul Shelton*

#### **Muscle Disease/Neuromuscular Junction: Clinical Issues**

**P06.081** Successful Treatment of Stiff Person Syndrome with Sequential Use of Tacrolimus *Shunya Nakane, Yoshiko Kawabata, Ryo Urushihara, Masafumi Harada, Ryuji Kaji*

**P06.082** Arteriovenous Fistula Venous Access for Long-Term Outpatient Plasma Exchange for Neuromuscular Disorders *Farhan Ahmed, Karthik Vamanan, Mazen Dimachkie, Mamatha Pasnoor, April McVey, Faisal Raja, Laura Herbelin, Janine Klingele, Sheri Copeland, Richard Barohn*



**P06.083** Predictors of Clinical Outcome in Thyrectomy in Patients with Myasthenia Gravis – Postoperative Myasthenic Crisis Is the Potential Predictor of Poor Outcome *Tai-Seung Nam, Seung-Han Lee, Joon-Tae Kim, Seong-Min Choi, Man-Seok Park, Byeong-Chae Kim, Myeong-Kyu Kim, Ki-Hyun Cho*

**P06.084** Carriers of Mutations in Calpain Genes May Increase the Risk of HyperCKemia in Mitochondrial Disease Patients *Genevieve Langley, Lauren Hyams, John Shoffner, Douglas Stuart*

**P06.085** Clinical and Laboratory Features of a Single Family with Mutations in the POLG1 and ANT1 (SLC25A4) Genes *Lauren Hyams, Genevieve Langley, John Shoffner*

**P06.086** Diplopia and Eyelid Ptosis Responsive to Pyridostigmine in a Patient with Hereditary Demyelinating Peripheral Neuropathy *John Khoury, Eduardo De Sousa*

**Muscular Dystrophy: Clinical and Basic Studies**

**P06.087** Reduced Necrosis and Inflammatory Change in Muscle of SJL/J Mice by Blocking TNF $\alpha$  Function with Etanercept *Hiroshi Nemoto, Shingo Konno, Hideki Sugimoto, Nobuatsu Nomoto, Hiroshi Nakazora, Mayumi Murata, Toshiki Fujioka*

**P06.088** Erythropoietin Application in mdx Mice – A Pilot Trial *Alzira Carvalho, Michelle Ugollini, Augusto Santomauro, Jr., Leticia Oliveira, Victor Lioi, Rosangela Dos Santos, Lucas Ferreira, Maria Nunes, Maria Helena Carvalho, Szulim Zyngier, David Feder*

**P06.089** Cell Therapy for Muscular Dystrophy: CD34 Negative Muscle Derived Cells Present High Myogenic and No Adipogenic Potential *Sabrina Sacconi, Didier Pisani, Noemi Clement, Claude Dechesne, Christian Dani, Claude Desnuelle*

**P06.090** Cystatin C Permits Assessment of Renal Glomerular Filtration Independent of Muscle Mass in Duchenne Muscular Dystrophy (DMD) *Susan Gailey, Cheryl Wall, Laurence Viollet, David Thornton, Jerry Mendell*

**P06.091** Expanding the Phenotypic and Genotypic Spectrum of FHL1-Related X-Linked Scapulo-peroneal Myopathy *Dong-Hui Chen, Wendy Raskind, Tiffany Vu, YunLin Zheng, Mark Matsushita, John Wolff, Hillary Lipe, Thomas Bird*

**P06.092** LGMD 2I in Twin Brothers: Response to Prednisone *Peter Karachunski, Marcia Margolis, Joline Dalton, John Day*

**P06.093** Oral Protein Supplementation Improves Protein Metabolism after Acute Exercise in Patients with Fascio-Scapulo-Humeral Muscular Dystrophy *Mette Cathrine Orngreen, Nicolai Preisler, Grete Andersen, Tina Jeppesen, Gerrit Van Hall, John Vissing*

**P06.094** Partial Response of Dysferlinopathy Patients to Low Dose Dantrolene Sodium Treatment *Itzik Wirguin*

**P06.095** Shaping the Phenotypes of Dysferlin Myopathies According to a Clinical and Muscle Imaging Follow-Up *Isabel Illa, Jaume Llauger, Ricard Rojas-Garcia, Jordi Diaz-Manera, Eugenia Martinez-Hernandez, Noemi De Luna, Eduard Gallardo, Celedonio Marquez, Ana Fernandez, Carmen Paradas*

**P06.096** Creatine Kinase Elevation: Evaluation of Pediatric Population *Sebastien Perreault, Ala Birca, Dominique Piper, France Gauvin, Michel Vanasse*

**Duchenne’s Muscular Dystrophy: Clinical and Translational Studies**

**P06.097** Behavioral Outcomes of a CINRG Multi-Center, Double-Blind, Controlled Study Comparing High Weekly Versus Low Daily Dose Prednisone Therapy in Boys with Duchenne Muscular Dystrophy *Yaron Fridman, Adrienne Arrieta, Fengming Hu, Lauren Hache, Jason Weimer, Hoda Abdel-Hamid, Diana Escolar, Avital Cnaan, Paula Clemens*

**P06.098** A Comparison of the Six-Minute Walk Test to Commonly Used Outcome Measures in Duchenne Muscular Dystrophy *Erik Henricson, Cassie Spalding, Craig McDonald, Richard Abresch, Jay Han, Aliina Nicorici, Leone Atkinson, Allen Reha, Gary Elfring, Langdon Miller*

**P06.099** Volumetric Radial and Tibial Bone Mineral Density in Boys with Duchenne Muscular Dystrophy *Wendy King, John Landoll, Velimir Matkovic, John Kissel*

**P06.100** Newborn Screening (NBS) in Duchenne Muscular Dystrophy: A Practical, Comprehensive and Affordable Approach *Roula Al-Dahhak, Susan Gailey, Kandice Roush, Lauren Schueller, Joni Beauman, Heather Lilly, Sharon Linard, Ram Chandrasekar, Diane Dunn, Deborah Cragun, Christopher Shilling, Patrick Wall, Nancy Leslie, Natalie Street, Robert Weiss, Jerry Mendell*

**P06.101** Sonoporation of Human Biceps Muscle as Preparation for Plasmid-Based Dystrophin Gene Transfer *Maria Molnar, Renald Gilbert, Aniko Gal, George Karpati*

**P06.102** Characterization of DMD Mutations in Novel Dog Models of Dystrophinopathy *Kevin Flanigan, Aaron Larsen, Laura Taylor, Janet Bogan, Daniel Bogan, Joe Kornegay*

**P06.103** Abundance of Circulating Progenitors with Myo-Endothelial Potential Correlates with a Mild Phenotype in Patients Affected by Duchenne Muscular Dystrophy *Marzia Belicchi, Andrea Farini, Mirella Meregalli, Daniele Parolini, Paola Razini, Raffaella Lopa, Laura Porretti, Simona Maciotta, Claire Navarro, Giulio Cossu, Nereo Bresolin, Yvan Torrente*

**P06.104** An Immortalized Fibroblast Model for Exon-Skipping Studies in Duchenne Muscular Dystrophy (DMD) *Ling Zhao, Gillian Butler-Browne, Vincent Mouly, Kamel Mamchaoui, Steve Wilton, Kevin Flanigan*

**P06.105** Reduction of TGF Beta 1 Using an Oral TNF Alpha Inhibitor in mdx Dystrophic Mice *Leonardo Brito, Lucas Saad, Vinicius Oliveira, Eduardo Barros, Rosangela Dos Santos, Lucas Ferreira, Maria Helena Carvalho, Maria Nunes, Szulim Zyngier, Alzira Carvalho, Feder David*

**P06.106** High-Resolution, Three-Dimensional, In Vivo Bioimaging of Perivascular Stem Cell Homing *Chad Markert, Jennifer Cann, Martin Childers*

**Anterior Horn: Clinical and Neurophysiological**

**P06.107** “Dropped Head Syndrome” in Amyotrophic Lateral Sclerosis *Masahiro Uemura, Takayoshi Shimohata, Kaori Yanagawa, Masatoyo Nishizawa*

**P06.108** Does Taste Perception Change with ALS? *Elias Abou-Zeid, Linda Bartoshuk, Deborah Fewell, Stacy Rudnicki, Cathy Pelletier*

**P06.109** The Outcome and Effect of Pregnancy and Delivery in Women with Spinal Muscular Atrophy *Bakri Elsheikh, Kameron Teal, Xiaoli Zhang, John Kissel*

**P06.110** The Pros and Cons of Scoliosis Surgery in Patients with Spinal Muscular Atrophy *Megan Montgomery, Jacqueline Montes, Benjamin Koo, Jonathan Marra, Vanessa Battista, Sally Dunaway, Douglas Sproule, Andrei Constantinescu, Darryl De Vivo, Petra Kaufmann*

**P06.111** German and UK TREAT-NMD Patient Registries for Spinal Muscular Atrophy: Natural History and Clinical Care *Sarah Baumeister, Zsuzsana Foeldvari, Brigitta von Rekowski, Maggie Walter, Hanns Lochmüller*

**P06.112** Functional Loss of Spinal Alpha Motor Neurons and Its Correlation with Clinical Scales and Quality of Life (QOL) Measures in Amyotrophic Lateral Sclerosis (ALS) *Keisuke Arasaki, Mizuho Sumiya, Ryosuke Ushijima, Akira Hyodo*

**P06.113** Measuring Electrical Impedance of Muscle with a Dedicated System *Seward Rutkove, Andrew Tarulli, Muiyiwa Ogunnika, Hongshen Ma, Joel Dawson, Patricia Fogerson*

**P06.114** Electrical Impedance Myography (EIM) in the SOD1 g93a Mouse *Patricia Fogerson, Seward Rutkove*

**P06.115** Lack of Consensus in the Serologic Evaluation of Patients with Amyotrophic Lateral Sclerosis *John Novak, Stephen Kolb, Steven Nash, John Kissel*

**P06.116** Cervical Anterior Horn Cell Loss from Subdural Hygroma – A Late Sequela of Spontaneous CSF Leak *Temenuzhka Mihaylova, Andrew Biondo, Imad Zak, Richard Lewis*

**Anterior Horn: ALS: Clinical Features and Management**

**P06.117** Validating a Brief Screen for Cognitive Impairment in ALS *Lauren Elman, Sharon Xie, David Libon, William Hu, Alea Khan, Brianna Morgan, Lauren Richmond, Rachel Gross, Leo McCluskey, Murray Grossman*

**P06.118** Executive Function and Frontotemporal Degeneration in ALS and ALS-FTD *Catherine Lomen-Hoerth, Jennifer Murphy, Roland Henry*

**P06.119** Executive Impairment and Prefrontal Disease in Non-Demented Amyotrophic Lateral Sclerosis *David Libon, Rachel Gross, William Hu, Leo McCluskey, Lauren Elman, Murray Grossman*

**P06.120** Retrospective Study of Depression in Amyotrophic Lateral Sclerosis *Nazem Atassi, Kerrie Nelson, Yuvika Paliwal, Merit Cudkovicz*

**P06.121** Results of the Non-Invasive Ventilatory (NIPPV) Arm of the PEG-NIV Pilot Study *Terry Heiman-Patterson, Carlyne Jackson, Michael Sherman, Sara Feldman, Melonie Mitchell, Yvonne Rollins, Ashok Verma, Jeremy Shefner, Stephen Scelsa, Daniel Newman, Marta Mendiondo, Edward Kasarskis*



**P06.122** Positive Airway Titration Studies Result in Improvements in Daytime Sleepiness in Patients with Amyotrophic Lateral Sclerosis *Aparajitha Verma, Stanley Appel, Joan Appel, Ericka Simpson, Milvia Pleitez, Mario Gonzalez, Amit Verma*

**P06.123** Effects of NIPPV on the Prognosis of ALS Patients with Respiratory Onset *Guillaume Gautier, Annie Verschueren, Armelle Monnier, Shahram Attarian, Jean Pouget*

**P06.124** Blood Lipid Levels Are Related to Respiratory Function in ALS *Adriano Chio, Gabriele Mora, Andrea Calvo, Antonio Iardi, Cristina Moglia, Enrico Cavallo, Stefania Cammarosano, Roberto Mutani*

**P06.125** Assessing Fall Risk in ALS Using the Timed Up and Go Test *Jacqueline Montes, Bin Cheng, Elizabeth Kelvin, Howard Andrews, Carolyn Doorish, Kate Bednarz, Julaine Florence, Hiroshi Mitsumoto, Paul Gordon*

**P06.126** Postural Orientation Impairment Leading to Falls and Balance Deficit Early in the Course of Amyotrophic Lateral Sclerosis (ALS) *Mohammed Sanjak, Kerry Duffy, Elena Bravver, Benjamin Brooks*

#### Multiple Sclerosis: Therapeutics I

**P06.127** Efficacy and Safety of Natalizumab in the STRATA Study *Paul O'Connor, Chris Polman, Andrew Goodman, Ludwig Kappos, Fred Lublin, Richard Rudick, Stephanie Jurgensen, Dominick Paes, Nisha Lucas, Michael Panzara*

**P06.128** Oral Fingolimod (FTY720) Shows Sustained Low Rates of Clinical and MRI Disease Activity in Patients with Relapsing Multiple Sclerosis: Four-Year Results from a Phase II Extension *Xavier Montalban, Paul O'Connor, Jack Antel, Giancarlo Comi, Ernst-Wilhelm Radue, Ana De Vera, Harald Pohlmann, Göril Karlsson, Ludwig Kappos, FTY720D2201 Study Group*

**P06.129** Phase 1 Studies Demonstrate That PEGylated Interferon Beta-1a Is Safe, Well Tolerated, and Pharmacologically Active in Healthy Volunteers *Gudarz Davar, Sandra Richman, Stacy Hitchman, Gabrielle Glick, Meena Subramanyam, Xiao Hu, Ivan Nestorov, Shifang Liu, Ying Zhu, Michael A. Panzara*

**P06.130** Oral Masitinib in Patients with Primary Progressive or Secondary Progressive Multiple Sclerosis *Patrick Vermersch, Rabah Benrabah, Nicolas Schmidt, Hélène Zephir, Pierre Chen, Cyrille Vongsouthi, Alain Moussy, Olivier Hermine*

**P06.131** Sustained Improvement in Physical Disability with Natalizumab in Patients with Relapsing Multiple Sclerosis *Fredrick Munschauer, Gavin Giovannoni, Fred Lublin, Paul O'Connor, J. Phillips, Chris Polman, Amy Pace, Richard Kim, Michael Panzara*

**P06.132** TERMS Trial T-Cell Vaccination Secondary Analysis of Clinical and Immunologic Outcomes in Relapsing-Remitting Multiple Sclerosis Patients *Edward Fox, Clyde Markowitz, Stanley Cohan, Daniel Wynn, Donna Rill, Mary Riser, Jim Williams*

**P06.133** Safety and Tolerability, but Lack of Efficacy of Tolperisone (AV650) in Multiple Sclerosis Patients with Spasticity: A Double-Blind, Placebo-Controlled, Randomized Trial of Tolperisone Administered Orally Three Times a Day *Robert Elfont, Lin He, Raymond Chavez, Kenneth Chahine, Jennifer Bahr-Davidson, Kirk Johnson, Drew Jones, Glenn Morrison*

**P06.134** Efficacy of Natalizumab in Multiple Sclerosis Patients with High Disease Activity: A Danish Nationwide Study *Annette Oturai, Nils Koch-Henriksen, Thor Petersen, Poul Erik Jensen, Finn Sellebjerg, Per Sorensen*

**P06.135** Time to First Treatment with Disease-Modifying Drugs in Newly Diagnosed Patients with Multiple Sclerosis *Dennis Meletiche, Chris Kozma, Michael Dickson*

**P06.136** High Doses Immunosuppression Anteceded by Rescue of Hematopoietic Stem Cells and Followed by Its Intravenous Infusion (HDI-SCI) for Devic's Disease Treatment *Amilton Barreira, Doralina Brum, Antonio Santos, Carlos Guerreiro Tostes, Ana-Beatriz Stracieri, Maria-Carolina Oliveira, Dannielle Godoi, Daniela Moraes, Marina Coutinho, Wilson Marques, Jr., Júlio Voltarelli*

**P06.137** CHAMPIONS Extension Study: 10-Year Follow-Up after a Clinically Isolated Syndrome (CIS) in High Risk Patients *Revere Kinkel, Jean Tanner, Jack Simon, Paul O'Connor, Craig Kollman*

**P06.138** Physician Disease-Modifying Therapy Decisions for Patients Registered with the New York State Multiple Sclerosis Consortium (NYSMSC) *Barbara Teter, Cornelia Mihai, Stephanie Wasch, Brian Apatoff, Patricia Coyle, Susan Gauthier, Andrew Goodman, Malcolm Gottesman, Carl Granger, Joseph Herbert, Richard Holub, Burk Jubelt, Ilya Kister, Lauren Krupp, Michael Lenihan, Fred Lublin, Aaron Miller, Fredrick Munschauer, Allan Perel, David Snyder, Mark Tullman, Robert Zivadinov, Bianca Weinstock-Guttman*

**P06.139** BNP as a Predictor of Mitoxantrone Induced Cardiotoxicity in Multiple Sclerosis Patients *Neeta Garg, Kevin Kane, Joan Armagost, Bianca Weinstock-Guttman*

**P06.140** Pharmacokinetic and Pharmacodynamic Profile of PEGylated Interferon Beta-1a in Healthy Volunteers: Results from Two Phase I Clinical Studies *Xiao Hu, Meena Subramanyam, Michaela Lerner, Larisa Miller, Ivan Nestorov, Gudarz Davar*

**P06.141** Randomized, Prospective, Rater-Blinded, Four-Year Pilot Study To Compare the Effect of Daily Versus Every Other Day Glatiramer Acetate 20 mg Subcutaneous Injections in RRMS *Christina Caon, Alexandros Tselis, Wendy Ching, Moein Din, Imad Zak, Zahid Latif, Fen Bao, Samia Ragheb, Alan Hudson, Omar Khan*

**P06.142** Autoimmune Hemolytic Anemia under Treatment with Natalizumab *Olivier Outteryck, Arnaud Lacour, Helene Zephir, Didier Ferriby, Patrick Vermersch*

**P06.143** Natalizumab Significantly Improved Relapses and MRI Outcomes in African American Patients with Relapsing Multiple Sclerosis *Bruce Cree, William Stuart, Carlo Tornatore, Douglas Jeffery, Amy Pace, Choon Cha*

**P06.144** Neutralizing Antibodies during Treatment with Interferon Beta-1b in 1745 Patients with Relapsing-Remitting Multiple Sclerosis *Douglas Goodin, Paul O'Connor, Hans Hartung, Ludwig Kappos, Barry Arnason, Giancarlo Comi, Stuart Cook, Massimo Filippi, Douglas Jeffery, Timon Bogumil, Rupert Sandbrink, Karola Beckmann, Francis Boatey, Christoph Pohl*

**P06.145** Alemtuzumab Induces a Sustained Reduction in Disability in Patients with Relapsing-Remitting Multiple Sclerosis *Alasdair Coles, CAMMS223 Study Group*

**P06.146** MS Center Experience of Use of Rituximab in Secondary-Progressive Multiple Sclerosis *Carolina Ionete, Biliana Beretich, Peter Riskind*

#### Treatment of Parkinson's Disease

**P06.147** Population-Pharmacokinetic Analysis of Pramipexole Extended-Release in Patients with Parkinson's Disease *Chantaratsamon Dansirikul, Robert Hauser, Alexander Staab, Thorsten Lehr, Sebastian Haertter*

**P06.148** North American Subgroup Analysis of the FIRST-STEP Trial of Levodopa/Carbidopa/Entacapone and Levodopa/Carbidopa in Patients with Early Parkinson's Disease *Dee Silver, Kevin McCague, Monique Somogyi, Robert Hauser*

**P06.149** Anti-Parkinsonian Medication Use in Parkinson Disease in a Community-Based Elderly Cohort (Cardiovascular Health Study) *Samay Jain, Thanh Ton, Robert Boudreau, Stephanie Studenski, Shannon Rhodes, Will Longstreth, Elsa Strotmeyer, Anne Newman*

**P06.150** Double-Blind Evaluation of Maintenance of Efficacy of Pramipexole Extended-Release in Early Parkinson's Disease *Laurence Salin, Robert Hauser, Juergen Koester*

**P06.151** An Open-Label Extension Study To Determine the Safety of Pimavanserin in Patients with Parkinson's Disease and Psychosis *Roger Mills, Ann Johnson, Hilde Williams, Daun Bahr, Stephen Revell*

**P06.152** Overnight Switching from Immediate- to Extended-Release Pramipexole in Early Parkinson's Disease *Olivier Rascol, Paolo Barone, Catherine Debove Debieuvre, Robert Hauser, Yoshikuni Mizuno, Werner Poewe, Laurence Salin, Anthony Schapira, Mandy Sohr*

**P06.153** Effects of Immediate Versus Delayed Switch from Levodopa/Carbidopa to Levodopa/Carbidopa/Entacapone on Motor Function and Quality of Life in Patients with Parkinson's Disease with End-of-Dose Wearing Off *Mark Lew, Monique Somogyi, Kevin McCague, Mickie Welsh*

**P06.154** Rasagiline 1 mg/Day Provides Benefits in the Progression of Non-Motor Symptoms in Patients with Early Parkinson's Disease *Werner Poewe, Robert Hauser*

**P06.155** A Clinical Pharmacology Study To Determine the Selective and Non-Selective Doses of the Monoamine Oxidase Type B (MAO-B) Inhibitor, Rasagiline *Tamar Goren, Liat Adar, Nissim Sasson*

**P06.156** Long-Term Safety and Tolerability of Transdermal Rotigotine in Patients with Advanced Parkinson's Disease *Werner Poewe, Olivier Rascol, Niall Quinn, Eduardo Tolosa, Wolfgang Oertel, Nir Giladi, Babak Boroojerdi*

#### Parkinson's Disease: Quality of Life Issues

**P06.157** Factors Predicting Activities of Daily Living in Parkinson's Disease *Jeffrey Olech, Glenn Stebbins, Cynthia Comella*

**P06.158** Does Age Make a Difference in Caregiver Strain? Comparison of Young Versus Older Spouses in Early-Stage Parkinson's Disease (PD) *Julie Carter, Karen Lyons, Barbara Stewart, Patricia Archbold*

**P06.159** Depression and Lateral Onset Parkinson's Disease: Differential Effects on Working Memory *Paul Foster, Valeria Drago, Frank Skidmore, Gregory Crucian, Kenneth Heilman*

**P06.160** Relationship between Autonomic Dysfunction and Depression in Parkinson's Disease *Chengjie Mao, Kangping Xiong, Weidong Hu, Yanbo Cheng, Juping Chen, Guoxiu Ke, Chunfeng Liu*

**P06.161** Depression and Drug Induced Parkinsonism as Presymptomatic Features of Parkinson Disease *Kohsuke Fukuhara, Yoshio Tsuboi, Hirotsato Inoue, Tatsuo Yamada*

**P06.162** The Non Motor Staging of Parkinson's Disease: Results from an International Study *K. Ray Chaudhuri, Pablo Martinez-Martin, Rosalie Sherman, Yogini Naidu, Per Odin, Kapil Sethi, W. Ondo, Fabrizio Stocchi, Anthony Schapira, PD Non Motor Group*

**P06.163** Independence, Postural Stability and Staging of Parkinson Disease – Expectations from a Survival Analysis *Barbara Jasinska-Myga, John Putzke, Zbigniew Wszolek, Ryan Uitti*

**P06.164** A Study of Cognitive Fatigue *Joshua Proemsey, Benzi Kluger, Rajasimhan Rajagovindan, Mingzhou Ding, Frank Skidmore, Michael Okun, Kenneth Heilman*

**P06.165** The Temporal Relationship between Day Napping and Night Sleep Duration and Parkinson's Disease *Honglei Chen, Jianjun Gao, Xuemei Huang, Yikyung Park, Aaron Blair, Albert Hollenbeck, Arthur Schatzkin*

**P06.166** Ability To Work in Parkinson Disease – Estimated Time and Predictors *Barbara Jasinska-Myga, John Putzke, Zbigniew Wszolek, Ryan Uitti*

**P06.167** Morning Injections of Interferon-Beta Decrease Flu-Like Syndrome of Patients with Multiple Sclerosis *Yann Nadjar, Emilie Coutelas, Pauline Proteau, Fabienne Panzer, Daniele Paquet, Claude Saint-Val, Alain Creange*

## Sleep Disorders

**P06.168** Sleep Disturbances in Caregivers of Children with Epilepsy *Winfred Wu, Alcibiades Rodriguez*

**P06.169** Sleep Complaints in a Large Cohort of Patients with Amyotrophic Lateral Sclerosis *Aparajitha Verma, Stanley Appel, Mario Gonzalez, Joan Appel, Ericka Simpson, Milvia Pleitez, Amit Verma*

**P06.170** REM Sleep Behavior Disorder May Precede PD, DLB or MSA by up to Half a Century *Daniel Claassen, Keith Josephs, J. Ahlskog, Glenn Smith, Michael Silber, Maja Tippmann-Peikert, Bradley Boeve*

**P06.171** Reverse Sleep Misperception in the Elderly *Heidi Roth, Bradley Vaughn*

**P06.172** HLA Status and Sleep Symptoms in a Control Population *Mari Viola-Saltzman, Nathaniel Watson, Thanh Ton, Thomas Koepsell, Vivian Gersuk, W. T. Longstreth*

**P06.173** Sleep Abnormalities in Stiff Person Syndrome and Stiff Leg Syndrome: A Further Evidence of a Dysfunction of GABA-ergic Inhibitory System *Anna Rosati, Luigi Bongiovanni, Maria Benedetti, Marika Vianello, Bruno Giometto, Alessandro Padovani*

**P06.174** Does Narcolepsy Symptom Severity Vary According to HLA-DQB1\*0602 Allele Status? *Nathaniel Watson, Thanh Ton, Thomas Koepsell, Mari Viola-Saltzman, Vivian Gersuk, W. T. Longstreth*

**P06.175** Does Daytime or Nocturnal Hypoxemia Contribute to the Subsequent Development of Cognitive Impairment in Patients with Multiple System Atrophy? *Kunio Kawamura, Takayoshi Shimohata, Hideaki Nakayama, Masahiko Tomita, Tetsutaro Ozawa, Masatoyo Nishizawa*

**P06.176** Gender Effect in Patients with REM Sleep Behavior Disorder Associated with Multiple System Atrophy Compared with Parkinson's Disease and Dementia with Lewy Bodies *Junger Tang, Bradley Boeve, Maja Tippmann-Peikert, Michael Silber*



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## Poster Session VII

7:00 a.m.–10:00 a.m.

### Frontiers in Clinical Neuroscience Plenary Session

9:00 a.m.–11:00 a.m.

Washington State Convention and Trade Center, Exhibit Hall 4A

This session focuses on translational research related to clinical issues of importance. Four physician-scientists outline their recent research findings, along with the clinical implications.



**Moderator: John W. Griffin, MD, Chair,  
Lecture Awards Subcommittee**



"Modulating Putative Depression Circuits Using Deep Brain Stimulation"

*Helen S. Mayberg, MD  
Emory University School of Medicine  
Atlanta, GA*



"Mechanisms of Fragile X Syndrome and Associated Disorders"

*Stephen T. Warren, PhD  
Emory University School of Medicine  
Atlanta, GA*



"Toward Therapies for Polyglutamine Diseases"

*Henry L. Paulson, MD, PhD, FAAN  
University of Michigan  
Ann Arbor, MI*



"Seeking the Causes of Parkinson's Disease"

*Caroline M. Tanner, MD, PhD, FAAN  
Parkinson's Institute  
Sunnyvale, CA*

## Exhibits

11:30 a.m.–4:00 p.m.

### Complimentary luncheon

12:00 p.m.–2:00 p.m.

Exhibit Halls 4B–4F

See the latest in pharmaceutical products, medical equipment, publications, and products to assist with practice management, teaching methods, and research activities.

## Poster Session VIII

11:30 p.m.–2:30 p.m.

## Poster Session IX

4:00 p.m.–7:00 p.m.

## Scientific Topic Highlights Programs

6:00 p.m.–8:00 p.m.

The highlights programs provide an overview of the best research in select neurologic topics from more than 2,000 scientific poster and platform presentations. Details on topics and moderators are available on the Annual Meeting website at [www.aan.com/go/am/science/highlights](http://www.aan.com/go/am/science/highlights).

6:00 p.m.–7:00 p.m.

### Cerebrovascular Disease, Critical Care/Emergency Neurology/Trauma, and Interventional Neurology

Room 2B

### Dementia/Behavioral Neurology

Room 6C

### Epilepsy/EEG

Room 613/614

### Movement Disorders

Room 6A

### Neuromuscular, EMG, and Autonomic Disorders

Room 605/610

7:00 p.m.–8:00 p.m.

### Combined Scientific Topic Highlights: Child Neurology, Ethics, Pain and Palliative Care, Infections, Neuroepidemiology, and Neuro-oncology

Room 604

### Clinical Practice

Room 3AB

### Multiple Sclerosis

Room 6B



**Epilepsy**

- P07.001** Early Predictors of Intractable Epilepsy in Turkish Children: A Single Center Experience *Fusun Alehan, Semra Saygi*
- P07.002** Sudden Unexpected Near Death in Epilepsy (SUDEP): Malignant Ventricular Arrhythmia from a Partial Seizure *Patricio Espinosa, Jong Lee, Usha Tedrow, Edward Bromfield, Barbara Dworetzky*
- P07.003** Levetiracetam Extended Release: Population Dose–Response Modeling in Adults with Partial-Onset Seizures *Rik Schoemaker, Eric Snoeck, Armel Stockis, Christian Otoul, Maria Laura Sargentini-Maier*
- P07.004** Meta-Analysis of Levetiracetam Used in Status Epilepticus *David Gloss*
- P07.005** Patient Abilities and Techniques Used for Seizure Self-Termination *Jenna Dionisio, William Tatum*
- P07.006** Carbamazepine and Atherosclerosis: Is There Any Link? *Mubashira Hashmi, Shaista Siddiqi, Abdul Malik, Sarah Saleem, Farrukh Khan*
- P07.007** Visual Field Defects after Transylvian Selective Amygdalohippocampectomy *Lana Boursoulian, Elias Abou-Zeid, Bashir Shihabuddin, Joseph Chacko, Naim Haddad*
- P07.008** Novel Neuroprotective Drugs Against Experimentally Induced Status Epilepticus *Saleh Al Deeb, Mohammad Ahmad, Mohammad Tariq*
- P07.009** Clinical Characteristics of Alcohol Related Seizures *Ji-Young Park, Sujoo Kim, JungJu Lee, Byung-Kun Kim, Ja-seong Koo, Ohyun Kwon, Jong-Moo Park*
- P07.010** Ketogenic Diet Treatment of Intractable Epilepsy *Naznin Mahmood, Farhan Murshed, Fatema Serajee, A. H. M. Huq*
- P07.011** Effect of Levetiracetam on Testosterone Levels in Male Patients *Cynthia Harden, Padmaja Kandula, Douglas Labar, Blagovest Nikolov*
- P07.012** Comorbidities in Patients with Psychogenic Nonepileptic Seizures *W. Curt LaFrance, Jr., Andrew Blum, Christine Ryan, Ivan Miller III, Gabor Keitner*
- P07.013** A Profile of Adolescent-Onset Epilepsy *Elisabeth Simard-Tremblay, Michael Shevell*

**Aging and Dementia: Other II**

- P07.014** Relationship between Dysautonomia, Clinical Features and Cognitive Dysfunction in Dementia with Lewy Bodies *Luísa Alves, Paulo Bugalho, Marta Marquié, Laura Molina, Daniel Alcolea, Isabel Sala, Belén Sánchez, Carmen Garcia, Teresa Gómez-Isla, Rafael Blesa, V. Camacho, M. Estorch, Alberto Lleó*
- P07.015** Feasibility, Reliability, and Minimal Detectable Change for Maximal Exercise Testing in Mild Alzheimer Disease *Heather Anderson, Patricia Kluding, Joseph Donnelly, Jeffrey Burns*
- P07.016** WITHDRAWN
- P07.017** Association Study of Serum Heme Oxygenase-1 Levels with Alzheimer's and Parkinson's Diseases *Ignacio Mateo, Jose Vazquez-Higuera, Ines Garcia-Gorostiaga, Eloy Rodriguez-Rodriguez, Pascual Sanchez-Juan, Jon Infante, Onofre Combarros*
- P07.018** Memantine Discontinuation Due to Non-Medical Reasons Is Associated with a Subsequent Decline in Patients' Health Status in Nursing Home Residents with Alzheimer's Disease *Howard Fillit, Robert Hofbauer, Juliana Setyawan, Stavros Tourkodimitris, Moshe Fridman, M. Haim Erder, Constantine Lyketsos*
- P07.019** Idiopathic Parkinson's-Like  $\alpha$ -Synucleopathy in TDP-43-Negative FTLD-U with Basophilic Inclusions *David Munoz, Lorne Zinman, Beverley Young, Juan Bilbao*
- P07.020** 3-n-Butylphthalide Improves Cognitive Deficits of SAMP8 Mice *Xiaojiang Sun, Feng Wang*
- P07.021** MCP-1 A-2518G Polymorphism: Effect on Susceptibility for Frontotemporal Lobar Degeneration and on Cerebrospinal Fluid MCP-1 Level *Daniela Galimberti, Eliana Venturelli, Chiara Villa, Chiara Fenoglio, Francesca Clerici, Alessandra Marcone, Luisa Benussi, Roberta Ghidoni, Francesca Cortini, Diego Scalabrini, Maria Serpente, Ilaria Restelli, Giuliano Binetti, Stefano Cappa, Claudio Mariani, Nereo Bresolin, Elio Scarpini*
- P07.022** Relevance of CSF Levels of Secreted Amyloid-b Precursor Protein (APP) and Amyloid- $\beta$  Peptides (A $\beta$ ) in NPH to Alzheimer's Disease *Patricio Reyes, Balmiki Ray, Debomoy Lahiri*

- P07.023** The Contribution of Apolipoprotein E Alleles on Cognitive Performance and Behavioral Changes in Alzheimer's Disease *Shima Mehrabian, Alberna Jordanova, Margarita Raycheva, Latchezar Traykov*

**Behavioral Neurology I**

- P07.024** Depression and Somatic Symptoms Determine Quality of Life in Nonepileptic Seizures *W. Curt LaFrance, Jr., Stephanie Syc*
- P07.025** ERP Abnormalities of Auditory Attention in Fragile X-Associated Tremor/Ataxia Syndrome *John Olichney, Shiao-hui Chan, Andrea Schneider, Adam Niese, Jamie Pak, Rawi Nanakul, Flora Tassone, Randi Hagerman*
- P07.026** Neural Correlates of Successful Attention and Executive Functions Training in MS: An fMRI Study *Flavia Mattioli, Chiara Stampatori, Mara Rocca, Deborah Zanotti, Ruggero Capra, Gianna Riccitelli, Massimo Filippi*
- P07.027** Distractibility and Alzheimer Disease: The "Neglected" Phenomenon *Valeria Drago, Paul Foster, Raffaele Ferri, Kenneth Heilman*
- P07.028** A Restless Dementia Responsive to Carbidopa/Levodopa: A Case Study *Anahid Kabasakalian, David Cox, Kenneth Heilman*
- P07.029** Functional MRI of Dynamic 3D Visual Object Recognition *Victoria Pelak, Mark Dubin, Christopher Filley, Don Rojas*
- P07.030** Prism Adaptation and Learning Curves in Spatial Neglect *Jeffrey Kornitzer, Paola Fortis, Kelly Goedert, Hareesh Naringrekar, Anna Barrett*
- P07.031** Dopaminergic Modulation of Degenerative Spatial Neglect Phenomena *Ronald Riechers, Xiao-Feng Wang, John Hughes*
- P07.032** MEANING: Musical Emotion and Affect Naming In Neurodegeneration – A Pilot Investigation *Brandy Matthews, Tamara Scott, Jacob Harter, Howard Rosen, Bruce Miller*
- P07.033** Effect of Prism Adaptation on "Aiming" Spatial Bias and Functional Abilities *Paola Fortis, Jeffrey Kornitzer, Kelly Goedert, Anna Barrett*
- P07.034** Real Time Functional MRI: Next Generational fMRI *Tsutomu Nakada, Keisuke Itoh, Kiyotaka Suzuki, Makoto Terumitsu, Ingrid Kwee*
- P07.035** Genetic Association Studies of Immune Genes in Autism *Fatema Serajee, A. H. M. Huq*

- P07.036** Magnetic Source Imaging (MSI) Activation of the Mesial Temporal Lobe: Relationship to Wada Memory Performance *Gail Risse, Robert Doss, Deanna Dickens, Wenbo Zhang*
- P07.037** Cognitive and Functional Consequences of Chronic Cerebellar Injury *Michael Alexander, Tom Schweizer, Susan Gillingham, Donald Stuss*
- P07.038** Complex Regional Pain Syndrome – A Cluster Analysis of Neuropsychological Deficits *David Libon, Eric Brahin, Atul Kalanuria, B. Peterlin, Robert Schwartzman*
- P07.039** Neuroanatomical Correlates of Visual Memory in Multiple Sclerosis *Raffaella Migliaccio, Patrizia Montella, Daniela Buonanno, Manuela De Stefano, Daria Dinacci, Bruno Alfano, Ugo Nocentini, Gioacchino Tedeschi*
- P07.040** Behavioral and Cortical Activation Patterns in Hemianopia *Noa Raz, David Arkadir, Netta Levin*
- P07.041** Age-Related Differences in Efficiency of Working Memory Processing among High Versus Low Performers: When Is Less More? *Kirk Daffner, Jenna Riis, Hyemi Chong, Scott McGinnis, Phillip Holcomb, Elise Tarbi, Xue Sun*
- P07.042** Putaminal Volumetrics in Frontotemporal Lobar Degeneration: Manual Tracing Showing Differential Volumes in Subtypes of FTLD *Jeffrey Looi, Leif Svensson, Olof Lindberg, Per Osterberg, Bram Zandbelt, Eva Orndahl, Lars-Olof Wahlund*
- P07.043** Noradrenergic Effects on Functional Connectivity in Autism Spectrum Disorder *David Beversdorf, Ananth Narayanan, Catherine White, Sanjida Salkayen, Mary Scaduto, Namhee Kim, Amir Abduljalil, Perta Schmalbrock*
- P07.044** Motor Cortex Reward Signaling in Parkinson's Disease *Dimitrios Kapogiannis, Eric Wassermann*
- P07.045** Altered Auditory Feedback in Stuttering: Preliminary Studies *Anne Foundas, Jeffrey Mock, David Corey, Edward Golob, Edward Conture*
- P07.046** Creativity in Parkinson Disease as a Function of Right Versus Left Hemibody Onset *Drago Valeria, Paul Foster, Frank Skidmore, Kenneth Heilman*
- P07.047** Decreased Frequency of Severe Arithmetic Learning Disability in Girls with Turner Syndrome Treated with Oxandrolone Versus Placebo *David Roeltgen, Judith Ross*

**P07.048** The Effect of Ejection Fraction and Age on Memory Functioning in Older Adults with Heart Failure *Joanne Festa, Michael Schmidt, Peter Shapiro, Donna Mancini, Emily Lantz, Yoshifumi Naka, Mario Deng, Ronald Lazar*

**P07.049** Effects of Adjunctive Amodafinil on Patients with Schizophrenia *Jane Tiller, Deepak D'Souza, Richard Keefe, John Kane, Ashwin Patkar, James Youakim*

**P07.050** Seronegative Non-Paraneoplastic Limbic Encephalitis: New Evidence of Autoimmune Pathogenesis *Tariq Alfahad, Samuel Potolicchio, Perry Richardson*

#### **Restless Legs Syndrome Therapy**

**P07.051** Gabapentin Enacarbil Improves Sleep in Subjects with Moderate-to-Severe Primary Restless Legs Syndrome (RLS) *Philip Becker, Clete Kushida, Aaron Ellenbogen, Daniel Canafax, Ronald Barrett*

**P07.052** Gabapentin Enacarbil Improves Mood, Quality of Life (QOL) and Functioning in Subjects with Primary Restless Legs Syndrome (RLS) *Daniel Canafax, Michael Calloway, Aaron Ellenbogen, Clete Kushida, Philip Becker, Ronald Barrett*

**P07.053** Gabapentin Enacarbil Relieves the Pain Associated with Restless Legs Syndrome (RLS) *Clete Kushida, Philip Becker, Aaron Ellenbogen, Daniel Canafax, Ronald Barrett*

**P07.054** A Randomized, Double-Blind, Placebo-Controlled Study To Assess the Efficacy and Tolerability of Gabapentin Enacarbil in Subjects with Restless Legs Syndrome (RLS) *Daniel Lee, Ronald Ziman, A. Thomas Perkins, J. Steven Poceta, Arthur Walters, Ronald Barrett*

**P07.055** The Maintenance of Efficacy and Long-Term Tolerability of Gabapentin Enacarbil Compared with Placebo in Subjects with Restless Legs Syndrome (RLS) *Richard Bogan, Michel Cramer Bornemann, Clete Kushida, Pierre Tran, Ronald Barrett*

**P07.056** Efficacy and Safety of Pramipexole for Restless Legs Syndrome: A 26-Week Randomized, Placebo-Controlled Clinical Trial in the European Union *Birgit Högl, Diego Garcia-Borreguero, Mandy Sohr, Stefanie Brenner*

**P07.057** Efficacy and Tolerability of Rotigotine in the Treatment of Patients with Most Severe RLS and Augmentation – A 12-Month Clinical Survey *Jana Godau, Daniela Berg*

**P07.058** Augmentation in the Therapy of the Restless Legs Syndrome with Transdermal Rotigotine – A Retrospective Systematic Analysis of Two Large Double-Blind Six-Month Trials *Diego Garcia-Borreguero, Luigi Ferini-Strambi, Ralf Kohnen*

**P07.059** Frequency of Impulse Control Disorders in Patients with Restless Legs Syndrome Treated with Dopaminergic Agents *Jason Cornelius, Maja Tippmann-Peikert, Nancy Slocumb, Courtney Frerichs, Michael Silber*

**P07.060** Rotigotine Transdermal System in the Treatment of Idiopathic Restless Legs Syndrome: Combined Results from Two Double-Blind, Placebo-Controlled, Multicenter Studies in Europe and the US *Claudia Trenkwalder, Richard Allen, Wayne Hening, Erwin Schollmayer*

#### **Sleep Apnea and Restless Legs Syndrome**

**P07.061** Error Monitoring Is Impaired in Obstructive Sleep Apnea *Erik St. Louis, Joel Dennhardt, Steven Luck*

**P07.062** Patients at High Risk for Obstructive Sleep Apnea Identified Using the Berlin Sleep Questionnaire Have Worse Functional Outcomes Following a Stroke *Meghna Mansukhani, Maria Fernanda Bellolio, Bhanu Prakash Kolla, Sailaja Enduri, Virend Somers, Latha Stead*

**P07.063** Association of Periodic Limb Movements without Restless Legs and Cardiovascular Disease *Marc Narayansingh, Brian Murray*

**P07.064** Developing and Validating a Patient-Reported Post-Sleep Diary for Restless Legs Syndrome (RLS) *Richard Allen, Christina Hill-Zabala, Murtuza Bharmal, Michael Calloway*

**P07.065** Efficacy, Tolerability, and Compliance of CPAP Therapy for Obstructive Sleep Apnea in Patients with Mild Cognitive Impairment or Alzheimer's Disease *Bradley Boeve, Michael Silber, Maja Tippmann-Peikert, Glenn Smith, Tanis Ferman, Jennifer Molano, Kelly Jacobson, David Knopman, Ronald Petersen*

**P07.066** Clinical Usefulness of Sleep Questionnaires in Patients with Obstructive Sleep Apnea Syndrome *Hyun-jung Jung, Tai-seung Nam, Joon-Tae Kim, Seong-Min Choi, Seung-Han Lee, Man-Seok Park, Byeong-Chae Kim, Myeong-Kyu Kim, Ki-Hyun Cho*

**P07.067** Prevalence of Restless Legs Syndrome in Patients in Hemodialysis Compared with Peritoneal Dialysis *Carolina Barnett, Julia Santin, Bernardita Soler, Jaime Godoy, Francisca Canals, Rina Morales*

**P07.068** Validation of the Post-Sleep Questionnaire (PSQ) for Assessment of Sleep in Subjects with Restless Legs Syndrome (RLS) *Daniel Canafax, Abhijeet Bhanegaonkar, Murtuza Bharmal, Michael Calloway*

**P07.069** What Is Quality of Life for Persons with Restless Legs Syndrome? *Richard Allen, Wen-Hung Chen, Michael Calloway*

**P07.070** Self-Report of Restlessness Is Not Enough: Exclusion of Secondary Causes of RLS in Utah Kindreds and Search for Genetic Linkage to Published Loci *Jacinda Sampson, Brith Otterud, Lisa Baird, Mark Leppert*

#### **Pathogenesis of Movement Disorders**

**P07.071** Motor Planning and Disease Severity Impact Ambulatory Behavior in Parkinson's Disease *Frank Skidmore, Valeria Drago, Chad Mackman, Paul Foster, Breckon Pav, Kenneth Heilman*

**P07.072** DJ-1 Expression Modulates Astrocyte-Mediated Neuroprotection in a Toxin-Specific Manner *David Hinkle, Steven Mullett*

**P07.073** Oscillatory Activities Recorded from the Human Pedunculopontine Nucleus Region during Voluntary Movements *Eric Tsang, Clement Hamani, Elena Moro, Filomena Mazzella, Yu-Yan Poon, Andres Lozano, Robert Chen*

**P07.074** DOPAL Treated Rat: A New Behavioral Model for Parkinson's Disease *William Burke, Michael Panneton, James Galvin, Vijay Kumar*

**P07.075** Are There Differences in Cerebral White Matter Lesion Burdens between Parkinson's Disease Patients with and without Dementia? *Sun-Ah Choi, Virgilio Gerald Evidente, John Caviness, Holly Shill, Marwan Sabbagh, Donald Connor, Joe Hentz, Charles Adler, Thomas Beach*

**P07.076** Metabolic Profiles of the Striatum and the Nucleus Accumbens Detected by Proton Magnetic Resonance Spectroscopy (1H MRS) In Vivo in a Murin Model of Parkinson's Disease, the MPTP-Intoxicated Mouse, before and after Levodopa Administration *Carine Chassain, Guy Bielicki, Cecile Keller, Amidou Traore, Franck Durif*

**P07.077** CSF from Parkinson's Disease Patients Differentially Affects  $\alpha$ -Synuclein Density and Cell Growth in Microglia Compared to Astrocytes *Mya Schiess, Jennifer Barnes, Brian Poindexter, Irene Oh, Roger Bick*

**P07.078** Autophagic Stress: A Key Problem of Autophagy Upregulation *Ji Shi, Zeng Cai, Ya Yang, Chun Liu*

**P07.079** Abnormal Metabolic Network Activity during Phenoconversion of Preclinical Huntington's Disease *Chengke Tang, Andrew Feigin, Matthew Bussa, Kathleen Poston, Yilong Ma, Mark Guttman, Jane Paulsen, Vijay Dhawan, David Eidelberg*

**P07.080** Recessive Mutations in an Ubiquitin-Like Gene Cause a Late-Onset Recessive Cerebellar Ataxia *Bernard Brais, Julie Demers-Lamarche, Martine Tetreault, Myriam Srour, Jean-Pierre Bouchard, Marie-Josée Dicaire, Jean Mathieu, Ronald Postuma, Jacques Lesage, Masaaki Komatsu, Keiji Tanaka, John Richardson, Alex Parker, Isabelle Thiffault*

#### **Dystonia and Spasticity**

**P07.081** Clinical Efficacy in Focal Dystonia and Overall Tolerability of NT 201 (Botulinum Neurotoxin Free from Complexing Proteins) *Susanne Grafe, Georg Comes, Irena Sassin*

**P07.082** Temporal Discrimination Thresholds in Adult-Onset Primary Torsion Dystonia – Physiological and Structural Imaging Evidence for an Endophenotype *David Bradley, Robert Whelan, Richard Walsh, Richard Reilly, Siobhan Hutchinson, Fiona Molloy, Michael Hutchinson*

**P07.083** Long-Term Efficacy of Deep Brain Stimulation for Dystonia: A Blinded Assessment *Leonard Verhagen Metman, Aleksandar Videnovic, Roy Bakay*

**P07.084** Sensory Disinhibition in Cervical Dystonia *Mark Obermann, Clemens Vollrath, Armin De Greiff, Hans-Christoph Diener, Matthias Maschke*

**P07.085** Effect of Spasticity on Physical Function and Health of Nursing Home Residents *Chandler Gill, Michael Putman, John Schnelle, Sandra Simmons, P. David Charles*

**P07.086** Long-Term (Seven-Year) Cervical Dystonia Safety Study with Botulinum Toxin Type B *William Birmingham, Edgar Salazar-Grueso*

**P07.087** A Profile of Dystonia in Children: Experience from a Pediatric Neurology Center *Ninon Pachikara, Debabrata Ghosh*



**P07.088** Efficacy and Safety of NT 201 (Neurotoxin Free from Complexing Proteins) in Cervical Dystonia *Cynthia Comella, Joseph Jankovic, Daniel Truong, Angelika Hanschmann, Susanne Grafe*

**P07.089** Long-Term Follow-Up of DYT1 Dystonia Patients Treated by Deep Brain Stimulation *Laura Cif, Xavier Vasques, Victoria Gonzalez, Philippe Coubes*

**P07.090** Levodopa-Induced Dyskinesias in Spinocerebellar Ataxia Type 2 *Joseph Ferrara, William Ondo*

**P07.091** Efficacy and Safety of NT 201 (Botulinum Neurotoxin Free from Complexing Proteins) in Blepharospasm *Joseph Jankovic, Cynthia Comella, Angelika Hanschmann, Susanne Grafe*

**Child Neurology: Therapeutics and Basic Science**

**P07.092** Prognostic Value of Sleep Wake Cycle on Video EEG and MRI in Neonates with HIE Treated with Cool Cap *Toshiki Takenouchi, Elayna Rubens, Linda Heier, Vivien Yap, Barry Kosofsky, Jeffrey Perlman, Murray Engel*

**P07.093** Postnatal Period of Intervention of GTA Supplementation Determines the Extent of Phenotypic Improvement in Tremor Rat Model of Canavan Disease *Chikkathur Madhavarao, Peethambaran Arun, Steven Mog, Kristen Hamilton, Neil Grunberg, John Moffett, Aryan Namboodiri*

**P07.094** Age- and Region-Specific Analysis of Monoaminergic Systems in the Brain of Mecp2-Null Mice Implies the Prefrontal and Motor Cortices in the Earliest Stages of Disease *Mónica Santos, Teresa Summaville, Anabela Silva-Fernandes, Andreia Teixeira-Castro, Mara Dierssen, Pedro Oliveira, Nuno Sousa, Patricia Maciel*

**P07.095** Cerebral Folate Deficiency and Mitochondrial Disease *Keith Hyland, Lauren Hyland, John Shoffner*

**P07.096** Deep Brain Stimulation in Patients with Dystonic Cerebral Palsy: Six Month Follow-Up *Warren Marks, John Honeycutt, Fernando Acosta, Jr*

**P07.097** Developmental Expression of Synaptic Vesicle Protein SV2A *Martina Vendrame, Delia Talos, Meayoung Chang, Frances Jensen*

**P07.098** Clinical Outcomes in Patients with Duchenne Muscular Dystrophy and Role of Multidisciplinary Care *Muddasir Qureshi, Laurie Bliss, Brian Tseng*

**P07.099** Use of Saliva To Monitor Phenobarbital Levels in Neonates: A Pilot Study *Paola Pergami, Miya Asato, Patrick Oberly, Toby Yanowitz, Michael Painter, John Alvin, Beth Minnigh*

**P07.100** Metabolic and Neurological Complications of Antipsychotic Therapy in Children with Tourette Syndrome *Tamara Pringsheim, Michelle Pearce*

**P07.101** Cyclophosphamide Therapy in Pediatric Multiple Sclerosis *Naila Makhani, Mark Gormon, Helen Branson, Lynn Stazzone, Brenda Banwell, Tanuja Chitnis*

**Epilepsy: Therapy**

**P07.102** Ethnicity Is a Possible Risk Factor in the Development of Anti-Epileptic Drug Induced Cutaneous Reactions *Khatuna Gurgenshvili, Hardik Amin, Andrea Rosso, Jyoti Pillai*

**P07.103** Lateralization of Temporal Lobe Epilepsy with Long-Term Ambulatory Intracranial Monitoring Using the RNS™ System *David King-Stephens, Peter Weber, Kenneth Laxer*

**P07.104** Voxel-Based Morphometry Reveals Differences in Familial and Sporadic Forms of Refractory MTLT *Clarissa Yasuda, Marcia Morita, Amanda Pereira, Andrea Alessio, Luiz Betting, Carlos Guerreiro, Benito Damasceno, Tania Cardoso, Alberto Costa, Li Li, Iscia Lopes-Cendes, Helder Tedeschi, Evandro Oliveira, Fernando Cendes*

**P07.105** Safety Profile of Levetiracetam Extended Release as Compared to Immediate Release. An Indirect Comparison Using a Meta-Analytic Approach *Florent Richy, Soutrik Banerjee, Christophe Gervasoni, Patricia Grossman, Sandra Helmers*

**P07.106** A New Methodology for Predicting Unbound Phenytoin Concentrations in Hypoalbuminemic Patients, a Novel Approach *Mark Decerbo, Jingyang Fan, Meghan Jeffres, Timothy Lassiter*

**P07.107** Clinical Profile of Epilepsy and the Cost of Its Treatment in a Tertiary Care Center in India *Ajit Roy, Lakshmi Achar, Alben Sigamani, Chanda Kulkarni*

**P07.108** [3H]Levetiracetam Binding to Brain Membranes: A Putative Allosteric Modulator of AMPA Glutamate Receptor Desensitization *Izad-Yar Rasheed, Jean Bidlack*

**P07.109** Cumulative Effect of Vagal Nerve Stimulator in Intractable Seizures Observed over a Period of Three Years *Fouzia Siddiqui, Imran Ali*

**P07.110** Prognostic Importance of Risk Factors for Extratemporal Lobe Epilepsy in Patients Undergoing Surgical Treatment *Mithri Junna, Robbie Buechler, Aaron Cohen-Gadol, Jayawant Mandrekar, Teresa Christianson, Gregory Cascino*

**P07.111** Suboptimal Dialogue around Mood/Behavior and Side Effects of Epilepsy Medications: Results of an Observational Linguistic Study *Frank Gilliam, Meaghan Onofrey, Joyce Cramer, Gregory Holmes, Patricia Penovich, John Stern, David Labiner, Corey Eagan*

**Epilepsy: Therapeutics**

**P07.112** Long-Term Treatment of Partial Epilepsy with Eslicarbazepine Acetate (ESL): Results of a One-Year Open-Label Extension to Study BIA-2093-301 *Mark Versavel, Peter Halasz, Christian Elger, Alla Borisovna Guekht, Joana Maia, Luis Almeida, Patricio Soares-da-Silva*

**P07.113** Radiosurgery for MTLT: Sparing of Neurocognition, Prediction of Seizure Remission, and Potential Antiepileptic Mechanisms of Dose-Related Peak MRI Effects *Edward Chang, Michael Oh, William Dillon, Mariann Ward, Kenneth Laxer, Donna Broshek, Mark Quigg, Nicholas Barbaro*

**P07.114** Postsurgical Outcome of Frontal Lobe Epilepsy. An Unexpected Finding *Manuel Toledo, Antoaneta Balabanov, Richard Byrne, Michael Smith, Donna Bergen, Marvin Rossi, Thomas Hoepfner, Michael Stein, Travis Stoub, Andres Kanner*

**P07.115** Evaluation of Lacosamide Efficacy in Subjects with Difficult-to-Treat Partial-Onset Seizures across the Dose Range Used in Phase II/III Clinical Trials *Steve Chung, G. David Rudd, David Hebert, Pamela Doty*

**P07.116** Empiric Use of Polycitra K® with the Ketogenic Diet Reduces Kidney Stone Incidence *Melanie McNally, Paula Pyzik, James Rubenstein, Eric Kossoff*

**P07.117** An Evaluation of the Efficacy and Safety of Eslicarbazepine Acetate (ESL) as Add-On Treatment in Adults with Refractory Partial-Onset Seizures: BIA-2093 Study *Mark Versavel, Piotr Czapinski, Peter Halasz, Christian Elger, Joana Maia, Luis Almeida, Patricio Soares-da-Silva*

**P07.118** Early Onset of Efficacy in the Initial Weeks of Treatment with Lacosamide: A Pooled Analysis of Three Phase II/III Trials *Pamela Doty, Michael Sperling, G. David Rudd, David Hebert*

**P07.119** Clinical Significance of Persistent Fetal PCA in Epilepsy Surgery Candidates *Elias Ntsoane, Charles Szabo, Lola Morgan, Bruce Mayes, Jose Cavazos, Jean-Louis Caron, Carlos Bazan, Arthur Cortez, Karin McCoy*

**P07.120** Catamenial Epilepsy Frequency with Various Antiepileptic Drugs *Andrew Herzog, Kristen Fowler, Sarah Smithson, Laura Kalayjian, Christianne Heck, Sandra Oviedo, Guadalupe Corral-Leyva, Progesterone Therapy Study Group*

**P07.121** Lacosamide Efficacy Is Independent of Concomitant AED(s) Treatment *William Rosenfeld, G. David Rudd, David Hebert, Pamela Doty*

**Thrombolysis and Acute Stroke Therapies**

**P07.122** Thrombolysis in Stroke Attributable to Extra- or Intracranial Cerebral Artery Dissection – Swiss Survey of IV Thrombolysis *Philippe Lyre, Matthieu Rutgers, Florian Hatz, Dimitrios Georgiadis, Lucka Sekoranja, Guido Schwegler, Philippe Temperli, Bruno Weder, Felix Müller, Felix Fluri, Regina Luethy, Marcel Arnold, Heinrich Mattle, Barbara Tettenborn, Hansjoerg Hungerbuehler, Roman Sztajzel, Ralf Baumgartner, Patrik Michel, Stefan Engelter*

**P07.123** Outcome of “Too Mild” Stroke Patients Treated with Thrombolysis: Is It Safe and Effective? *David Tong, Jack Rose, Jackie Phan, Ann Bedenk, Nobl Barazangi*

**P07.124** Barriers to tPA Use for Inpatient Ischemic Strokes *Marjorie Bunch, Kristen Babinski, Nunziato Edward, Daniel Labovitz*

**P07.125** Comparison of tPA Treatment between NonHispanic White and Hispanic American Stroke Patients *Tzu-Ching Wu, Mohamed Teleb, Gunjan Parikh, Denise Drumm, Georgios Tsivgoulis, Andrei Alexandrov, James Frey*

**P07.126** Implant for Perfusion Augmentation Clinical Trial -1 (ImpACT-1). A Safety and Effectiveness Evaluation of the Ischemic Stroke System (ISS\*) in the Treatment of Acute Ischemic Stroke – Pilot Study Report *Dheeraj Khurana, ImpACT-1 Investigators*

**P07.127** Randomized Study of Butylphthalide (NBP) in Treatment of Acute Cerebral Infarction *Hong Zhang, Min Zhou, E-Tang Tong*

**P07.128** tPA Therapy Following Acute Stroke Increases Plasma MMP-9 Activity out to 24Hours *Jeffrey Switzer, Livia Machado, David Hess, Adviye Ergul*



**P07.129** Intravenous Recombinant Tissue Plasminogen Activator Administered at Three to Six Hours Following Onset of Ischemic Stroke Does Not Improve Outcome. A Meta-Analysis *Samuel Maiser, M. Fareed Suri, Alexandros Georgiadis, Gabriela Vazquez, Adnan Qureshi*

**P07.130** Is Estimated Patient Weight Accurate for IV rt-PA Dosing in Acute Stroke? *David Tong, Jackie Phan, Ann Bedenk, Jeff Thomas, Nobl Barazangi, Jack Rose, Daniel McDermott*

**P07.131** tPA by Telephone: Comparison of Telephonic Versus In-House Parallel Treatment for Two Cohorts *Mohamed Teleb, Gunjan Parikh, Teddy Wu, Denise Drumm, Giorgios Tsvigoulis, Anabele Lao, Vijay Sharma, Steve Hoover, Andrei Alexandrov, James Frey*

#### **Multiple Sclerosis: Therapeutics II**

**P07.132** Cutaneous Candida Infection after Treatment with Natalizumab *Stefan Gutwinski, Sebastian Erbe, Christoph Münch, Claudia Pagenkopf, Judith Haas*

**P07.133** HALT MS – Phase II Clinical Trial of High Dose Immunosuppressive Therapy and Autologous Hematopoietic Stem Cell Transplantation for Active Relapsing-Remitting Multiple Sclerosis *Annette Wundes, James Bowen, George Kraft, George Hutton, Harry Openshaw, Stephen Forman, Elliot Frohman, Linda Griffith, Paolo Muraro, Michael Racke, Peter Sayre, Olaf Stuve, Uday Popat, Richard Nash*

**P07.134** Natalizumab Use in Two French Multiple Sclerosis Centers: The Incidence of Hypersensitivity Reactions Based on Premedication Practices *Eric Berger, Lucien Rumbach, Annick Lavier, Patrick Vermersch, Olivier Outteryck, Jean-Claude Ongagna, Jerome De Seze*

**P07.135** Comparison of Two Therapeutic Strategies in Active Relapsing-Remitting MS: Cyclophosphamide as Induction for 12 Months Followed by Interferon Beta Versus Interferon Beta. A Two-Year Randomized Trial *Francesco Patti, Salvatore Lo Fermo, Emanuele D'Amico, Silvia Messina, Tiziana Cavallaro, Mario Zappia*

**P07.136** Case Report of Recurrent Pericarditis Due to Natalizumab Treatment with Positive Re-Challenging Test *Mikael Cohen, Fanny Rocher, Claude Brunschwig, Christine Lebrun Frenay*

**P07.137** Hypereosinophilia under Natalizumab *Helene Zephir, Olivier Outteryck, Arnaud Lacour, Didier Ferriby, Patrick Vermersch*

**P07.138** Memantine as a Treatment for Spasticity in Multiple Sclerosis *Lahar Mehta, Michael McDermott, Andrew Goodman, Steven Schwid*

**P07.139** Enhancement Volumes in Multiple Sclerosis Patients Randomized to Interferon Beta 1b or Glatiramer Acetate Imaged by Monthly 3 Tesla Brain MRI with Triple Dose Gadolinium *Jojy Cheriyan, Stuart Cook, Leo Wolansky, Diego Cadavid*

**P07.140** B Cell Depletion and Safety of Low Dose Rituximab in Patients with Relapsing Multiple Sclerosis *Augusto Miravalle, Revere Kinkel, Annette Langer-Gould, Joanna Cooper*

**P07.141** A Phase I Trial of Probiotic Helminth Ova in Relapsing Remitting Multiple Sclerosis (RRMS) *John Fleming, JangEun Lee, Christopher Luzzio, Michael Carrithers, Aaron Field, Zsuzsanna Fabry*

**P07.142** One Year Follow-Up Results from a Phase II Trial of the BHT-3009 DNA Vaccine for Multiple Sclerosis *Hideki Garren, Joanne Quan, William Robinson, Paul Utz, Lawrence Steinman*

**P07.143** Two Annual Cycles of Alemtuzumab Yield Durable Treatment Response 24 Months after Last Dose *Sibyl Wray, CAMMS223 Study Group*

**P07.144** High Bioavailability and Long Half-Life of Oral Fingolimod (FTY720), an Investigational Treatment for Multiple Sclerosis *Alan Slade, Robert Schmouder, John Kovarik, Hans-Peter Gschwind, Olivier David*

**P07.145** Efficacy of a New Formulation of Subcutaneous Interferon Beta-1a in Patients with Relapsing-Remitting Multiple Sclerosis: 16-Week Results from a Double-Blind, Placebo-Controlled Study *Nicola De Stefano*

**P07.146** 4-Aminopyridine as a Treatment for Intractable Eructation: The First Case Report *Daniel Kantor*

**P07.147** Alemtuzumab Immunotherapy of Treatment-Refractory Multiple Sclerosis *Samuel Hunter, Heli Hunter, Janet Brown, Leah Eby*

**P07.148** Efficacy and Tolerability of Pramipexole in Multiple Sclerosis: Treatment for "Rubral Tremor" Related *José-Luis Rodríguez-Valdez, Aurelio Mendez-Dominguez*

**P07.149** Long-Term Efficacy and Safety of Intense Immunosuppression as First-Line Therapy in Clinically Active Relapsing MS: A New Treatment Algorithm *Jai Perumal, Stephanie Hreha, Christina Caon, Fen Bao, Ramya Penmesta, Imad Zak, Alexandros Tselis, Omar Khan*

**P07.150** Pharmacokinetic Study of Lipoic Acid in Multiple Sclerosis: Comparing Mice and Human Pharmacokinetic Parameters *Vijayshree Yadav, Dennis Koop, Gail Marracci, Lauren Stuber, Lilia Alvarez, Ganesh Cherala, Myrna Munar, Lynne Shinto, Dennis Bourdette*

**P07.151** Efficacy and Safety of Natalizumab in Multiple Sclerosis Patients Pretreated with Immunomodulatory and Immunosuppressive Drugs *Ulrich Mueller, Claudia Pagenkopf, Stilian Asimiadou, Judith Haas*

**P07.152** Pregbalin for Treating Paroxysmal Painful Symptoms in Multiple Sclerosis: An Open Label Study *Claudio Solaro, Margit Boehmker, Paolo Tanganelli*

**P07.153** Treating MS Relapses at Home. The Combined Experience of Four French Regional MS Networks (LORSEP, RBN-SEP, SEP-AUvergne and SINDEFI-SEP) for 807 Patients *Gilles Defer, Marc Debouverie, Valérie Jaillon-Rivière, Frédéric Taithe, Dora Liban, Alexandra Moutereau, Pierre Clavelou, Alain Créange*

**P07.154** Modifying Therapies Used in Severe First Idiopathic Acute Inflammatory Events within the Central Nervous System *Sara El Alaoui, Jean-Christophe Ouallet, Bruno Brochet*

**P07.155** Mycophenolate Mofetil in Multiple Sclerosis: A Retrospective Study *Laure Michel, Jean-Claude Ongagna, David Axel Laplaud, Mary Fleury, Frederic Blanc, Jerome De Seze, Sandrine Wiertelowski*

#### **Anterior Horn: Therapeutics**

**P07.156** Moderate Intensity Resistance Training Does Not Significantly Alter Disease Progression in a Representative Group of ALS Patients *Max Lowden, Helen Stephens, Zachary Simmons, Kevin Scott*

**P07.157** Safety Profile of Lithium Treatment in Patients with ALS: A Prospective Open-Label and Off-Label Cohort Studies *Jinsy Andrews, I. Chen, Aamir Hussain, Gabriella Harrington-Moroney, Kate Bednarz, Daniel Bell, Judith Rabkin, Jin Choi, Daniel MacGowan, Stephen Scelsa, Hiroshi Mitsumoto*

**P07.158** Is Lithium Therapy Safe for ALS Patients? *William Camu, Nicolas Pageot, Raoul Juntas Morales*

**P07.159** Retrograde Viral Delivery of GDNF and IGF1 Prevents the Development of Late Weakness (Post-Polio Syndrome) in a Mouse Model *Burk Jubelt, Iulia Moveleanu, Karen Straube-West, George Christophi, Paul Massa, Agnes Jani-Acsadi, Gyula Acsadi*

**P07.160** Minocycline and Verapamil Reduce Riluzole's Effectiveness in a Preclinical Model System of Mechanisms of Sporadic Amyotrophic Lateral Sclerosis (ALS) Pathogenesis *Richelle Hemendinger, Edward Armstrong III, Benjamin Brooks*

**P07.161** A Phase I-II Multicenter Study on G-CSF in ALS: Clinical and Hematological Results *Cristina Moglia, Andrea Calvo, Gabriele Mora, Claudia Caponnetto, Gabriele Siciliano, Mario Sabatelli, Vincenzo La Bella, Vincenzo Silani, Massimo Corbo, Gianluigi Mancardi, Pietro Attilio Tonali, Roberto Mutani, Corrado Tarella, Adriano Chio*

**P07.162** Autologous Stem Cells Transplantation in Amyotrophic Lateral Sclerosis: A Phase I Clinical Trial *Letizia Mazzini, Ivana Ferrero, Lucia Testa, Katia Mareschi, Vincenzo Luparello, Massimo Miglioretti, Alessandro Stecco, Gaia Donata Oggioni, Francesco Monaco, Franca Fagioli*

**P07.163** Safety and Short-Term Effects of Umbilical Cord Mesenchymal Stem Cell Therapy in Amyotrophic Lateral Sclerosis: Review of Chinese Data *S. Charles Cho, Hans Kutzberg, Byung-Jo Kim, Hak Jae Roh, Yuen So*

**P07.164** A Double-Blind, Placebo-Controlled, Randomized Trial of Growth Hormone as Add-On Therapy to Riluzole in Patients with Amyotrophic Lateral Sclerosis: Preliminary MRS, Hormonal, and Population Analysis *Francesco Saccà, Mario Quarantelli, Carlo Rinaldi, Tecla Tucci, Raffaele Piro, Barbara Carotenuto, Angela Marsili, Vincenzo Palma, Vincenzo Bresciamorra, Arturo Brunetti, Giuseppe De Michele, Alessandro Filla, Marco Salvatore*

**P07.165** Pontobulbar Palsy with Deafness (Brown-Vialetto-Van Laere Syndrome): Treatment and Prognosis in Ten Patients *Saeed Bohlega, Mohammed Al-Muhaizea, Issa Al-Sharoqi*

**Peripheral Nerve V**

**P07.166** Different Pathologic Features in Neurofilament Light Chain (NEFL) Pro22 Mutation in Charcot-Marie-Tooth Disease *Ji Soo Shin, Sooyeoun You, Sun Young Cho, Su Jin Hwang, Kee-Duk Park, Kyoung-Gyu Choi, Byung-Ok Choi*

**P07.167** WITHDRAWN

**P07.168** Sequence Analysis of the  $\alpha$ -Crystallin Type Heat Shock Protein Gene Family in Motor Neuropathy Patients *Elizabeth Renard, Pamela Snyder, Amy Bartlett, Scott Sutton, Shuping Gu, Victoria Lawson, Thomas Prior, Stephen Kolb*

**P07.169** CIDP Induced by TNF- $\alpha$  Antagonists in Rheumatoid Arthritis *J. Douglas Miles, Keivan Basiri, Bashir Katirji, Amer Alshekhlee*

**P07.170** Concomitance of an Inherited and an Acquired Demyelinating Neuropathy in a Young Girl *Wilson Marques, Juliana Secchin, Carolina Funayama, Silmara Gouvea, Vanessa Marques, Patricia Bastos, Charles Lourenço, Amilton Barreira*

**P07.171** De Novo Amyloid Deposits and Induced Polyneuropathy in FAP Domino Liver Recipients *David Adams, Catherine Lacroix, Teresa Antonini, Pierre Lozeron, Christian Denier, Stephane Epelbaum, Frederique Blandin, Vincent Karam, Daniel Azoulay, Rene Adam, Denis Castaing, Didier Samuel*

**P07.172** Parent-of-Origin Effect on Penetrance in Transthyretin Related Familial Amyloid Polyneuropathy *Violaine Plante-Bordeneuve, Bernard Bonaiti, Flora Alarcon, Catherine Bonaiti-Pellie*

**P07.173** CMT2A2 with Upper Motor Neuron Signs in a Patient with a Novel De Novo Mutation in MFN2 *Senda Ajroud-Driss, Faisal Fecto, Kaouther Ajroud, Yi Yang, Sandra Donkervoort, Nailah Siddique, Teepu Siddique*

**P07.174** The Clinical Spectrum of X-Linked Charcot-Marie-Tooth Disease in Childhood *Eppie Yiu, Nimeshan Geevasingha, Garth Nicholson, Elizabeth Fagan, Robert Ouvrier, Monique Ryan*

**P07.175** Novel Giant Axonal Neuropathy Mutation C→A146{Ala49Glu} Mimicking Chronic Immune Demyelinating Polyradiculoneuropathy *Juan Figueroa, Nancy Kuntz, Peter Dyck, JaNean Engelstad, Christopher Klein*



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**Anterior Horn:  
Basic Science**

**P08.001** Acetylcholinesterase Is Overexpressed in ALS Mice and Antisense Inhibition Prolongs Survival *Marc Gotkine, Leah Rozenstein, Tama Evron, Ofira Einstein, Oded Abramsky, Zohar Argov, Hermona Soreq, Hanna Rosenmann*

**P08.002** Autophagic Alteration in the Spinal Cord Motor Neurons of ALS Mice: Possible Link to Selective Motor Neuron Degeneration *Xiaojie Zhang, Liang Li, Qian Wang, Shen Chen, Weidong Le*

**P08.003** CD4+ T Cells Protect Motoneurons by Inducing Alternatively Activated (M2) Microglia in a Mouse Model of ALS *Jenny Henkel, David Beers, Weihua Zhao, Stanley Appel*

**P08.004** Effective Suppression of Spasticity in Baclofen Tolerant Rats after Spinal or Systemic Treatment with the Selective AMPA Receptor Antagonist Tezampanel *Masakatsu Oshiro, Michael Hefferan, Osamu Kakinohana, Martin Marsala*

**P08.005** An Investigation of SOD1 Behaviour in Amyotrophic Lateral Sclerosis *James Stevens, Virginie Bros-Facer, William Hendriks, Jan van Minnen, Linda Greensmith, Joanne Martin, Giampietro Schiavo, Elizabeth Fisher*

**P08.006** Passive Immunization Using Monoclonal Antibodies Specific for Mutant SOD1 Delayed Mortality in ALS G93A Mutant SOD1 Mice *Francois Gros-Louis, Daryl Bosco, Nicolas Dupre, Scott Brady, Robert Brown, Jean-Pierre Julien*

**P08.007** Higher Molecular Weight Species of SQSTM1/p62 Accumulate in Protein Aggregates in a Mouse Model of Amyotrophic Lateral Sclerosis *Faisal Fecto, Ronggen Fu, Hong Zhai, Han-Xiang Deng, Teepu Siddique*

**P08.008** Rat Brain Mitochondrial Calcium Retention Capacity (CRC) Exceeds Total Brain Calcium While Rat Spinal Cord CRC Is 90 Percent Less Than the Available Total Spinal Cord Calcium *Alexander Panov, Nataliya Kubalik, Richelle Hemendinger, Benjamin Rix Brooks*

**P08.009** Genetic and Cellular Studies of the Hereditary Spastic Paraplegia Gene REEP1 *Jia Huang, Gladys Montenegro, Tine Deconinck, Justin Price, Margaret Pericak-Vance, Gaofeng Wang, Peter De Jonghe, Stephan Zuchner*

**P08.010** Histopathologic Changes of the Enteric Nervous System in ALS *Terry Heiman-Patterson, Steven Ryder, Preetha Muthasamy, Luisa Rojas, Christos Katsetos*

**Peripheral Nerve VI**

**P08.011** Retrospective Analysis of Response to Medical Treatment of Peripheral Neuropathy Symptoms in Clinical Practice *Todd Levine, Madison Levine, Anna Cordova, Nicole Hank, Richard Gerkin, David Saperstein*

**P08.012** Anterior Lobe and Cerebellar Atrophy in Sensory Neuron Diseases *Alfredo Damasceno, Marcondes Franca, Jr., Anamarli Nucci, Fernando Cendes*

**P08.013** Distinct Pattern of Amyloid Deposition in Gelsolin Amyloidosis *Wolfgang Singer, Jennifer Tracy, Christopher Klein*

**P08.014** Low Dose Pyridoxine and Reversible Neurotoxicity *John Romine*

**Pediatric Multiple Sclerosis**

**P08.015** Multimodal Determinants of Multiple Sclerosis Outcome in Children with Central Nervous System Demyelination *Brenda Banwell, Ruth-Ann Marrie, Douglas Arnold, Dessa Sadovnick, Rezwan Ghassemi, Heather Hanwell, Sridar Narayanan, Raymond Tellier, Amit Bar-Or*

**P08.016** Viral Seroprevalence among Canadian Children Presenting with Acquired Demyelination of the Central Nervous System *Jean Marie Ahorro, Brenda Banwell, Raymond Tellier, Melissa McGowan, Sandra Magalhaes, Douglas Arnold, Dessa Sadovnick, Amit Bar-Or*

**P08.017** Cognitive and Psychological Functioning in Pediatric Onset Multiple Sclerosis *Mary Putnam, Ellen Braaten, Ellen O'Donnell, Mark Gorman, Tanuja Chitnis*

**P08.018** Spinal MRI in Pediatric Multiple Sclerosis *Monica Makhija, Helen Branson, Manohar Shroff, Sandra Magalhaes, Brenda Banwell*

**P08.019** Relationship between Age of Onset and Duration and Neurocognitive Status in Pediatric MS *Joy Parrish, Eluen Yeh, Lisa Jackson, Bianca Weinstock-Guttman, Ralph Benedict*

**P08.020** Use of Plasmapheresis in Pediatric Demyelinating Disease *Jayne Ness, Dorothee Chabas, Emmanuelle Waubant, Eluen Yeh, Nancy Kuntz, Sibyl Wray, Bianca Weinstock-Guttman, NMSS Network of Pediatric MS Centers of Excellence*

**P08.021** White Matter Tract Based DTI Analysis in Pediatric Multiple Sclerosis *Mellekate Vishwas, Tanuja Chitnis, Rudolph Pienaar, Brian Healy, Ellen Grant*

**P08.022** Depression in Pediatric MS Patients Correlates with Increased Disease Severity and Selective Neuropsychological Deficits *Joseph Ackerson, Samuel Rubin, Khurram Bashir, Pallavi Ghosh, Sarah Dowdy, Yolanda Harris, John Rinker, Jayne Ness*

**P08.023** Daclizumab Add-On Therapy for Pediatric Multiple Sclerosis Patients Failing Interferon *Mark Gorman, Annika Berger, Charles Guttmann, Tanuja Chitnis*

**P08.024** Cerebrospinal Fluid Characteristics of Acquired Demyelinating Syndromes of the Central Nervous System in Children *Gregory Aaen, Sandra Magalhaes, Melissa McGowan, Douglas Arnold, Amit Bar-Or, Dessa Sadovnick, Brenda Banwell*

**P08.025** Regional and Tract Based DTI Analysis of Normal Appearing White Matter in Pediatric Multiple Sclerosis *Mellekate Vishwas, Ellen Grant, Rudolph Pienaar, Brian Healy, Tanuja Chitnis*

**Multiple Sclerosis: Genetics and Epidemiology**

**P08.026** Melanocortin Receptor-1 Gene Polymorphisms and Multiple Sclerosis Outcome *Roby Abraham, Richard Strange, Vythilingam Raveendran, Sud Ramachandran, Clive Hawkins*

**P08.027** Temporal Variation of Onset of Relapses in Multiple Sclerosis: Results from the Northern and Southern Hemispheres in the MSBase Registry *Orla Gray, Damien Jolley, Cees Zwanikken, Maria Trojano, Francois Grand-Maison, Pierre Duquette, Pierre Grammond, Roberto Bergamaschi, Giorgio Giuliani, Ruja Taffi, R. M. M. Hupperts, Thor Petersen, Cavit Boz, Edite Rio, Vincent Van Pesch, Etienne Roulet, Jeannette Lechner-Scott, Guillermo Izquierdo, Edgardo Cristiano, Dieter Poehla, Marcela Fiol, Walter Arruda, Norma Deri, Shlomo Flechter, Mark Paine, Aldo Savino, Michelle Rutherford, Helmut Butzkueven*

**P08.028** Threefold Increase in Migraine in MS Patients Compared to Age- and Gender-Matched Population Controls *Ilya Kister, Ana Belen Caminero Rodriguez, Teshamae Monteith, Amani Soliman, Jennifer Fromm, Joshua Bacon, Richard Lipton, Joseph Herbert*

**P08.029** Progranulin Genetic Variability in a Population of 239 Patients with Primary Progressive Multiple Sclerosis *Chiara Fenoglio, Filippo Martinelli Boneschi, Daniela Galimberti, Diego Scalabrini, Federica Esposito, Milena De Riz, Laura Piccio, Robert Naismith, Becky Parks, Cristoforo Comi, Anna Pietrobboni, Mirko Piola, Eliana Venturelli, Francesca Cortini, Chiara Villa, Maria Serpente, Francesco Monaco, Nereo Bresolin, Anne Cross*

**P08.030** Challenging the Role of Chromosome X Inactivation in Multiple Sclerosis Pathogenesis *Nicolas Couturier, Pierre-Antoine Gouraud, Pierre Antoine Gouraud, Céline Rabadeux, Laurie Parmentier, Florence Bucciarelli, Isabelle Rebeix, Claire Gout, Renato Colamarino, Florent Borgel, Serge Mrejen, Philippe Cabre, Christine Lebrun Frenay, Jacqueline Yaouanq, Patrick Hautecoeur, Marc Debouverie, Gilles Edan, Michel Clanet, Bertrand Fontaine, David Brassat*

**P08.031** HLA-DRB1\*-DQB1\* and Multiple Sclerosis in Argentina *Liliana Patrucco, Julián Larriba, Juan Rojas, María Redal, Pablo Argibay, Edgardo Cristiano*

**P08.032** Gender Differences in Disease and Therapy Management in MS: Evidence from a Community Health Survey *Anna Vlahiotis, Emily Cox, Thomas Burroughs*

**P08.033** Demographic and Clinic Characteristics of Patients Treated with Tysabri in the Real Situation of Prescription Compared with AFFIRM Study *Olivier Outteryck, Jean-Claude Ongagna, Helene Zephir, Marie Fleury, Arnaud Lacour, Frédéric Blanc, Patrick Vermersch, Jerome De Seze*

**P08.034** Unusual Presentation of Multiple Sclerosis in Four Caucasian Patients Carrying a Mutation in the MEFV Gene *Tania Kümpfel, Lisa Gerdes, Reinhard Hohlfeld, Peter Lohse*

**P08.035** Prevalence of Dysphagia in Multiple Sclerosis: An Italian Multicenter Study *Claudio Solaro, Cristina Rezzani, Roberto Bergamaschi, Dymus Group*

**P08.036** Epidemiology and Current Treatment Trends of Multiple Sclerosis in Pakistan *Abdul Malik, Farrukh Khan, Khurram Siddiqui*

**P08.037** Sexual Dysfunction in Multiple Sclerosis: Gender Basis Differences *Billur Celik, Esra Coskuner Poyraz, Ayhan Bingol, Serkan Ozakbas, Egemen Idiman*

**P08.038** High Frequency of Impaired Glucose Tolerance and Diabetes in Patients with Progressive Multiple Sclerosis *Alain Creange, Antoine Gueguen*



**P08.039** The Clinical and Immunological Comparison of Limited Disseminated Demyelinating Diseases and Conventional Multiple Sclerosis *Egemen Idiman, Serkan Ozakbas, Ozan Sagut, Turan Poyraz, Derya Kaya, Serap Tufan*

**P08.040** CD24 Polymorphism and Multiple Sclerosis *Sergio Gonzalez, Juan Rojas, Maria Redal, Liliana Patrucco, Jorge Correale, Edgardo Cristiano, Pablo Argibay*

**P08.041** The Prevalence of Multiple Sclerosis in the Italian Province of Frosinone *Valentina Durastanti, Antonio Cortese, Simone Di Rezze, Annalisa Maraone, Enrico Millefiorini*

**Multiple Sclerosis: Animal Models**

**P08.042** Prophylactic and Therapeutic Treatment with IFN- $\lambda$ , a Novel Type III Interferon, Has Potent Efficacy in a Relapsing-Remitting EAE Model *Pallavur Sivakumar, Katherine Lewis, Shannon Okada, Kristen Bontadelli, Kei Kim, Monica Anderson, Kim Waggie, Sean Doyle*

**P08.043** HSP70 Overexpression in Oligodendrocytes Enhance EAE *Anna Jurewicz, Grazyna Galazka, Bozena Szymanska, George Kollias, Krzysztof Selmaj*

**P08.044** Nicotinic Attenuation of Central Nervous System Inflammation and Autoimmunity *Fu-Dong Shi, Wen-Hua Piao, Yen-Ping Kuo, Denise Campagnolo, Timothy Vollmer, Ronald Lukas*

**P08.045** Alteration of B Cell Cytokine and Growth Factors in Experimental Autoimmune Encephalomyelitis by Glatiramer Acetate *Sakhina Begum-Haque, Alok Sharma, Islam Fayed, Javier Ochoa-Repáraz, Tim Lentini, Daniel Mielcarz, Azizul Haque, Lloyd Kasper*

**P08.046** Recombinant Invariant Chains Induce Different Responses in CNS-Specific Effector and Regulatory T Cell Populations *Felix Bischof, Christian Lange, Hong Doster, Hubert Kalbacher, Arthur Melms*

**P08.047** Fingolimod Enhances Myelin Basic Protein Expression and Modulates Cytokine Production Following an Interferon-gamma Mediated Insult in the Whole Brain Aggregate Cell Culture System *Samuel Jackson, David Baker, Gavin Giovannoni*

**P08.048** Histopathology of the Murine Cuprizone Model for Multiple Sclerosis (MS) *Stig Wergeland, Øivind Torkildsen, Kjell-Morten Myhr, Sverre Jarl Mørk, Lars Bø*

**P08.049** MRI Detectable Spinal Cord Atrophy Correlates with Disability in a Murine Model of Multiple Sclerosis *Istvan Pirko, Yi Chen, Anne Lohrey, Aaron Johnson*

**P08.050** p75NTR-Knockout Mice Feature Increased Axonal Vulnerability in Experimental Autoimmune Encephalomyelitis *Stefan Nessler, Christine Stadelmann, Tobias Dallenga, Alwina Bittner, Wolfgang Jäger, Wolfgang Oertel, Norbert Sommer, Carsten Möller, Bernhard Hemmer*

**P08.051** Laquinimod Inhibits MOG-Induced Experimental Autoimmune Encephalomyelitis (EAE) in CD4+CD25+ Regulatory T-Cell Depleted Mice *Nora Tarcic, Emanuel Raymond, Joel Kaye*

**P08.052** Thalamic T2 Hypointensity Correlates with Disability in a Murine Model of Multiple Sclerosis *Istvan Pirko, Aaron Johnson, Anne Lohrey, Yi Chen, Jun Ying*

**P08.053** Repetitive Pertussis Toxin Promotes Development of Regulatory T Cells and Prevents Central Nervous System Autoimmune Disease *Martin Weber, Mahdia Benkhoucha, Klaus Lehmann-Horn, Cynthia Rundle, Michel Chofflon, Scott Zamvil, Patrice Lalive*

**P08.054** Dimethyl Fumarate (BG00012) Inhibits Astroglialosis in Rodent EAE Models *Sarah Ryan, Sha Mi, Kyungmin Hahm, Yi Luo, Matvey Lukashev*

**P08.055** The Therapeutic Effect of Pertussis Toxin Administered Intracerebroventricularly in an Animal Model of Experimental Autoimmune Encephalomyelitis *Jiong Shi, Jiang-long Tu, Hao-jie Lin, Stephen Coons*

**P08.056** Reduced Adult Neurogenesis and Altered Emotional Behaviors in Autoimmune-Prone BAFF Transgenic Mice *Rosalía Crupi, Marco Cambiaghi, Giuseppe Vita, Linda Spatz, Eitan Friedman, Fortunato Battaglia*

**P08.057** Visualization of Encephalitogenic Effector T Cells during Fingolimod (FTY720) Treatment of Experimental Autoimmune Encephalomyelitis Using In Vivo 2-Photon Imaging *Ingo Bartholomäus, Christian Schläger, Volker Brinkmann, Hartmut Wekerle, Alexander Flügel*

**P08.058** Ingested (oral) ACTH (Adreno-Cortico-Trophic Hormone)/Corticotrophin Inhibits Acute EAE *Staley Brod, Zach Hood*

**Epilepsy: Basic Science and Clinical Neurophysiology**

**P08.059** Acute and Long-Term Effects of Lacosamide in an Animal Model of Status Epilepticus *Lucie Suchoamelova, Jerome Niquet, Kerry Thompson, Roger Baldwin, Thomas Stoehr, Claude Wasterlain*

**P08.060** The Mammalian Target of Rapamycin (mTOR) Signaling Pathway Mediates Epileptogenesis in the Kainate Model of Temporal Lobe Epilepsy *Ling-Hui Zeng, Nicholas Rensing, Michael Wong*

**P08.061** Persistent vs. Non-Persistent Group I mGluR-Induced Network Activity: Implications for Epileptogenesis *Michaelangelo Fuortes, Lisa Merlin*

**P08.062** Calcium Channels Contribute to a Prolonged Depolarization in the Bag Cell Neurons of Aplysia californica *Alan Tam, Neil Magoski*

**P08.063** Relationship of Peripheral Autonomic Nerve Activity and Limbic Cortical Seizures *Isaac Naggar, Mark Stewart*

**P08.064** Intracranial EEG Seizure – Onset Patterns and Surgical Outcomes in Patients with Refractory Epilepsy *Tarek Zakaria, Terrence Lagerlund, Elson So, Gregory Worrell*

**P08.065** Repeating EEG-Video Monitoring: Why and with What Results? *Juan Muniz, Selim Benbadis*

**P08.066** Gelastic Seizures and the Anteromesial Frontal Lobe: A Case Report *Kanjana Unnwongse, Tim Wehner, Nancy Foldvary-Schaefer*

**P08.067** Musicogenic Epilepsy with Independent Bilateral Temporal Seizures *Dina Amrom, Eva Andermann, Benjamin Zifkin, François Dubeau, Frederick Andermann*

**P08.068** Do Atmospheric Pressure Changes Influence Seizure Occurrence in the Epilepsy Monitoring Unit? *Michael Doherty, Wonsuk Kim, Clover Youn, Alan Haltiner, John Miller, John Oakley*

**Aging and Dementia: Clinical III**

**P08.069** Memantine Treatment in Patients with Alzheimer's Disease: Neuropsychological Results from an Open-Label, Multi-Center Brain Imaging Trial *Judith Saxton, Robert Hofbauer, Stephen Graham, Sung Yun Yu, Shaoyi Li, Hai-An Hsu, James Perhach*

**P08.070** Relevance of Computerized Cognitive Assessment to Functional Disability in a Mildly Impaired Elderly Cohort *Ely Simon, Deena Simon, Tzvi Dwolatzky, David Tanne, Felicia Goldstein, Doniger Glen*

**P08.071** Mattis Dementia Rating Scale Distinguishes between Parkinson's Disease with Mild Cognitive Impairment (PD-MCI) and Amnesic-Mild Cognitive Impairment (A-MCI) *Evelyne Matteau, Leonie Jean, Martine Simard, Nicolas Dupre*

**P08.072** First Symptoms in Pathologically Confirmed Corticobasal Degeneration, Progressive Supranuclear Palsy, and Frontotemporal Dementia with Motor Neuron Disease *Michael Rosenbloom, Suzee Lee, Shenly Glenn, Alvin Chan, Caroline Racine, Bruce Miller*

**P08.073** Hippocampal Sclerosis Co-Existing with Parkinson's Disease Dementia *Marwan Sabbagh, Aleksandra Obradov, Charles Adler, Holly Shill, Lucia Sue, Donald Connor, John Caviness, Linda Vedders, Thomas Beach*

**P08.074** Clinical Improvements in Cognitive Function with 3D Video Gameplay *Joshua Cosman, Brendon Honick, Joan Severson, Monica Severson, Steven Anderson, Matthew Rizzo*

**P08.075** Telemedicine-Based Validation of the National Alzheimer's Coordinating Center Uniform Data Set in Normal Cognition, Mild Cognitive Impairment, and Dementia *Gregory Jicha, Sarah Carr, Stephanie Freeman, Rob Sprang, William Markesbery*

**P08.076** Cerebrospinal Fluid Vitamin D Binding Protein Declines with Age *Joseph Quinn, Jeffrey Kaye, Nathaniel McCoy, Susanne Crane, Amie Peterson, Thomas Montine, John Breitner*

**P08.077** Extended-Release Memantine (28 mg, Once Daily) Improves Verbal Fluency and Behavior in Patients with Moderate to Severe Alzheimer's Disease: Results of a Multinational, Double-Blind, Placebo-Controlled Trial *George Grossberg, Facundo Manes, Ricardo Allegri, Luis Miguel Gutierrez Robledo, Sergio Gloger, Lei Xie, Daniel Jia, James Perhach, Stephen Graham*

**P08.078** Clinical Overlap between Creutzfeldt-Jakob Disease and Dementia with Lewy Bodies *Julie Thai, Aissa Haman, David Johnson, Stephen DeArmond, Michael Geschwind, Bruce Miller*

**Aging and Dementia: Basic Science/Genetics**

**P08.079** Dimebon Induces Neurite Outgrowth with Hippocampal, Spinal, and Cortical Neurons *Sebastian Bernales, Marcelo Chacon, Rodrigo Alarcon, Javier Guerrero, Andrew Protter*

**P08.080** PIN1 as New Target To Protect Synaptic Function in Alzheimer's Disease *Richard Tsai, Carol Lippa, Andrea Rosso, Yuesong Gong*

**P08.081** Presenilin 2 Modulates Microglial Activation In Vitro *Suman Jayadev, Amanda Case, Luke Seaburg, Anand Kaul, Huy Nguyen, Gwenn Garden*

**P08.082** Functional Validation Strategy for a Pilot Genome Scan of Alzheimer's Disease Neuropathology Suggests a Role for SEMA5A *Philip De Jager, Joshua Shulman, Patricia Kramer, Mel Feany, David Bennett*

**P08.083** rs5848 Variant Influences GRN mRNA Levels in Brain and Peripheral Mononuclear Cells from Patients with Alzheimer's Disease *Daniela Galimberti, Chiara Fenoglio, Francesca Cortini, John Kauwe, Carlos Cruchaga, Eliana Venturelli, Diego Scalabrini, Chiara Villa, Maria Serpente, Kevin Mayo, Laura Piccio, Francesca Clerici, Diego Albani, Claudio Mariani, Gianluigi Forloni, Nereo Bresolin, Alison Goate, Elio Scarpini*

**P08.084** Diagnosis of Frontotemporal Lobar Degeneration Due to Progranulin Gene Mutations: Usefulness of Serum and Cerebrospinal Fluid Progranulin Dosage *Alessandro Padovani, Silvana Archetti, Antonella Alberici, Chiara Agosti, Barbara Bigni, Marta Bianchi, Maria Ferrari, Monica Di Luca, Barbara Borroni*

**P08.085** GAB2 Gene Polymorphism in Italian Patients with Alzheimer's Disease *Benedetta Nacmias, Andrea Tedde, Silvia Bagnoli, Elena Cellini, Biancamaria Guarnieri, Silvia Piacentini, Sandro Sorbi*

**P08.086** A Polymorphism in ASPM Is Associated with Alzheimer Disease and Brain Size *Deniz Erten-Lyons, Shannon McWeeney, Beth Wilmot, Patricia Kramer, Jeffrey Kaye*

**P08.087** APOE Gene Polymorphisms and Frontotemporal Dementia: A Meta-Analysis *Elisa Rubino, Innocenzo Rainero, Margherita Ferrero, Giovanna Vaula, Salvatore Gentile, Walter Valfre', Paola De Martino, Elisa Negro, Lorenzo Pinessi*

**P08.088** Lipoprotein Profile and Interaction with Paraoxonase1 (PON1) and APOE Polymorphisms in Alzheimer's Disease *Annachiara Cagnin, Alberta Leon, Daniela Vianello, Mario Ermani, Silvia Favaretto, Maurizio Dalle Carbonare, Davide Colavito, Alberto Zambon*

## Genetics and Parkinson's Disease

**P08.089** No Mutations in TARDBP, the Gene Encoding TDP-43, in UK Familial and Sporadic Parkinson's Disease Cases *Karen Morrison, Nick Owen, Alistair Lewthwaite, Emily Goodall, Sohraab Yadav, Georgina Williams*

**P08.090** Differential Effects of PINK1 Nonsense and Missense Mutations on Mitochondrial Function and Morphology *Anne Grünewald, Matthew Gegg, Jan-Willem Taanman, Rosalind King, Christine Klein, Anthony Schapira*

**P08.091** Prevalence of FMR1 Gray Zone Alleles Is Increased in Female Patients with Parkinsonism *Deborah Hall, Katherine Howard, Tim Byers, Gary Zerbe, Wenting Zhang, Flora Tassone, Paul Hagerman, Maureen Leehey*

**P08.092** Nigrostriatal Dopaminergic Functioning in Hereditary Parkinsonism Associated with PINK1 Mutations *Ruediger Hilker, Carsten Eggers, Johann Hagenah, Alexander Schmidt, Norbert Brueggemann, Vera Tadic, Johannes Klein, Lena Kertelge, Joyce van der Vegt, Katja Lohmann, Ferdinand Binkofski, Detlev von Cramon, Hartwig Siebner, Gereon Fink, Christine Klein*

**P08.093** The Increased Risk of Parkinson's Disease in Non-Smokers Is Dependent on Catechol-o-Methyltransferase (COMT) Genotype *Carolyn Orr, Timothy Lesnick, Mariza De Andrade, Julie Cunningham, Demetrius Maraganore*

**P08.094** PARK Locus and Related Genes, Environmental Exposures, and Parkinson's Disease (PD) *Sun Ju Chung, Sarah J. Lincoln, Matthew J. Farrer, Julie M. Cunningham, Sebastian M. Armasu, Timothy G. Lesnick, Mariza De Andrade, Walter A. Rocca, Demetrius M. Maraganore*

**P08.095** Demographic and Clinical Characteristics of LRRK2 G2019S Carriers in Early Onset PD *Roy Alcalay, Lorraine Clark, Helen Mejia-Santana, Ming Tang, Llency Rosado, Elan Louis, Cynthia Comella, Amy Colcher, Danna Jennings, Martha Nance, Susan Bressman, William Scott, Caroline Tanner, Susan Mickel, Howard Andrews, Cheryl Waters, Stanley Fahn, Barbara Ross, Lucien Cote, Steven Frucht, Michael Rezak, Blair Ford, Kevin Novak, Joseph Friedman, Ronald Pfeiffer, Laura Marsh, Elise Caccappolo, Bradley Hiner, Andrew Siderowf, Ruth Ottman, Karen Marder*

**P08.096** Heterozygous ATP13A2 Mutations Associated with Dopaminergic Dysfunction *Norbert Brüggemann, Alexander Schmidt, Maria Behrens, Alfredo Ramirez, Joyce van der Vegt, Ana Djarmati, Hartwig Siebner, Ferdinand Binkofski, Manfred Bähre, Johann Hagenah, Christine Klein*

**P08.097** Non-Motor Symptoms in Genetic Forms of Parkinson Disease *Meike Kasten, Lena Kertelge, Norbert Brüggemann, Johann Hagenah, Alexander Schmidt, Vera Tadic, Susanne Steinlechner, Maria Isabel Behrens, Alfredo Ramirez, Heiner Raspe, Rebekka Lencer, Christine Klein*

## Anterior Horn: Genetics

**P08.098** Selective Association of ALS-Linked Mutant SOD1 with HuR and TIAR in VEGF Destabilization and Down-Regulation *Liang Lu, Lei Zheng, Shin Oh, Peter King*

**P08.099** Association of the H63D Polymorphism in HFE with ALS in a Population of US Veterans *Lydia Kwee, Kelli Allen, Valerie Loiacono, Catherine Stanwyck, Heidi Munger, Michael Hauser, Eugene Oddone, Silke Schmidt*

**P08.100** Loss of Heterozygosity Mapping in Irish Sporadic ALS Patients *David Lynch, Kim Caulfield, Simon Cronin, Daniel Bradley, Orla Hardiman*

**P08.101** Phenocopies in SOD1 Positive Familial Amyotrophic Lateral Sclerosis: Implications for Genetic Counseling and Research. From Case Report to Full Investigation *Sandra Donkervoort, Nailah Siddique, Erik Pioro, Teepu Siddique*

**P08.102** TARDBP Genotyping in Patients with Familial and Sporadic ALS: Identification of Two Novel Mutations *Roberto Del Bo, Stefania Corti, Michela Ranieri, Serena Ghezzi, Domenico Santoro, Isabella Ghione, Massimo Pandolfo, Gianni Sorarù, Chiara Briani, Michelangelo Mancuso, Gabriele Siciliano, Nereo Bresolin, Giacomo Comi*

**P08.103** High Frequency of TARDBP Gene Mutations in Italian Patients with Amyotrophic Lateral Sclerosis (ALS) *Vincenzo Silani, Lucia Corrado, Antonia Ratti, Cinzia Gellera, Emanuele Buratti, Barbara Castellotti, Yari Carlomagno, Nicola Ticozzi, Letizia Mazzini, Lucia Testa, Franco Taroni, Francisco Baralle, Sandra D'Alfonso*

**P08.104** High Resolution Melting (HRM) Analysis for Mutation Screening of the Cu/Zn Superoxide Dismutase 1 (SOD1) Gene *Chizuru Akimoto, Mitsuya Morita, Imaharu Nakano*

**P08.105** SOD1 Mutations in Familial Amyotrophic Lateral Sclerosis – Discordant D90A Genotype in Affected Twins *Karen Morrison, Yin Dong*

**P08.106** Exclusion of Glycyl-tRNA Synthetase (GARS) Gene Mutations in Hirayama Disease *Sergiu Blumen, Vivian Drory, Menachem Sadeh, Baruch El-Ad, Lev Goldfarb*

**P08.107** Gene Screening in a French-Canadian Family with Primary Lateral Sclerosis and Identification of a New Family with the Same Phenotype *Veronique Belzil, Paul Valdmantis, Guy Rouleau, Nicolas Dupre*

## Neurogenetics and Gene Therapy II

**P08.108** Brain Involvements Due to MFN2 Mutations *Sooyeoun You, Ki-Duk Park, Kyung-Gyu Choi, Byung-Ok Choi*

**P08.109** BDNF Val66Met Polymorphism and Brain Volumes in Multiple Sclerosis: A Relationship Still Debated *Daria Dinacci, Antonio Russo, Alessandro Tessitore, Maria Laura De Bonis, Luigi Lavorgna, Orietta Picconi, Rosaria Sacco, Simona Bonavita, Antonio Gallo, Giovanna Servillo, Marco Commerci, Patrizia Galletti, Bruno Alfano, Giocchino Tedeschi*

**P08.110** AAV-Follistatin Gene Therapy Targeting Neuromuscular Diseases with Weakness and Atrophy of the Quadriceps Muscle *Janaiah Kota, Chrystal Montgomerie, Amy Eagle, Danielle Tucker, Chalonda Handy, Amanda Haidet, Louise Rodino-Klapac, Kim Shontz, Yiran Davis, Zachary Van Wagoner, Christopher Shilling, Walter Therfall, Steven Weisbrode, Paul Janssen, K. Reed Clark, Zarife Sahekn, Jerry Mendell, Brian Kaspar*

**P08.111** Spastic Paraplegia, Optic Atrophy, and Neuropathy (SPOAN): New Observations, Locus Refinement, and Exclusion of Candidate Genes *Fernando Kok, Lucia Ines Macedo-Souza, Santos Silvana, Simone Amorim, Luciana Licinio, Zdzia Graciani, Paulo Otto, Mayana Zatz*

**P08.112** Targeting the Nrf2 Pathway in Huntington's Disease: Therapeutic Efficacy of Dimethyl Fumarate in the R6/2 Mouse Model *Gisa Ellrichmann, De-Hyung Lee, Carsten Saft, Ralf Gold, Ralf Linker*

**P08.113** Variation in the Alpha-Synuclein Gene, Independent of REP1, Modifies Risk for Parkinson's Disease *Ignacio Mata, Ali Samii, Stewart Factor, Donald Higgins, Alida Griffith, John Roberts, Hojoong Kim, Pinky Agarwal, Dora Yearout, Carolyn Hutter, Karen Edwards, Denise Kay, Haydeh Payami, Cyrus Zabetian*



**P08.114** Common Variation in the LRRK2 Gene Is a Risk Factor for Parkinson's Disease *Ignacio Mata, Harvey Checkoway, Carolyn Hutter, Ali Samii, Alida Griffith, John Roberts, Hojoong Kim, Pinky Agarwal, Dora Yearout, Federico Farin, Karen Edwards, Cyrus Zabetian*

**P08.115** Genotype-Phenotype Correlation in a Transgenic Mouse Model of Machado-Joseph Disease *Anabela Silva-Fernandes, Maria do Carmo Costa, Sara Duarte-Silva, Cristina Costa, Pedro Oliveira, Patricia Maciel*

**P08.116** Region-Specific Changes in the Expression of Hsp70 in the Central Nervous System of a Transgenic Mouse Model of Machado-Joseph Disease *Teresa Cruto, Andreia Teixeira-Castro, Anabela Silva-Fernandes, Maria do Carmo Costa, Sara Duarte-Silva, Patricia Maciel*

**P08.117** WITHDRAWN

**P08.118** Restoration of Normal Function by Combinational Gene Replacement Using Follistatin and Micro-Dystrophin in Mdx Mice *Louise Rodino-Klapac, Paul Janssen, Kim Shontz, Amy Eagle, Chrystal Montgomery, K. Reed Clark, Jerry Mendell, Brian Kaspar*

**P08.119** Targeting the Expression of Transferrin by the Choroid Plexus *Richard Smith, Merrill Benson, Gene Hung, Brett Monia, Barbara Kluge-Beckerman*

**P08.120** Abnormal Glutamate Neurotransmission (GNT) in Adults with Ornithine Transcarbamylase Deficiency (OTCD) *Brian Ross, Andrea Gropman, Napapon Sailasuta, Kent Harris, Osama Abulseoud*

## Child Neurology: Genetics

**P08.121** Molecular Genetic Studies in Indian Patients with Megalencephalic Leukodystrophy *Pallavi Shukla, Neerja Gupta, Manju Ghosh, Raju Sharma, Madhulika Kabra, Veena Kalra*

**P08.122** A New Sporadic Point Mutation in the ATP6 of the Mitochondrial DNA (mtDNA) in Leigh Disease *Genevieve Langley, Lauren Hyams, Francis Dimario, John Shoffner*

**P08.123** Classic Pelizaeus-Merzbacher Disease in a Girl with an Unbalanced Chromosomal Translocation and Functional Duplication of the PLP1 Gene *Eppie Yiu, Sandra Farrell, Teesta Soman*

**P08.124** Clinical Characterization and Mapping of the Locus for a New Form of Childhood-Onset Leukodystrophy *Genevieve Bernard, Isabelle Thiffault, Martine Tetreault, Marie-Emmanuelle DiIenge, Guillaume Sebire, Serge Melancon, Michel Sylvain, Pierre Langevin, Jean-Pierre Bouchard, Bernard Brais*

**P08.125** Genetic Basis of Unidentifiable Arcuate Fasciculus in Children with Developmental Delay *Senthil Sundaram, Harry Chugani, A. H. M. Huq*

**P08.126** Mutations in PEX10 Are a Cause of Autosomal Recessive Spinocerebellar Ataxia *Luc Régal, Merel Ebberink, Ronald Wanders, Hans Waterham, Linda De Meirleir, Jaak Jaeken, Rudy Van Coster, Maarten Schrooten, Nathalie Goemans*

**P08.127** "Dropped Head Syndrome" in a Child Due to a Lamin A/C Mutation *Edward Smith*

**P08.128** Comparative Genomic Hybridization (CGH) in the Diagnosis of Malformations of Cerebral Development *Frances Roberts, Adeline Vanderver, Andrea Gropman*

**P08.129** Familial Degenerative Encephalopathy with Intracranial Calcification and Metaphyseal Dysplasia *Margaret Timmons, James Garbern, Pamela Robey, Andrew Singleton, Dena Hernandez, G. David Roodman, Ira Zaltz, Steven Mumm, William Wilcox, Kenneth Fischbeck, Roscoe Brady, Melanie Knight*

**P08.130** MUTFLOW: A Mutation Discovery Workflow *Senthil Sundaram, Zhen Sun, Otto Muzik, Shiyong Lu, A. H. M. Huq*

## Translational Research in Stroke

**P08.131** Changes in Hemocoagulation in Stroke Patients and Healthy Volunteers after a One-Hour Continuous Ultrasound Monitoring Using a Diagnostic 2-4 MHz Transcranial Probe *Roman Herzig, David Skoloudik, Tána Fadrná, Michal Bar, Ondrej Zapletal, Jan Blatn, Katerina Langová, Petr Kanovský*

**P08.132** Autophagy in Human Umbilical Vein Endothelial Cells Involved in Atherosclerosis: Degradation of Ox-LDL *Yanlin Zhang, Yongjun Cao, Yaping Yang, Ruixia Li, Tong Tong, Huihui Liu, Chunfeng Liu*

**P08.133** WITHDRAWN

**P08.134** Melatonin Neuroprotection during Focal Cerebral Ischemia *Pankhil Shah, Santiago Ortega-Gutierrez, Jane Madden, Joaquin Garcia, Michel Torbey*

**P08.135** Clot Aspiration Plus Intraatrial Administration of a Self-Assembling Peptide in a Rat Model of Intracerebral Hemorrhage *Yan-Hua Sang, Yu-Xiang Liang, Rutledge Ellis-Behnke, Kwok-Fai So, Raymond Cheung*

**P08.136** ATP-Sensitive Potassium (KATP) Channel Blockers Do Not Reverse the Neuroprotective Effect of a Ketogenic Diet in an Animal Model of Posthypoxic Myoclonus *Kwok-Keung Tai, Lisa Pham, Daniel Truong*

**P08.137** Cysteine-Sparing Notch3 Mutation in a Patient with Migraines and Extensive White Matter Abnormalities *Eric Edgar, Kurt Lindsay, Karen Dellinger, Helmi Lutsep*

**P08.138** The Effect of Serum ADMA Levels on Infarct Volume and Prognosis in Patients with Acute Ischemic Stroke *Fatma Saglam, Yahya Celik, Hakan Karadag, Kemal Balci, Talip Asil*

**P08.139** Validation of a One-Dimensional Model of the Arterial Cerebral Circulation Using Ultrasound *Fabienne Perren, Philippe Reymond, Daniel Rüfenacht, Nikoalios Stergiopoulos*

**P08.140** Microalbuminuria in the Acute Phase of Ischemic Stroke and TIA *Severine Debais, Isabelle Bonnaud, Ken Hagenauer, Denis Saudeau, Bertrand De Toffol, Jean Michel Halimi*

## Stroke: Bench to Bedside

**P08.141** Hyperglycemia May Be Associated with Edema Progression in Acute Intracerebral Hemorrhage *Mustapha Ezzeddine, Nauman Tariq, Gabriela Vazquez, Steve Cordina, Alexandros Georgiadis, Adnan Qureshi*

**P08.142** Apocynin Decreases Consequences of Nitric Oxide Synthase Uncoupling in Experimental Neonatal Hypoxia-Ischemia *Roderic Fabian, Thomas Kent*

**P08.143** Changes in Protein Levels of Phosphorylated Akt and GSK 3 Beta May Not Contribute to the Protection of Lithium Against Focal Ischemia in Rats *Tetsuya Takahashi, Hanfeng Zhan, Heng Zhao, Gary Steinberg*

**P08.144** Delayed Postconditioning Protects Against Focal Ischemic Brain Injury in Rats *Heng Zhao, Chuancheng Ren, Xuwen Gao, Gang Niu, Zhimin Yan, Xiaoyuan Chen*

**P08.145** Plasma Myeloperoxidase in Acute Brain Ischemia and High-Grade Carotid Stenosis *David Orion, Philipp von Landenberg, Yvonne Schwammenthal, Rakefet Tsabari, Roseline Schwartz, Oleg Merzeliak, Joab Chapman, David Tanne*

**P08.146** Pinoline: A Novel Neuroprotective Therapy in Focal Cerebral Ischemia *Santiago Ortega-Gutierrez, Pankhil Shah, Jane Madden, Joaquin Garcia, Michel Torbey*

**P08.147** ASIC2 Protein Is Required for Pressure-Induced Constriction in Mouse Middle Cerebral Artery and Prevention of Cerebral Edema *Kim Gannon, Lauren VanLandingham, Elizabeth Mckey, Rumbi Chiposi, Heather Drummond*

**P08.148** Hypoxia/Hypoglycemia Modulates Thrombin-Induced Release of Pro-Inflammatory Cytokines and Chemokines from Cultured Human Astrocytes *Jonathan Weinstein, Sarah Swarts, Richard Lee, Thomas Moeller*

**P08.149** Caspase 3-Dependent Proteolytic Cleavage of TDP-43 in a Model of Transient Middle Cerebral Artery Occlusion *Masato Kanazawa, Akiyoshi Kakita, Hironaka Igarashi, Tetsuya Takahashi, Hitoshi Takahashi, Masatoyo Nishizawa, Tsutomu Nakada, Takayoshi Shimohata*

**P08.150** Metabolic Syndrome and CO2 Cerebral Vasomotor Reactivity *Sotirios Giannopoulos, Bernadette Boden-Albala, Emmanuel Carrera, Margaret Doyle, Thania Perez, Randolph Marshall*

## Interventional Neurology III

**P08.151** Prevalence of Vertebrobasilar System Abnormality in Patient with Vertigo *Fritz Usman, Fitri Illahude-Sumantri, Hermanto Swatan, Suwito Pantoro, Edward Yuwono*

**P08.152** Clinical Outcome of Patients with Posterior Circulation Stroke Secondary to Bilateral Vertebral Artery Occlusion *M. Fareed Suri, Nauman Tariq, Qaisar Shah, Adnan Qureshi*

**P08.153** Neuroprotective Effect of Near-Infrared Light Emitting Treatment in Stroke *Santiago Ortega-Gutierrez, Pankhil Shah, Ellen Buchmann, Michele Henry, Michel Torbey, Harry Whelan*

**P08.154** Endovascular Treatment of Carotid Artery Stenosis by Stent Implantation *Detlef Claus, Peter Huppert*



**P08.155** How Common Is Vertebral Artery Origin Stenosis in Hospitalized Patients Admitted with Ischemic Stroke? CT Angiography Study *Aparna Komatineni, Junaid Kalia, Sindhu Srivatsal, Mouhammad Kabbani, Thomas Wolfe, Syed Hussain, Osama Zaidat*

#### Neural Repair/Rehabilitation II

**P08.156** Accelerated Locomotor Recovery after Augmented Stroke Rehabilitation *Megumi Hatakenaka, Ichiro Miyai, Masahito Mihara, Hajime Yagura, Noriaki Hattori, Takehiko Yanagihara*

**P08.157** Validation of Neuroprotective Efficacy of Progesterone and Curcumine on Subacute Phase Changes Induced by Partial Global Cerebral Ischemia in Mice Model *Amitava Chakrabarti, Ajay Prakash, Debashish Hota, Ashis Pathak, Uma Saikia*

**P08.158** The Effects of Noradrenergic Stimulation on the Motor System of Stroke Patients *Ling Wang, Christian Grefkes, Svenja Diekhoff, Anne Rehme, Gereon Fink*

**P08.159** Differential Effects of Proton Pump Inhibitors on Functional Recovery Following Stroke *Leonardo Lopez, Rolf Martin, Michael Reding*

**P08.160** Results of a Phase I/IIa Prospective, Multicenter Clinical Trial To Assess the Safety and Efficacy of Cethrin in Adult Subjects with Acute Spinal Cord Injury (SCI) *Mark Hurtt, Susan Flint*

**P08.161** Reduced Peroxisomal Proliferator Activator Receptor Gamma Co-Activator Alpha PGC-1alpha Levels in Hemiparetic Stroke Thigh Muscle May Be Reversed by Treadmill Exercise *Charlene Hafer-Macko, Frederick Ivey, Alice Ryan*

**P08.162** Effect of Multiple Sclerosis Treatments on Growth of Neural Progenitor Cells In Vitro *Nara Chhua, Violaine Harris, Saud Sadiq*

**P08.163** Extensive Demyelinating Lesions: Clinical and MRI, Predictive and Evolutionary Factors *Carole Roué-Jagot, Irène Coman, Damien Galanaud, Rana Assouad, Olivier Gout, Olivier Lyon-Caen, Ayman Tourbah*

**P08.164** Occurrence of Fatigue More Than 20 Years after Recovery from Guillain-Barre Syndrome *Vivian Drory*

**P08.165** Locomotor Training May Improve Cognitive Performance in Persons with Multiple Sclerosis *Barbara Giesser, Elise Herlihy, Prudence Plummer-D'Amato, Michele West, Seth Thomas, Amy Budovitch, Natalia Pokras, Melinda Guttry, Jean-Philippe Regnaud, Rhonda Voskuhl, Stefan Gold, Bruce Dobkin*

**P08.166** Management of Refractory Orthostatic Hypotension in the First Month Following Acute Spinal Cord Injury *Evgeny Sidorov, Andrea Townson, Marcel Dvorak, Brian Kwon, John Steeves, Andrei Krassioukov*

**P08.167** Pantoprazole Treatment Is Associated with More Rapid Recovery Following Ischemic and Hemorrhagic Stroke, Spinal Cord Injury, Traumatic Brain Injury and Other Types of CNS Injury *Rolf Martin*

**P08.168** ICF-CY as a Roadmap for Projecting and Programming Rehabilitation in a Neuropediatric Hospital Unit *Andrea Martinuzzi, Annamaria Salghetti, Silvana Betto*

**P08.169** Development of a Gravity Neutral Orthotic To Improve Arm Function in Severely Disabled Children with Spinal Muscular Atrophy (SMA) *Jacqueline Montes, Viktor Gamarnik, Benjamin Koo, Jonathan Marra, Sally Dunaway, Megan Montgomery, Jessica O'Hagen, Keith Yeager, Nancy Strauss, Darryl De Vivo, Elisa Konofagou, Barclay Morrison, Petra Kaufmann*

**P08.170** Visualizing Axonal Integrity Following Neonatal Spinal Cord Injury Using Diffusion Tensor Imaging MRI *Daniel Becker, Yun Qu, Quinlan Sievers, John McDonald*

**P08.171** Improving Sleep: Initial Treatment of OIF/OEF Veterans with Blast-Induced Mild TBI *Robert Ruff, Suzanne Ruff, Xiao-Feng Wang*

**P08.172** Ocular Pressure Test Shows Subtle Autonomic Cardiovascular Dysfunction in Patients with Mild Traumatic Brain Injury *Max Hilz, Felix Aurnhammer, Stefan Anders, Harald Marthol, Paulina Blaszczyńska, Tim Schroeder, Anja Rossmeißl, Steven Flanagan*

**P08.173** Bruxism/Trismus Treated with Botulinum Toxin-A in a Severe Head Injury Patient *Harry Koslowski*

**P08.174** Impairment in Communicative Effectiveness in Parkinson's Disease *Emily Plowman-Prine, Stephenie Pollock, Michael Okun, Christine Sapienza, John Rosenbek*

**P08.175** Animal Model of Corticobulbar and Corticospinal Dysfunction in Parkinson's Disease *Emily Plowman-Prine, Naghme Thomas, Stephen Fowler, Christine Sapienza, Jeffrey Kleim*

## S41 Multiple Sclerosis: Clinical Outcomes

Room 6B

- 1:30 p.m. S41.001**  
A Clinical-MRI Composite Score Predictive of Longer Term Outcome in RMS *Gary Cutter, Maria Pia Sormani, Jack Simon, Richard Rudick*
- 1:45 p.m. S41.002**  
Falls in Multiple Sclerosis: Prevalence and Risk Factors *Patricia Matsuda, Alyssa Bamer, Anne Shumway-Cook, Shana Johnson, George Kraft, Dagmar Amtmann*
- 2:00 p.m. S41.003**  
Quantitative Sensorimotor Measures in a Heterogeneous Multiple Sclerosis Cohort *Scott Newsome, Kathleen Zackowski, Peter Calabresi*
- 2:15 p.m. S41.004**  
Clinically Meaningful Change in Cognitive Function as Confirmed by Work Disability *Sarah Morrow, Allison Drake, Bianca Weinstock-Guttman, Fredrick Munschauer, Ralph Benedict*
- 2:30 p.m. S41.005**  
Cognitive Impairment Predicts the Clinical Conversion to Multiple Sclerosis in Patients with Clinically Isolated Syndromes *Valentina Zipoli, Benedetta Goretti, Emilio Portaccio, Maria Pia Amato*
- 2:45 p.m. S41.006**  
Urometric Profile in a MS Population: Relation between Subjective and Objective Measures of Bladder Dysfunction *Shalom Haggiag, Giovanni Bolla, Claudio Gasperini, Simonetta Galgani*
- 3:00 p.m. S41.007**  
Incidental Multiple Sclerosis like Lesions in Asymptomatic Patients; Analysis of 864 Consecutive MRI at a Tertiary Care Hospital in Karachi, Pakistan *Farhan Rizvi, Mohammad Wasay, Muhammad Azeemuddin, Adnan Yousuf, Sten Fredrikson*
- 3:15 p.m. S41.008**  
Follow-Up of 70 Patients with Subclinical Multiple Sclerosis: What Can We Learn from MRI and CSF on Clinical Conversion Profile? *Christine Lebrun Frenay, Caroline Bensa, Sandrine Wiertlewski, Marc Debouverie, David Brassat, Jean Pelletier, Ayman Tourbah, Bruno Brochet, Pierre Labauge, Jerome De Seze, Frederic Berthier, Pierre Clavelou*

## S42 Aging and Dementia: Biology or Predictor

Room 6C

- 1:30 p.m. S42.001**  
A $\beta$  Conformer Reactivity of IgG Antibodies Contained in Normal Plasma *Brian O'Nuallain, Luis Acero, Helen McWilliams, Koeppen, Alan Solomon, Hans Peter Schwarz, Alfred Weber, Hartmut Ehrlich, Angela Williams*
- 1:45 p.m. S42.002**  
Reduced Serum Progranulin in GRN Mutation Carriers *Ging-Yuek Hsiung, Alice Fok, Howard Feldman, Rosa Rademakers, Ian Mackenzie*
- 2:00 p.m. S42.003**  
Stability of MCI Diagnoses over Time in a Population-Based Cohort: The Mayo Clinic Study of Aging *Ronald Petersen, David Knopman, Vernon Pankratz, Rosebud Roberts, Bradley Boeve, Walter Rocca*
- 2:15 p.m. S42.004**  
The Cortical Signature of Alzheimer's Disease (AD) Is Detectable in Asymptomatic Older Adults and Is Useful for Prediction of Dementia *Bradford Dickerson, Akram Bakour, Ronald Killiany, Marilyn Albert, Reisa Sperling, Bradley Hyman, Deborah Blacker*
- 2:30 p.m. S42.005**  
Whole Brain MTR25% a Valuable Outcome Measure in Prion Disease Therapeutic Trials *Durrenajak Siddique, Steve Wroe, Harpreet Hyare, Thomas Webb, Rebecca Macfarlane, John Collinge, Sarah Walker, Tarek Yousry, John Thornton*
- 2:45 p.m. S42.006**  
An Oculomotor Biomarker of Tau Pathology in FTL D *Adam Boxer, Siobhan Garbutt, William Seeley, Joanna Hellmuth, Aria Jafari, Stephen DeArmond, Stephen Lisberger, Bruce Miller*
- 3:00 p.m. S42.007**  
TDP-43 Immunohistochemistry in Neurofilament Inclusion Body Disease (NIBD) *Keith Josephs, Joseph Parisi, Gary Pearl, Rodney McComb, Dennis Dickson*
- 3:15 p.m. S42.008**  
Coated-Platelet Levels and Progression to Alzheimer Disease in Patients with Amnesic Mild Cognitive Impairment *Calin Prodan, Elliott Ross, Julie Stoner, Linda Cowan, Andrea Vincent, George Dale*

## S43 Evaluation and Treatment of Parkinson's Disease

Room 6A

- 1:30 p.m. S43.001**  
The ADAGIO Study: Secondary and Additional Endpoints *C Warren Olanow, Olivier Rascol*
- 1:45 p.m. S43.002**  
Training Program for the Unified Dyskinesia Rating Scale *Christopher Goetz, Glenn Stebbins, John Nutt, Teresa Chmura*
- 2:00 p.m. S43.003**  
Double-Blind Evaluation of Pramipexole Extended-Release (ER) in Early Parkinson's Disease *Robert Hauser, Laurence Salin, Juergen Koester*
- 2:15 p.m. S43.004**  
Pramipexole Ameliorates Depression in Parkinson's Disease: A Randomized Double-Blind Versus Placebo Trial *Paolo Barone, Werner Poewe, Dan Massey, Catherine Debove Debievre*
- 2:30 p.m. S43.005**  
The PREPARED Study: An Assessment of Symptom Control in Patients with Advanced Parkinson's Disease Receiving Treatment with Adjunctive Ropinirole Prolonged Release or Ropinirole Immediate Release *Fabrizio Stocchi, Luigi Giorgi, Brian Hunter, Anthony Schapira*
- 2:45 p.m. S43.006**  
Transcranial Direct Current Stimulation for the Treatment of Parkinson's Disease: A Randomized, Double-Blind, Sham-Controlled Study *David Benninger, Mikhail Lomarev, Grisel Lopez, Eric Wassermann, Elaine Considine, Mark Hallett*
- 3:00 p.m. S43.007**  
Temporal Characteristics of Dyskinesia Emerging during Long-Term Levodopa (LD) Therapy in Parkinson's Disease (PD) *John Nutt, Kathryn Chung*
- 3:15 p.m. S43.008**  
Longitudinal Assessment of a Clinically Meaningful Difference in the UPDRS *Lisa Shulman, Ann Gruber-Baldini, Karen Anderson, Paul Fishman, Stephen Reich, William Weiner*

## S44 Stroke Imaging

Room 608/609

- 1:30 p.m. S44.001**  
Robust Leptomeningeal Collaterals on Computed Tomography Angiography Correlate with Improved Outcome in Patients with Proximal Middle Cerebral Artery Occlusion *Fabrizio Lima, Karen Furie, Gisele Silva, Michael Lev, Erica Camargo, Hakan Ay, Aneesh Singhal, Gordon Harris, David Greer, Elkan Halpern, Walter Koroshetz, Wade Smith, Raul Nogueira*
- 1:45 p.m. S44.002**  
Determinants of White Matter Hyperintensity Volume in Patients with Acute Ischemic Stroke *Natalia Rost, Shruti Sonni, Rosana Rahman, Allison Kanakis, Christi Butler, Efi Massasa, Lisa Cloonan, Aaron Gilson, Pilar Delgado, Yuchiao Chang, Angela Besanger, Gisele Silva, Jonathan Rosand, Karen Furie*
- 2:00 p.m. S44.003**  
Neuroinflammation Extends the Brain Tissue at Risk to Areas of Preserved Perfusion: A Combined <sup>11</sup>C]PK11195- and <sup>18</sup>F]FDG-PET Study *Michael Schroeter, Maria Dennin, Maureen Walberer, Heiko Backes, Bernd Neumaier, Gereon Fink, Rudolf Graf*
- 2:15 p.m. S44.004**  
Cerebral White Matter Lesions Are Associated with the Risk of Stroke but Not with Other Vascular Events. The 3C-Dijon Study *Carole Dufouil, Jean-Francois Buycck, Bernard Mazoyer, Pierre Ducimetiere, Annick Alperovitch, Marie-Germaine Bousser, Tobias Kurth, Christophe Tzourio*
- 2:30 p.m. S44.005**  
The Extent of White Matter Hyperintensities on Early MRI Is Independently Associated with Long-Term Outcomes in Patients with Anterior Circulation Infarcts *Mahmut Guroi, Patricia Davis, Enrique Leira, Christopher Streib, Harold Adams*
- 2:45 p.m. S44.006**  
Longitudinal Changes in Neuropsychological Function and Brain Structure among Cognitively Intact Individuals with Vascular Risk Factors *Lara Hefflin, Ling Zheng, Wendy Mack, Jonathan Gooblar, Dan Mungas, Bruce Reed, Michael Weiner, Helena Chui, Joel Kramer*
- 3:00 p.m. S44.007**  
Collateral Vessels on CTA Predict Outcome in Acute Ischemic Stroke *Matthew Maas, Michael Lev, Hakan Ay, Aneesh Singhal, David Greer, Wade Smith, Gordon Harris, Elkan Halpern, Walter Koroshetz, Karen Furie*
- 3:15 p.m. S44.008**  
Effect of Carotid Stenosis on the Prognostic Value of Admission Blood Pressure in Patients with Acute Ischemic Stroke *Maurizio Paciaroni, Giancarlo Agnelli, Valeria Caso, Francesco Corea, Walter Ageno, Andrea Alberti, Alessia Lanari, Sara Micheli, Luca Bertolani, Michele Venti, Francesco Palmerini, Sergio Biagini, Giancarlo Comi, Antonia Billeci, Paolo Previdi, Giorgio Silvestrelli*

## S45 Anterior Horn: Clinical and Translational Research

Room 606/607

- 1:30 p.m. S45.001**  
Plasma Levels of Phosphorylated Axonal Form of Neurofilament Heavy Subunit (pNF-H) Are Increased in the G93A SOD1 Mouse and in ALS Patients; Evaluation of Plasma pNF-H as a Potential ALS Biomarker *Kevin Boylan, Cui Yang, Julia Crook, Karen Overstreet, Michael Heckman, David Borchelt, Gerry Shaw*
- 1:45 p.m. S45.002**  
Computational SNP Analysis Suggests That Polymorphisms in TDP-43 Affect Potassium Channel Function in ALS *Jean-Luc Mougeot, Benjamin Brooks*
- 2:00 p.m. S45.003**  
In Vivo Measurement of the Elastic Properties of the Skin as a Biomarker for Amyotrophic Lateral Sclerosis *Harvey Arbesman, Julian Mackay-Wiggan, Xinhua Liu, Howard Andrews, Marian Arbesman, Jinsy Andrews, Rebecca Marcus, Ariel Hoch, Carol Coppola, Gabriela Harrington-Moroney, Ming Feng, Fidel Martinez, David Bickers, Hiroshi Mitsumoto*
- 2:15 p.m. S45.004**  
Tobacco Smoke and the Risk of Amyotrophic Lateral Sclerosis in a Large European Cohort Study *Valentina Gallo, Paolo Vineis, Lefkos Middleton*
- 2:30 p.m. S45.005**  
Single Chain Variable Fragment Antibodies (scFvs) Against Superoxide Dismutase Type-1 (SOD1): Reagents for Investigations of the Pathogenesis of Amyotrophic Lateral Sclerosis (ALS) and for Potential Use as a Treatment *Raymond Roos, Ghanashyam Ghadge, John Pavlovic, Andrew Kromer, Brian Kay*
- 2:45 p.m. S45.006**  
Abnormal Exon Splicing in Sporadic Amyotrophic Lateral Sclerosis (SALS) Motor Neurons *Stuart Rabin, Hugo Kim, Young Kim, Brad Stone, John Ravits*
- 3:00 p.m. S45.007**  
ALS-Dementia in a Large Population of Patients with ALS and FTD *Leo McCluskey, Lauren Elman, David Libon, William Hu, Sharon Xie, Alea Khan, Brianna Morgan, Lauren Richmond, Rachel Gross, Murray Grossman*
- 3:15 p.m. S45.008**  
Elevated Serum Ferritin Level Correlate with Faster Disease Course in ALS *Muddasir Qureshi, Merit Cudkovicz, David Schoenfeld, Yuvika Paliwal, Kerrie Nelson, Jack Rogers, Robert Brown, Jr.*

**S46 Headache: Basic and Clinical Science**

Room 611/612

- 1:30 p.m. S46.001**  
Phosphatidylcholine-Specific Phospholipase C Activity in Cerebrospinal Fluid Correlates with the Number of Comorbidities of Migraine *Alfred Fonteh, Rainbow Chung, Tara Sharma, Robert Cowan, Michael Harrington*
- 1:45 p.m. S46.002**  
Association of Benign Recurrent Vertigo and Migraine – 208 Cases *Yoon-Hee Cha, Hane Lee, Lauren Siningger-Santell, Robert Baloh*
- 2:00 p.m. S46.003**  
A Consecutive Series of Ten Cases of New Daily Persistent Headache: Clinical Presentation and Morphology of the Venous System *Anne Donnet, Olivier Levrier*
- 2:15 p.m. S46.004**  
Prevalence of Migraine in Abdominal Obesity throughout the Adult Life-Cycle: NHANES 1999-2004 *B. Peterlin, Andrea Rosso, Alan Rapoport, Ann Scher*
- 2:30 p.m. S46.005**  
C-Reactive Protein and Body Mass Index: Correlations with Migraine Severity and Treatment Response *John Rothrock, Diane Andress-Rothrock, Silvia Weibelt*
- 2:45 p.m. S46.006**  
Responsiveness of Exploding, Imploding, and Ocular-Type Migraine Headaches to Botulinum Toxin Type-B as a Prophylactic Agent *Maria Alvarez, Patrick Grogan*
- 3:00 p.m. S46.007**  
Pharmacokinetics and Overall Exposure of Sumatriptan after Administration of a Fixed Dose Single Tablet of Sumatriptan and Naproxen Sodium Followed by Sumatriptan SC Injection Two Hours Later *Alienor Berges, Christine Walls, Shelly Lener, Susan McDonald*
- 3:15 p.m. S46.008**  
The Serum Levels of Proangiogenic Factors in Migraineurs during Interictal Period *Slawomir Michalak, Danuta Wegryzn, Krystyna Osztynowicz, Wojciech Kozubski*

**S47 Multiple Sclerosis: Immunology III**

Room 605/610

- 1:30 p.m. S47.001**  
Targeting CNS-Autoimmunity and -Repair Using the Secretory Leukocyte Protease Inhibitor (SLPI) *Andre Mueller, Jacqueline Dinzey, Xiomara Pedre, Andreas Steinbrecher, Saud Sadiq*
- 1:45 p.m. S47.002**  
Inhibition of GAPDH Activity and Induction of Neuronal Apoptosis and Axonal Degeneration by Antibodies Present in the Cerebrospinal Fluid and Brain Tissue of Patients with Multiple Sclerosis *Yufen Qin, Johanna Kolln, Yiping Zhang, Stanley van den Noort, Gaby Thai, Michael Demetriou, Neal Hermanowicz*
- 2:00 p.m. S47.003**  
The Immunomodulator Fingolimod (FTY720) Increases Myelin Production Following Demyelination of Organotypic Cerebellar Slices *Veronique Miron, Peter Darlington, Samuel Ludwin, Andrew Jarjour, Timothy Kennedy, Jack Antel*
- 2:15 p.m. S47.004**  
Fish Diet Prevents Demyelination, Clinical Symptoms and MRI Activity in the Cuprizone Model *Qivind Torkildsen, Linn Anne Brunborg, Frits Thorsen, Anne Marita Milde, Sverre Jarl Mork, Martin Stangel, Kjell-Morten Myhr, Lars Bø*
- 2:30 p.m. S47.005**  
Capacity of Human Fetal Oligodendrocyte Progenitors To Differentiate and Ensheath Axons in Response to Growth Factors *QiaoLing Cui, Gabiella Fragoso, Veronique Miron, Guillermina Almazan, Jack Antel*
- 2:45 p.m. S47.006**  
Whole Genome Analysis of the Effect of Interferon-beta Treatment on Different Peripheral Blood Cell Populations in Multiple Sclerosis Patients *Xiao-song Zhao, Yuhong Yang, Michael Racke, Laurie Davis*
- 3:00 p.m. S47.007**  
Role of 15-oxysterols in Neuroinflammation *Mauricio Farez, Francisco Quintana, Antonio Iglesias, Claudia Lucchinetti, Guillermo Izquierdo, Miguel Lucas, Howard Weiner*
- 3:15 p.m. S47.008**  
The Effect of Laquinimod on Lymphocyte VLA-4 Properties under Shear Flow Conditions *Liat Hayardeny, Sara Feigelson, Valentin Grabovskiy, Joel Kaye, Rotem Keshet, Guy Cinamon, Ronen Alon*

**S48 Neuroepidemiology/ Health Services Research**

Room 602/603

- 1:30 p.m. Presentation of the Bruce S. Schoenberg International Award in Neuroepidemiology**  
*Endowed by GlaxoSmithKline, Inc. Recipient: Edgard-Brice Ngougou, PhD Libreville, Gabon*
- S48.001** Relationship between Cerebral Malaria and Sequelar Epilepsy in Tropical Regions *Edgard-Brice Ngougou, PhD*
- 2:00 p.m. S48.003**  
Age Disparities in Stroke Care Delivery and Quality of Care *Gustavo Saposnik, Sandra Black, Antoine Hakim, Jiming Fang, Jack Tu, Moira Kapral*
- 2:15 p.m. S48.004**  
The Duration and Amount of Cigarette Smoking in Relation to Parkinson's Disease *Honglei Chen, Xuemei Huang, Yikyung Park, David Umbach, Aaron Blair, Albert Hollenbeck, Arthur Schatzkin*
- 2:30 p.m. S48.005**  
Predictors of Functional Improvement after the First Three Months Following Ischemic Stroke *Yousef Mohammad, Steve Cordina, Gabriela Vazquez, Kamakshi Lakshminarayan, M. Fareed Suri, Adnan Qureshi*
- 2:45 p.m. S48.006**  
Usage of Pharmacological Treatments for Alzheimer's Disease: Associations of Race and Demographic Variables *Alan Lerner, Santiago Hernandez, Kathleen Smyth, McKee McClendon*
- 3:00 p.m. S48.007**  
The National Institute of Neurological Disorders and Stroke Clinical Research Collaboration: Connecting Research to Communities by Expanding Research Access *Anne Lindblad, Carolyn Burke, Marian Emr, Joanne Odenkirchen, Brandy Fureman*
- 3:15 p.m. S48.008**  
Measuring Health-Related Quality of Life (HRQL) in Neurology Clinical Research: Neuro-QOL Item Banks and Disease Targeted Scales *David Cella, Claudia Scala-Moy, Deborah Miller, Amy Peterman, Richard Gershon, David Victorson, Cindy Nowinski, Seung Choi, Jin-Shei Lai, Rita Bode, Anthony Reder*

**S49 Stroke Prevention and Outcomes**

Room 613/614

- 1:30 p.m. S49.001**  
Severity of Leukoaraiosis Predicts Clinical Outcome after Ischemic Stroke *Ethem Arsava, Rosanna Rahman, Jonathan Rosand, Jie Lu, Eric Smith, Natalia Rost, Aneesh Singhal, Michael Lev, Karen Furie, Walter Koroshetz, A. Gregory Sorensen, Hakan Ay*
- 1:45 p.m. S49.002**  
Retinal Vascular Caliber and Extracranial Carotid Disease in Patients with Acute Ischemic Stroke: The Multicentre Retinal Stroke (MCRS) Study *Deidre De Silva, Fung Peng Woon, Erica Liu, Richard Lindley, Tien-Yin Wong, Meng-Cheong Wong*
- 2:00 p.m. S49.003**  
Comparing Indicators of Quality of Stroke Care: The Initial Step for a Worldwide Effort *Luciano Sposato, Moira Kapral, Jiming Fang, Osvaldo Fustinoni, Gustavo Saposnik*
- 2:15 p.m. S49.004**  
Albuminuria and the Risk of Incident Stroke and Stroke Subtypes in Older Adults Participating in the Cardiovascular Health Study (CHS) *Maria Aguilar, Ellen O'Meara, Stephen Seliger, W. T. Longstreth, Robert Hart, Pablo Pergola, Michael Shipak, Ronit Katz, Mark Sarnak, Dena Rifkin*
- 2:30 p.m. S49.005**  
Safety Outcomes from the PROTECT Carotid Artery Stenting Multi-Center Study *Seemant Chaturvedi, William Gray, Jon Matsumura*
- 2:45 p.m. S49.006**  
Stroke Risk Perception in an Urban, Multiethnic Stroke and TIA Cohort: The SWIFT Study *Bernadette Boden-Albala, Megan Moran, Margaret Doyle, Thania Perez, Laura Evensen, Myunghee Paik*
- 3:00 p.m. S49.007**  
Functional MRI in the Assessment of Cerebral Vasomotor Reactivity after Extracranial-Intracranial Bypass for Internal Carotid Artery Occlusion *Petr Hluštík, Roman Herzig, Miroslav Vaverka, Josef Machac, Stanislav Burval, Ivanka Vlachová, Michal Král, Andrea Bártková, Jan Mareš, Petr Kanovský*
- 3:15 p.m. S49.008**  
Single Nucleotide Polymorphisms That Influence Lipid Metabolism and Carotid Plaque *Danielle Marie Yanuck, Ashley Beecham, Hannah Gardener, Susan Slifer, Liyong Wang, Susan Blanton, Ralph Sacco, Suh-Hang Hank Joo, Tatjana Rundek*

**S50 Child Neurology: Diagnosis and Treatment**

Room 604

- 1:30 p.m. S50.001**  
The Establishment of an Expanded Simultaneous Swift Diagnosing System for Mitochondrial DNA Pathological Mutations *Yutaka Nishigaki, Hitomi Ueno, Hiroko Hosoya, Michio Hirano, Masashi Tanaka*
- 1:45 p.m. S50.002**  
Reversible Cerebral Insult in Protein Energy Malnutrition *Mohamed El-Gengaihy, Magdy El-Ghamrawy, Yosria El-Taweel, Rasha Fahmy, Ahmed El-Gengaihy*
- 2:00 p.m. S50.003**  
Fever and Regression in Autistic Spectrum Disorder Patients with Mitochondrial Disease *John Shoffner*
- 2:15 p.m. S50.004**  
Growth Charts for Rett Syndrome: Birth to 18 Years of Age *Daniel Tarquinio, Kathleen Motil, Wei Hou, Daniel Glaze, Steven Skinner, Jeffrey Neul, Fran Annese, Judy Barrish, Suzanne Geerts, Jane Lane, Alan Percy*
- 2:30 p.m. S50.005**  
Efficacy and Safety of Aripiprazole for the Treatment of Irritability Associated with Autistic Disorder in Children and Adolescents (6–17 Years): Results from Two Eight-Week, Randomized, Double-Blind, Placebo-Controlled Trials *Donald Lewis, Randall Owen, Deidra Couch, Ronald Marcus, George Manos, William Carson, Robert McQuade, Dan Oren*
- 2:45 p.m. S50.006**  
Breakthrough Disease in Pediatric MS Patients: A Pediatric Network Experience *E. Ann Yeh, Jayne Ness, Dorothee Chabas, Anita Belman, Bianca Weinstock-Guttman, Emmanuelle Waubant, Lauren Krupp, NMSS Network of Pediatric MS Centers of Excellence*
- 3:00 p.m. S50.007**  
Neuropsychological Benefits of Computerized Cognitive Rehabilitation Training in Ugandan Children Surviving Cerebral Malaria and Children with HIV *Michael Boivin, Paul Bangirana, Rachelle Busman, Sujal Parikh, Robert Opika-Opoka, Noeline Nakasuja, Margaret Nakakeeto, Chandry John, Bruno Giordani*
- 3:15 p.m. S50.008**  
Atypical Neural Circuits for Language in Autistic Patients Using fMRI and DTI *Amy Newhouse, Grace Lai, William Millar, Harry Schneider, Johanna Schwarzenberger, Ted Yanagihara, Joy Hirsch*



# INTEGRATED NEUROSCIENCE SESSION: THE CIRCADIAN AND HOMEOSTATIC CONTROL OF SLEEP

Thursday, April 30 / 2:00 p.m.–6:00 p.m.

Coordinators: Michael Silber, MB, CHB, FAAN and Phyllis C. Zee, MD, PhD

## Invited Speaker Session\* / 2:00 p.m.–3:30 p.m. / Room 3AB

- 2:00 p.m.–2:05 p.m.** Introduction
- 2:05 p.m.–2:30 p.m.** Circadian Rhythms: Central Nervous System and Beyond *Phyllis C. Zee, MD, PhD*
- 2:30 p.m.–2:55 p.m.** Novel Insights from Genetics and Molecular Characterization of the Human Clock *Louis Ptacek, MD, FAAN*
- 2:55 p.m.–3:20 p.m.** Homeostatic Regulation of Sleep *Michael Silber, MB, CHB, FAAN*
- 3:20 p.m.–3:30 p.m.** Question and Answer Period

## Poster Session / 3:30 p.m.–4:30 p.m. / Room 3AB

- IN5-1.001** Chicken or Egg: Analysis of the Association between Headache and Sleep Disorders *Timothy Quast, Kimbra Kenney, Rachel Massey, William Campbell*
- IN5-1.002** Armodafinil Sustains Wakefulness throughout the Day in Patients with Excessive Sleepiness Associated with Narcolepsy *Russell Rosenberg, John Harsh, James Walsh, Ronghua Yang, Gregory Rippon, Thomas Roth*
- IN5-1.003** The Underlying Sleep Disorder of Fibromyalgia and Chronic Fatigue Syndrome Have Narcoleptiform Characteristics: Results of Sleep Studies and HLA Markers *A. Robert Spitzer, Melissa Broadman*
- IN5-1.004** CSF Hypocretine-1 Concentrations Correlate with the Level of Fatigue in Multiple Sclerosis Patients *Konrad Rejdak, Ewa Papuc, Witold Cholewiński, Zbigniew Stelmasiak*
- IN5-1.005** Decreased Sleep Efficiency and Increased Daytime Somnolence in Parkinson's Disease Subjects with Hallucinations *Jennifer Goldman, Glenn Stebbins, Mary Kwasny, Cynthia Comella*
- IN5-1.006** Circadian Rhythms in the Vegetative State *Tristán Bekinschtein, Diego Golombek, Sergio Simonetta, Martin Coleman, Facundo Manes*
- IN5-1.007** Preliminary Observations of Weather-Related Ambient Atmospheric Pressure Changes on Sleep-Disordered Breathing *Michael Doherty, Clover Youn, Alan Haltiner, Nathaniel Watson*
- IN5-1.008** A Case Study of Fatal Insomnia (FI) with Clinical, Laboratory, and Genetic Findings *Jin Jun Luo, Ming He, Rima Alkasem, Allan Truant, Qingzhong Kong, Wen-Quan Zou, Pierluigi Gambetti*
- IN5-1.009** Resolution of Amenorrhea and Postmenopausal State after CPAP Therapy for Obstructive Sleep Apnea: Case Report *Nicolas Saikali, Bijal Mehta, Daniel Rifkin*
- IN5-1.010** Restless Arms Syndrome *Walter Arruda, Renato Munhoz, Helio Teive*

## Platform Session / 4:30 p.m.–6:00 p.m. / Room 3AB

- 4:30 p.m.** **IN5-2.001** The Sleeping Brain's Influence on Verbal Memory: Boosting Resistance to Interference *Jeffrey Ellenbogen, Justin Hulbert, Robert Stickgold*
- 4:45 p.m.** **IN5-2.002** Melanopsin-Containing Retinal Ganglion Cells and Circadian Phototransduction Are Spared by Neurodegeneration in Mitochondrial Optic Neuropathies *Chiara La Morgia, Fred Ross-Cisneros, Alfredo Sadun, Kevin Tozer, Jens Hannibal, Elisa Sancisi, Alessandra Munarini, Vilma Mantovani, Piero Barboni, Gaetano Cantalupo, Solange Salomao, Milton Moraes, Milton Moraes-Filho, Adriana Berezovsky, Rubens Belfort, Jr., Pasquale Montagna, Valerio Carelli*
- 5:00 p.m.** **IN5-2.003** Circadian Control of Neural Excitability in an Animal Model of Temporal Lobe Epilepsy *Sachin Talathi, Dong-Uk Hwang, William Ditto, Paul Carney*
- 5:15 p.m.** **IN5-2.004** Early Pathology in Sleep Studies of Patients with Familial Creutzfeldt-Jakob Disease *Gili Givaty, Dalia Shechter-Amir, Oren Cohen, Blatt Ilan, Isak Prohovnik, Joab Chapman*
- 5:30 p.m.** **IN5-2.005** REM Behavior Disorder Associated with SOD1 Familial ALS *Sandra Donkervoort, Lisa Wolfe, Nailah Siddique, Senda Ajroud-Driss, Jennifer Armstrong, Brandon Lu, Robert Sufit, Teepu Siddique*
- 5:45 p.m.** **IN5-2.006** Clinical Presentation and Acute Treatment of Electrical Status Epilepticus in Sleep and Sleep Potentiated Spikes *Yaman Eksioglu, Emir Tas, Masanori Takeoka, Dean Sarco, Alexander Rotenberg, Sanjeev Kothare, Frank Duffy, Frances Jensen, Blaise Bourgeois, Tobias Loddenkemper*

\*Current as of February 23, 2009

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## S51 Multiple Sclerosis: Imaging II

Room 6B

- 3:45 p.m. S51.001**  
Axial and Radial Diffusivity as MR Biomarkers of Axonal and Myelin Injury in Ex-Vivo Multiple Sclerosis Cervical Spinal Cords *Eric Klawiter, Kathryn Trinkaus, Hsiao-Fang Liang, Shu-Wei Sun, Matthew Budde, Robert Naismith, Robert Schmidt, Sheng-Kwei Song, Anne Cross, Tammie Benzinger*
- 4:00 p.m. S51.002**  
Quantitative Assessment of Brain Iron by R2\* Relaxometry in Patients with Clinically Isolated Syndrome or Relapsing-Remitting Multiple Sclerosis *Michael Khalil, Christian Enzinger, Christian Langkammer, Maria Tscherner, Mirja Wallner-Blazek, Margit Jehna, Stefan Ropele, Siegrid Fuchs, Franz Fazekas*
- 4:15 p.m. S51.003**  
Children with Acute Demyelinating Syndromes Exhibit Age-Dependent Slowing of Brain Growth Compared to Healthy Children *Rezwan Ghassemi, Sridar Narayanan, Vladimir Fonov, Zografos Caramanos, Paul Giacomini, Simon Francis, Donald Collins, Amit Bar-Or, Dessa Sadovnick, Brenda Banwell, Douglas Arnold*
- 4:30 p.m. S51.004**  
T2 and T1 Lesion Volume as Predictors of Neuropsychological Impairment in Children and Adolescents with MS *Christine Till, Rezwan Ghassemi, Emily Ursell, Douglas Arnold, Sridar Narayanan, John Sled, Brenda Banwell*
- 4:45 p.m. S51.005**  
Cognitive Compensation Failure in RRMS Patients *Melissa Bonnet, Michele Allard, Bixente Dilharreguy, Mathilde Deloire, Vincent Dousset, Klaus Petry, Bruno Brochet*

## S52 Aging and Dementia: Imaging

Room 6C

- 3:45 p.m. S52.001**  
Age-Associated Leukoaraiosis and Cortical Cholinergic Deafferentation *Nicolaas Bohnen, Martijn Müller, Hiroto Kuwabara, Gregory Constantine, Stephanie Studenski*
- 4:00 p.m. S52.002**  
Longitudinal Resting-State fMRI Reveals Progressive Disrupted Functional Connectivity in Alzheimer's Disease *Jessica Damoiseaux, Katherine Keller, Vinod Menon, Michael Greicius*
- 4:15 p.m. S52.003**  
The Volume of the Anterior Corpus Callosum and T1 White Matter Hypointensities Independently Contribute to Age-Related Declines in Verbal Processing Speed *Reva Wilhelm, Sandra Hale, Victor Laluz, Kari Haws, Stephen Wilson, Stephen Hauser, Bruce Miller, Joel Kramer, Caroline Racine*
- 4:30 p.m. S52.004**  
Caudate Nucleus Volumes in LADIS: A Pilot Study of Longitudinal Volumetric Change in a Cohort with Leukoaraiosis *Jeffrey Looi, Gabriela Spulber, Per Julin, Leif Svensson, Olof Lindberg, Lisa Botes, Lars-Olof Wahlund*
- 4:45 p.m. S52.005**  
Executive Dysfunction in Frontotemporal Dementia Is Related to Abnormalities in Frontal White Matter Tracts *Maria Carmela Tartaglia, Yu Zhang, Caroline Racine, John Neuhaus, Linda Chao, Joel Kramer, Howard Rosen, Bruce Miller, Michael Weiner*

## S53 Pathogenesis of Parkinson's Disease

Room 6A

- 3:45 p.m. S53.001**  
Neuropathologic Findings in Parkinson's Disease with Mild Cognitive Impairment *Charles Adler, Donald Connor, John Caviness, Marwan Sabbagh, Holly Shill, Linda Vedders, Lucia Sue, Thomas Beach*
- 4:00 p.m. S53.002**  
Validation of Diagnostic Serum Biomarkers for Parkinson's Disease *Katerina Markopoulou, Jennifer Bryson, Bruce Chase, Silvia Quintero, Efthimios Dardiotis, Persa Kountra, Alexandros Papadimitriou, Georgios Hatjigeorgiou, Essam Sheta*
- 4:15 p.m. S53.003**  
Biological Effects of the PINK1 P209A Mutation: Implications in Parkinson's Disease Pathogenesis *Ming-Jen Lee, Ruey-Meei Wu, Tzeng-Ruei Lee, Jinyuan Wang, Wen-Mei Fu*
- 4:30 p.m. S53.004**  
Alpha-Synuclein Triggers Microglial Activation and Adaptive Immunity in a Mouse Model of Parkinson Disease *David Standaert, Shaji Theodore, Shuwen Cao, Pamela McLean*
- 4:45 p.m. S53.005**  
Rapamycin Protects Against Rotenone-Induced Apoptosis through Autophagy Induction in SH-SY5Y Cells *Tianhong Pan, Wenjie Xie, Pawan Rawal, Joseph Jankovic, Weidong Le*

## S54 Hemorrhagic Stroke

Room 608/609

- 3:45 p.m. S54.001**  
Effect of Systolic Blood Pressure Treatment on Perihematomal Edema. Results from the Antihypertensive Treatment of Acute Cerebral Hemorrhage (ATACH) Study *Adnan Qureshi, ATACH Investigators*
- 4:00 p.m. S54.002**  
Antihypertensive Treatment of Acute Cerebral Hemorrhage (ATACH): Final Results *Adnan Qureshi, ATACH Investigators*
- 4:15 p.m. S54.003**  
Pessimism in Intraparenchymal Hemorrhage Prognosis Models *Claire Creutzfeldt, Kyra Becker, Sandeep Khot, Thomas McPharlin, Thanh Ton, W. Longstreth, David Tirschwell*
- 4:30 p.m. S54.004**  
Risk of Hemorrhagic Stroke among Obstructive Sleep Apnea Sufferers *Syed Ahmed, Naser Abdelhadi, Bazi Ahmed, Ahmed Omar, Mohammad Yousuf, Yousef Mohammad*
- 4:45 p.m. S54.005**  
Timing of Computed Tomographic Imaging and Its Impact on Prediction of Symptomatic Vasospasm after Aneurysmal Subarachnoid Hemorrhage *Stefan Dupont, Eelco Wijdicks, Giuseppe Lanzino, Robert Brown, Alejandro Rabinstein*

## S55 Myasthenic and Mitochondrial Disorders

Room 606/607

- 3:45 p.m. S55.001**  
Long-Term Experience with Mycophenolate Mofetil (MMF) in Myasthenia Gravis (MG): Retrospective Analysis of 103 Patients *Michael Hehir, Ted Burns, Joshua Alpers, Mark Conaway, Michael Sawa, Donald Sanders*
- 4:00 p.m. S55.002**  
Ocular Myasthenia Gravis: Treatment Successes and Failures in Patients with Long-Term Follow-up *Mark Kupersmith*
- 4:15 p.m. S55.003**  
Clinical Features of Slow Channel Congenital Myasthenic Syndrome (SCCMS) *Daniel Lashley, Georgina Burke, David Beeson, Jacqueline Palace*
- 4:30 p.m. S55.004**  
Transcriptional Factor T-bet Determines the Susceptibility to Experimental Myasthenia Gravis *Ruolan Liu, Denise Campagnolo, Xue-Feng Bai, Carlos Dayao, Timothy Vollmer, Fu-Dong Shi*
- 4:45 p.m. S55.005**  
Levator Palpebrae Biopsy Has Higher Diagnostic Yield Than Other Muscle Biopsy Sites for Chronic Progressive External Ophthalmoplegia *Gerald Pfeffer, Vincent Wong, Michelle Mezei*



**S56 Epilepsy: Genetics and Therapy**

**Room 611/612**

**3:45 p.m. S56.001**  
 Postsurgical Remission of Comorbid Presurgical Psychiatric Disorders Following an Anterotemporal Lobectomy *Andres Kanner, Richard Byrne*

**4:00 p.m. S56.002**  
 Hemispherectomies in Adult Epilepsy Surgery Patients *Ngoc Minh Le, Tobias Loddenkemper, Andreas Alexopoulos, Lara Jehi, William Bingaman*

**4:15 p.m. S56.003**  
 Association of Polymorphisms in ATP-Binding Cassette Family Gene (ABCB1) with Corpora Amylacea Deposition in Mesial Temporal Lobe Epilepsy with Hippocampal Sclerosis *Abhijit Das, Anila Mathew, Venkataraman Radhakrishnan, Moinak Banerjee, Kurupath Radhakrishnan*

**4:30 p.m. S56.004**  
 Determination of Tolerability, Safety, and Efficacy of Perampanel, a Selective AMPA Receptor Antagonist, as Adjunctive Therapy in Subjects with Refractory Partial Seizures *Gregory Krauss, Victor Biton, Jack Klapper, Michael Bar, Ivan Rektor, Nerija Vaiciene-Magistris, Algimantas Skaringa, Aive Liigant, Dinesh Kumar, David Squillacote*

**4:45 p.m. S56.005**  
 ApoE ε4 Shorten the Silent Interval of Mesial Temporal Lobe Epilepsy with Hippocampal Sclerosis *Marcelo Kauffman, Damian Consalvo, Dolores Gonzalez Moron, Virginia Pujol, Patricia Solis, Silvia Oddo, Carolina Lomlomdjan, Silvia Kochen*

**S57 Neuro-Ophthalmology and Neuro-Otology**

**Room 605/610**

**3:45 p.m. S57.001**  
 Horizontal Head Impulse Test Detects Gentamicin Vestibulotoxicity *G. Halmagyi, Konrad Weber, Swee Aw, Michael Todd, Leigh McGarvie, Ian Curthoys*

**4:00 p.m. S57.002**  
 Skew Deviation Predicts Brainstem Involvement in the Acute Vestibular Neuropathy *Jorge Kattah, David Newman-Toker, Arun Talkad*

**4:15 p.m. S57.003**  
 Visual Pathways Functional and Structural Abnormalities in Patients with Leber Hereditary Optic Neuropathy *Valeria Barcella, Maria Rocca, Stefani Bianchi-Marzoli, Iacopo Milesi, Melissa Petrolini, Lisa Melzi, Andrea Falini, Giancarlo Comi, Massimo Filippi*

**4:30 p.m. S57.004**  
 Clinical and Ocular Imaging Characteristics of Eyes with Visual Loss over Time in Multiple Sclerosis *Esther Bisker, Sally Chang, David Long, Lauren Talman, Amy Conger, Girish Hiremath, Teresa Frohman, Michael Loguidice, Steven Galetta, Clyde Markowitz, Dina Jacobs, Yang Dai, Gui-Shuang Ying, Maureen Maguire, Elliot Frohman, Peter Calabresi, Laura Balcer*

**4:45 p.m. S57.005**  
 Artificial Hemianopic Scotomata in Normal Subjects Reveal Disorders of Visual Search in Patients with Unilateral Occipital Stroke *Wolfgang Heide, Björn Machner, Andreas Sprenger, Christoph Helmchen, Detlef Kömpf*

**S58 Critical Care**

**Room 602/603**

**3:45 p.m. S58.001**  
 Platelet Activity Is Related to ICH Volume Size *Andrew Naidech, Rajeev Garg, Storm Liebling, Matthew Walker, Sarice Bassin, Bernard Bendok, Richard Bernstein, H. Hunt Batjer, Mark Alberts, Thomas Bleck*

**4:00 p.m. S58.002**  
 Frontal White Matter Vulnerability to Carbon Monoxide Poisoning Demonstrated by Diffusion Tensor Imaging on 3.0T System *Kenshi Terajima, Hironaka Igarashi, Yuhei Takado, Koichiro Okamoto, Kohei Akazawa, Masatoyo Nishizawa, Tsutomu Nakada*

**4:15 p.m. S58.003**  
 Iron Accumulation in the Deep Gray Matter of Patients with Mild Traumatic Brain Injury: A Magnetic Field Correlation Study *Matilde Inglese, Jens Jensen, Yulin Ge, James Babb, Laura Miles, Joseph Reaume, Robert Grossman*

**4:30 p.m. S58.004**  
 Cost-Effectiveness Analysis of Hemicraniectomy Versus Conservative Treatment in Malignant Infarction of the Middle Cerebral Artery *Alberto Maud, Gabriela Vazquez, Robert Taylor, Adnan Qureshi, David Anderson, Mustapha Ezzeddine*

**4:45 p.m. S58.005**  
 Long-Term Cognitive Outcomes in Patients Surviving Cardiac Resuscitation *Daniel Claassen, Eelco Wijdicks, Edward Manno, Bradley Boeve, Alejandro Rabinstein*

**S59 Neural Repair and Neurorehabilitation**

**Room 613/614**

**3:45 p.m. Presentation of the S. Weir Mitchell Award**  
*Sponsored by the American Academy of Neurology Alliance.*  
 Recipient:  
**Sashank Prasad, MD**  
*Philadelphia, PA*

**4:00 p.m. S59.002**  
 Improvement in Aphasia from First-Time Stroke Follows Proportional Recovery *Ronald Lazar, Brandon Minzer, Daniel Antonello, Joanne Festa, John Krakauer, Randolph Marshall*

**4:15 p.m. S59.003**  
 Impact of Voice Guidance and Emotional Prosody on Cortical Activation during Finger Movement in Stroke Patients *Petr Hluštík, Jaroslav Opavský, Michal Mayer, Dagmar Tomisová, Ana Solodkin, Steven Small, Roman Herzig, Pavel Otruba, Martin Köcher, Petr Kanovský*

**4:30 p.m. S59.004**  
 New Insights into Repair in MS: A Longitudinal Spinal Cord Spectroscopy and Atrophy Study *Olga Ciccarelli, Dan Altmann, Mary McLean, Claudia Wheeler-Kingshott, Kelly Wimpey, David Miller, Alan Thompson*

**4:45 p.m. S59.005**  
 Outcomes of Patients with Spinal Epidural Metastases (SEM) Based upon ASIA Scores *Ingrid Park, Robert Ruff*

**S60 Autonomic Disorders**

**Room 604**

**3:45 p.m. S60.001**  
 A Novel Technique for Peripheral Nerve Fiber Imaging *Ningshan Wang, Christopher Gibbons, Roy Freeman*

**4:00 p.m. S60.002**  
 Antibody-Mediated Impairment of Synaptic Transmission and Homeostatic Plasticity in Experimental Autoimmune Autonomic Ganglionopathy *Steven Vernino, Phillip Low, Zhengbei Wang*

**4:15 p.m. S60.003**  
 Orthostatic Challenge Reveals Subtle Sympathetic Cardiac Dysfunction in Patients with Mild Traumatic Brain Injury *Max Hilz, Stefan Anders, Felix Aurnhammer, Harald Marthol, Rositsa Baltadzhieva, Tim Schroeder, Anja Rossmeissl, Steven Flanagan*

**4:30 p.m. S60.004**  
 Olfactory Dysfunction in Pure Autonomic Failure: Implications for the Pathogenesis of Lewy Body Diseases *David Goldstein, LaToya Sewell*

**4:45 p.m. S60.005**  
 A New Noninvasive Method To Assess Adrenergic Baroreflex Sensitivity *Wolfgang Singer, Phillip Low*

**Huntington's Disease and Other Hyperkinetic Disorders**

- P09.001** Changes in Mini Mental Status Examination over Time in Huntington's Disease *Kathleen Shannon, Bryan Bernard, Glenn Stebbins*
- P09.002** The Written and Oral Administration of the Symbol Digit Modality Test in Huntington Disease *Octavian Adam, Sharon Halton, Giovanni Mostile, Joseph Jankovic*
- P09.003** Postural Limits of Stability in Presymptomatic and Symptomatic Huntington's Disease *Eva Pirogovsky, Danielle Salomonczyk, Robert Panzera, Jody Goldstein, Trinh Luu, Oz Rico, Mark Jacobson, Guerry Peavy, Jody Corey-Bloom, Roger Simmons, Paul Gilbert*
- P09.004** Postural Control in Preclinical Huntington's Disease *Danielle Salomonczyk, Robert Panzera, Eva Pirogovsky, Jody Goldstein, Trinh Luu, Oz Rico, Mark Jacobson, Guerry Peavy, Jody Corey-Bloom, Roger Simmons, Paul Gilbert*
- P09.005** Depression in Huntington Disease – An Under-Recognized and Under-Treated Condition *Aleksandar Videnovic, Wenqing Fan, Jeana Jaglin, Bryan Bernard, Kathleen Shannon*
- P09.006** Longitudinal Changes in Dopaminergic Function and Regional Mechanism in Preclinical Huntington's Disease *Matthew Bussa, Kathleen Poston, Chengke Tang, Andrew Feigin, Yilong Ma, Mark Guttman, Jane Paulsen, Vijay Dhawan, David Eidelberg*
- P09.007** Longitudinal Diffusion Tensor Imaging in Huntington's Disease *Ali Samii, Kurt Weaver, Todd Richards, Elizabeth Aylward*
- P09.008** Puromycin-Sensitive Aminopeptidase (PSA) Reduces Aggregation Caused by Expanded Huntingtin in Cultured Cells and Is Induced in Brains of a Mouse Model of Huntington's Disease *Raphael Hourez, Alfred Goldberg*
- P09.009** Bilateral Globus Pallidus Deep Brain Stimulation for Huntington's Disease: Outcome in Eight Patients *Victoria Gonzalez-Martinez, Laura Cif, Brigitte Biolsi, Igor Maldonado, Xavier Vasques, Hassan El Ferti, Michel Zanca, Philippe Coubes*
- P09.010** Post-Ictal Improvement of a Lance-Adams Syndrome *Claire Ewencyk, Emmanuelle Apartis, Marie Vidailhet, Michel Baulac, Vincent Navarro*

**Neuroepidemiology/Health Services Research: Multiple Sclerosis and Movement Disorders**

- P09.011** Prospective Study of Infection with Epstein-Barr Virus and Risk of Developing Multiple Sclerosis *Alberto Ascherio, Kassandra Munger, Eilis O'Reilly, Kerstin Falk, Lynn Levin*
- P09.012** Smoking, Genes and Risk for Parkinson's Disease *Zhuqin Gu, Caroline Tanner, Piu Chan*
- P09.013** The Effect of Cigarette Smoking on Survival in Parkinson's Disease *Stephen Van Den Eeden, Kathleen Albers, Lorene Nelson, Raymond Lo, Amethyst Leimpeter, Charles Quesenberry, Allan Bernstein, Valerie McGuire, Caroline Tanner*
- P09.014** Development of an Algorithm To Identify Parkinson's Disease in the Cardiovascular Health Study *Thanh Ton, Samay Jain, Robert Boudreau, Evan Thacker, Elsa Strotmeyer, Shannon Rhodes, Anne Newman, W. T. Longstreth, Harvey Checkoway*
- P09.015** Incidence of Multiple Sclerosis, Myasthenia Gravis and Guillain-Barré Syndrome in Argentina *Juan Rojas, Diego Giunta, Liliana Patrucco, Carla Stefani, Barbara Rosso, Marcelo Rugiero, Edgardo Cristiano*
- P09.016** Prospective Non-Motor Symptoms Evaluation of a Cohort with Parkinson's Disease and Other Parkinsonian Disorders. The PRIAMO Study *Carlo Colosimo, PRIAMO Study Group*
- P09.017** The Frequency (Prevalence Rate) of Multiple Sclerosis in Iraq: A Retrospective Study *Fizel Al-Himyari*
- P09.018** Population-Based Study of Baseline Ethanol Consumption and Risk of Incident Essential Tremor *Elan Louis, Julian Benito-Leon, Felix Bermejo*
- P09.019** Time to Initiation of Disease-Modifying Therapy for Multiple Sclerosis Patients in a Commercial Managed Care Population *Jay Margolis, Barbara Johnson, Robert Fowler, Nikita Mody-Patel, Manoj Malhotra*
- P09.020** Mellen Center Care On-Line, a Randomized, Trial of a Telemedicine Intervention To Improve Patient Self-Management: Study Design and Subject Baseline Characteristics *Deborah Miller, Shirley Moore, Robert Fox, Atreja Ashish, Maria Stadler, Jar-Chi Lee, Alex Fu, Welf Saupe, Swati Chakraborty, Richard Rudick*

**Neuroepidemiology/Health Services Research: Stroke**

- P09.021** Physician Perception of Acute Stroke Care in a Mexican Community *Carlos Cantu, Jennifer Majersik, Brisa Sanchez, Lewis Morgenstern*
- P09.022** Impact of International Subarachnoid Aneurysm Trial Results on Treatment of Ruptured Intracranial Aneurysms in United States *Gabriela Vazquez, Adnan Qureshi, M. Fareed Suri, Ramachandra Tummala, Mustapha Ezzeddine*
- P09.023** Cost-Effectiveness Analysis of Protected Carotid Artery Versus Endarterectomy in High Surgical Risk Patients *Alberto Maud, Gabriela Vázquez, Kamakshi Lakshminarayan, David Anderson, Adnan Qureshi*
- P09.024** Current State of Neurohospitalist Practice *David Likosky, Lucas Restrepo, Scott Shulman, W. Freeman*
- P09.025** Utilization of Intravenous Tissue Plasminogen Activator in Acute Ischemic Stroke: Exploratory Analysis of Demographic and Risk Factors *Anand Vaishnav, Stephen Browning, Heather Bush, David Mannino*
- P09.026** Secondary Prevention of Stroke after Transient Ischemic Attack – Results from the Minnesota Stroke Registry *Haralabos Zacharatos, James Peacock, Brad Krier, Albert Tsai, Alexandros Georgiadis, Kamakshi Lakshminarayan*

**Neuroepidemiology/Health Services Research**

- P09.027** Clinical Utility of Head CT for Dizziness in the Emergency Department *Kevin Kerber, Lisa Schweigler, Brady West, A. Fendrick, Lewis Morgenstern*
- P09.028** High Prevalence and Geographical Variation of Myasthenia Gravis in an Italian Area *Cristina Montomoli, Antonietta Citterio, Rita Cioccale, Carla Pruzzi, Eleonora Tavazzi, Cesare Fratti, Giovanni Piccolo*
- P09.029** The NIH Toolbox: An Instrument for Assessment of Neurological and Behavioral Function *Thomas Bleck, Richard Gershon, Cindy Nowinski, David Cella, Richard Havlik, Molly Wagster, Hugh Hendrie, Nathan Fox*
- P09.030** Tracheostomy in ALS: A 10-Year Population-Based Study in Italy *Adriano Chio, Gabriele Mora, Andrea Calvo, Letizia Mazzini, Edo Bottacchi, Roberto Mutani*

- P09.031** Tumors Preceding ALS Onset and ALS: Results from a Case-Control Study *Marco D'Amelio, Eleonora Marchese, Paolo Aridon, Marianna Lo Re, Paolo Ragonese, Valeria Terruso, Vincenzo La Bella, Giovanni Savettieri*
- P09.032** 'NEUROLINK': Improving Access to the Neurology Service in a Dublin Hospital Using Telemedicine *Elijah Chaila, El Fatih Ali, Niall Tubridy*
- P09.033** Analysis of Healthcare Costs in a Large Cohort of Patients with Myasthenia Gravis *Lakevia Hall, Ronald Peeples, Jr., Jason Cooper, Donald Taylor, Jr., Andrew Krueger, Donald Sanders*
- P09.034** Occupational Exposures and the Risk of Amyotrophic Lateral Sclerosis (ALS) *Fang Fang, Patricia Quinlan, Weimin Ye, Marie Barber, David Umbach, Dale Sandler, Freya Kamel*
- P09.035** Accessibility of Neurological Care and Epidemiology of Neurological Disease in Ghana, West Africa *Augustina Charway, Ralph Ametepi*
- P09.036** Brain Networks Identified by Partial Least Square Modeling Are Associated with Gait Instability in the Oldest Old *Caterina Rosano, Yang Mei, Howard Aizenstein, Anne Newman, Jennifer Brach, Robert Boudreau*

**Epidemiology of Parkinson's Disease**

- P09.037** A Prospective Nested Case-Control Study of Organochlorine Exposures and Risk of Parkinson Disease *Marc Weisskopf, Eilis O'Reilly, Larisa Altschul, Paul Knekt, Alberto Ascherio*
- P09.038** Anemia Preceding Parkinson's Disease: A Case-Control Study *Rodolfo Savica, Justin Carlin, Brandon Grossardt, James Bower, Demetrius Maraganore, Walter Rocca*
- P09.039** A 15-Year Population-Based Longitudinal Study of Incidence of Parkinson's Disease (PD) and Parkinsonian Syndromes (PS) in an Elderly French Population (PAQUID) *Florian Perez, Catherine Helmer, Sophie Auriacombe, Jean-François Dartigues, François Tison*
- P09.040** Survival among Veterans with Parkinson's Disease *Sheng-Han Kuo, Suzanne Moore, Donna White, Eugene Lai*
- P09.041** Racial Differences in Expectations Regarding Movement (ERM) *Nabila Dahodwala, Jason Karlawish, Cynthia Zubritsky, David Mandel*

**P09.042** Correlations of Serum Uric Acid Levels with Parkinson's Disease Symptom Severity *Jyhong Gabriel Hou, Eugene Lai*

**P09.043** Dopamine Antagonist Prescribing Practices to Persons with Parkinson's Disease (PD) *Amie Peterson, Marsha Andrews, Joseph Quinn, John Nutt*

**P09.044** Nutrient Intake in Parkinson's Disease (PD) Compared to Age-Matched Controls *Marian Evatt, Gautam Hebbbar, Meghan Quirk, Thomas Ziegler*

**P09.045** Subcortical Brain Atrophy and Mild Cognitive Impairment in Early Parkinson Disease. A Case-Control Study *Turi Dalaker, Robert Zivadinov, Deepa Ramasamy, Mona Beyer, Guido Alves, Kolbjorn Bronnick, Ole-Bjorn Tysnes, Dag Aarsland, Jan Larsen*

**P09.046** Ethnic Variation and Geographic Distribution of Parkinson Disease in the United States *Allison Wright Willis, Bradley Evanoff, Brad Racette*

#### **Anterior Horn: Epidemiology**

**P09.047** Juvenile-Onset Distal Hereditary Motor Neuropathy Associated with Sensorineural Hearing Loss *W. Arnold, Victoria Lawson, John Kissel, Stephen Kolb*

**P09.048** The Natural History of Progressive Bulbar Palsy *Chafic Karam, Andreas Deik, Amir Hussein, Biggya Sapkota, Weiyi Gao, Patricia Friedman, Theresa Imperato, Joel Bernor, Daniel MacGowan, Stephen Scelsa*

**P09.049** Retrospective Cohort Study of Hyperlipidemia and Diabetes Mellitus with Disease Outcomes in Amyotrophic Lateral Sclerosis *Ericka Simpson, Stanley Appel*

**P09.050** Differences in Initial Symptoms between Amyotrophic Lateral Sclerosis (ALS) and Primary Lateral Sclerosis (PLS) in a Referral Centre *Gabriel Rodriguez, Gisella Gargiulo Monachelli, Maria Gonzalez Deniselle, Alejandro De Nicola, Roberto Sica*

**P09.051** Building Web-Based Management Platform for Clinical Trials Networks in Neurology: Case Study in ALS *Alexander Sherman, Karen Wallace, Francesca Belouin, Marianne Kearney, Merit Cudkowicz*

**P09.052** Possible Role of Familial, Environmental and Occupational Risk Factors in Development of Amyotrophic Lateral Sclerosis: A Case-Control Study *Kamalesh Das, Gouranga Mondal, Kalyan Bhattacharyya, Arindam Chakorborty*

**P09.053** Smoking and the Risk of Amyotrophic Lateral Sclerosis: A Systematic Review and Meta-Analysis *Alvaro Alonso, Giancarlo Logroscino, Miguel Hernan*

**P09.054** Smoking Is a Probable Risk Factor for ALS: An Evidence-Based Update (2003-2008) *Carmel Armon*

**P09.055** Autosomal Dominant Motor Neuron Disease and Vermian Ataxia in a North American Family *Christian Wider, Pamela Desaro, Jessica Young, Rosa Rademakers, Zbigniew Wszolek, Kevin Boylan*

**P09.056** Use of Capture-Recapture Methods To Estimate Amyotrophic Lateral Sclerosis Prevalence in Georgia *Michael Wittie, Sharon Usher, Kevin Ward, Oleg Muravov, Wendy Kaye, Michael Benatar*

#### **Epilepsy: Epidemiology, Genetics, and Imaging**

**P09.057** WITHDRAWN

**P09.058** Specialist Care Patterns among Patients with Epilepsy in Rural Communities *Angelia Paschal, Kore Liow, Suzanne Hawley, Elizabeth Ablah, Dale Hesdorffer, Craig Molgaard, Mary Warren, David Thurman, W. Allen Hauser*

**P09.059** Do Hippocampal FDG-PET Asymmetries Predict Post-Temporal Lobectomy Verbal Memory Dysfunction? *Beth Leeman, Catherine Leveroni, Keith Johnson*

**P09.060** Cortical and Subcortical Contributions to Seizure Onset in Medication-Refractory Absence Seizures: EEG/fMRI Study *Jerzy Szaflarski, Thomas Hirschauer, Mark Difrancesco, Michael Privitera, Jean Gotman, Scott Holland*

**P09.061** Predicting Epilepsy and Seizures from Vascular Risk Factors among Elderly Patients *Amir Arain, Pradumna Singh, Yanna Song, Lily Wang, Van Cain, Zahid Samad, Baqar Husaini*

**P09.062** Clinical Correlates of White Matter Structural Integrity in Patients with Medically Refractory Epilepsy *Amit Verma, Mario Dulay, Christof Karmonik, Zhong Xue, Hani Haykal, Robert Grossman*

**P09.063** Gene Expression Profile in Familial and Sporadic Forms of Mesial Temporal Lobe Epilepsy *Claudia Maurer-Morelli, Cristiane Rocha, Romênia Domingues, Helder Tedeschi, Evandro De Oliveira, Fernando Cendes, Iscia Lopes-Cendes*

**P09.064** Radiographic Findings in Convulsive and Non-Convulsive Partial Status Epilepticus *Pue Faroouque, Jyoti Pillai*

**P09.065** An Efficient and Robust Method for the Fractional Anisotropy Analysis of White Matter Tracts Based on Automated Template Matching in Talairach Space *Christof Karmonik, Mario Dulay, Amit Verma, Michele York, Robert Grossman*

**P09.066** Material Specific Memory Impairment Is Associated with Unilateral Cingulum Bundle Structural Integrity in Intractable Temporal Lobe Epilepsy *Mario Dulay, Amit Verma, Cristof Karmonik, Zhong Xue, Adriana Strutt, Michele York, Hani Haykal, Robert Grossman*

#### **Stroke Epidemiology**

**P09.067** Prevalence of Asymptomatic Intracranial Atherosclerosis in a Multi-Ethnic Population *Alexandros Georgiadis, M. Fareed Suri, Adnan Qureshi*

**P09.068** Acute Stroke Care Capacity and Services in the Northwest United States, 2008: A Needs Assessment by the Northwest Regional Stroke Network (NWRSN) *Wendy Shultis, Chara Chamie, Robert Graff, Cherish Hart, Palina Louangketh, Jessica Grennan, Michael McNamara, Nicholas Okon, David Tirschwell*

**P09.069** Nationwide Factors Associated with Inadequate Blood Pressure Reduction among Stroke Survivors *Sharmineh Shams, Bruce Ovbiagele, Nerses Sanossian*

**P09.070** Treatment of Dyslipidemia after Stroke: Analysis of a Nationwide Sample *Nerses Sanossian, Ling Zheng, Gene Sung, Bruce Ovbiagele*

**P09.071** Modifiable Behavioral Risk Factors in Stroke Survivors: The REasons for Geographic and Racial Differences in Stroke (REGARDS) Study *David Brenner, Rich Zweifler, Camilo Gomez, Monika Safford, Brett Kissela, Deborah Levine, David Rhodes, George Howard, Bruce Coull, Virginia Howard, Leslie McClure*

**P09.072** Hospital Charges for Stroke Admissions Attributable to Racial Disparities in South Carolina during 2002-2006 *Wuwei Feng, Paul Nietert, Robert Adams*

**P09.073** Low Incidence of Stroke in Takayasu Arteritis. Long-Term Clinical Follow-Up *Aurelio Mendez, Enrique Diaz, Ma. Cristina Castañon, Manuel Riuz*

**P09.074** Ethnicity Is Not an Independent Predictor of Outcome after Treatment for Acute Ischemic Stroke *Sheryl Martin-Schild, Karen Albright, Miriam Morales, James Grotta, Sean Savitz*

**P09.075** Trends in Hospitalization Rate, Hospital Case Fatality and Length of Stay for Stroke in Galicia (Spain), 1997-2007 *Manuel Seijo-Martinez, Javier Paz-Esquete, Ramon Ares Rico, Angeles Bouzas Rodriguez*

**P09.076** Risk Factors Associated with Falling among Retirees with History of Stroke *Afshin Divani, Gabriela Vazquez, Marjan Asadollahi, Andreas Luft*

**P09.077** Urine Toxicology Screening and Outcomes in an Urban Stroke Population *Patricia Garcia, Nawaf Murshed, Sean Logan, Melissa Straub, Anita Sinha, Patricia Penstone, Angelos Katramados, Panayiotis Mitsias, Andrew Russman, Daniel Morris, Brian Silver*

**P09.078** Increased US Utilization of Thrombolysis in the Treatment of Stroke *Richard Dubinsky, Sue Lai*

**P09.079** Glycosylated Hemoglobin Levels Correlate with Large- and Small-Artery Subtypes of Ischemic Stroke *Neil Chawla, Arthur Yule, Amytis Towfighi*

**P09.080** Traumatic and Spontaneous Carotid and Vertebral Artery Dissection: A Level I Trauma Care Experience *Paul Eugene Lleva, Charles Shyu, Hoang Lai, Michael Tenner, Donald Risucci, Brij Singh-Ahluwalia, Jin Li*

**P09.081** Quality of Acute Ischemic Stroke Care among Senior Citizens. Results from the Argentinian Stroke Registry (ReNACer) *Luciano Sposato, Osvaldo Fustinoni, Gustavo Saposnik*

**P09.082** Racial Differences in Stroke Characteristics: A Retrospective Cohort and Imaging Study *Kasey Gildersleeve, Jennifer Heidler-Gary, Melissa Newhart, Cameron Davis, Vijay Kannan, Lauren Cloutman, Argye Hillis*

**P09.083** Are Education and Socioeconomic Status Risk Factors for Mortality in Patients with Stroke and Transient Ischemic Attacks? Data from the NEDICES Study Group *Antonio Martinez-Salio, Rocio Trincado, Cilia Rodriguez Rodriguez, Daniel Goyo-Ibarra, Julian Benito-León, Felix Bermejo-Pareja*



**P09.084** Gender Differences in Blood Gene Expression during Ischemic Stroke *Peter Adamczyk, Huichun Xu, Yingfan Tian, Yang Tang, DaZhi Liu, Bradley Ander, Jane Khoury, Jeff Gregg, Arthur Pancioli, Edward Jauch, Kenneth Wagner, Piero Verro, Boryana Stamova, Lisa Lit, Achal Achrol, Xinhua Zhan, Isaac Liao, Glen Jickling, Renee Turner, William Young, Joseph Broderick, Frank Sharp*

**P09.085** CADASIL: First Observation in Russia and Report of a New Mutation in the Notch3 Gene *Sergei Illarionov, Pyotr Slominsky, Sergey Klyushnikov, Marina Tanashyan, Alla Sakharova, Dmitry Kandyba, Nikolay Zhulev*

**P09.086** CADASIL: Clinical Presentation in an Adolescent and Review of the Literature *Catalina Cleves, Neil Friedman, A. David Rothner*

**Muscle Disease/Neuromuscular Junction: Epidemiology and Population Studies**

**P09.087** Myopathies in the Elderly: A Hospital-Based Study *Andoni Echaniz-Laguna, Michel Mohr, Christine Tranchant*

**P09.088** What Is the True Incidence and Prevalence of Myasthenia Gravis? A Systematic Review of Myasthenia Gravis Epidemiology *Aisling Fitzpatrick, Chris Cardwell, Peter McCarron, John McConville*

**P09.089** Nationwide Epidemiological Survey of Myasthenia Gravis in Japan *Hiroyuki Murai, Natsumi Yamashita, Yoshiko Nomura, Hiroaki Yoshikawa, Makoto Watanabe, Jun-ichi Kira*

**P09.090** Frequency of False Positive Muscle Acetylcholine Receptor (AChR) Antibody Testing in Serological Evaluation for Neurological Autoimmunity *Metha Apiwattanakul, Andrew McKeon, Vanda Lennon, Sean Pittock*

**P09.091** Quality of Life in Myasthenia Gravis *Reza Seyedsadjadi, Bernadette Lipscomb, John Weinman, Michael Rose, Donald Sanders, Muscle Study Group*

**P09.092** A Cooperative International Neuromuscular Research Group (CINRG) Study of the Relationship between Impairment, Activity Limitation, Participation and Quality of Life in Persons with Confirmed Dystrophinopathies: Methods and Baseline Characteristics *Erik Henricson, Craig McDonald, Richard Abresch, Jay Han, Robert Leshner, Eric Hoffman, Diana Escobar, Avital Cnaan, Fengming Hu, Angela Zimmerman, Tina Duong, Jill Mayhew, Julaine Florence, Adrienne Arrieta*

**P09.093** Nondystrophic Myotonias: Measuring Quality of Life in a Longitudinal Natural History Study *Shannon Venance, Kori LaDonna, Emma Matthews, Yunxia Wang, Brian Bundy, Richard Barohn, CINCH Investigators*

**P09.094** Mitochondrial Disease in Adult and Pediatric Patients with Fatigue and Myalgias *John Shoffner, Lauren Hyams, Genevieve Langley*

**P09.095** Registry of Outcome Measures (ROM) for Neuromuscular Trials *Joanne Auld, Reza Seyedsadjadi, Michael Rose, TREAT-NMD*

**Multiple Sclerosis: Immunology II**

**P09.096** Regulatory NK Cells Mediate the Decreased Th17 Responses Associated with Abrogated New Disease Activity in MS Patients Treated with Bone Marrow Transplantation *Peter Darlington, Jean-Sebastien Doucet, Tarik Touil, Hania Kebir, Denis Gaucher, Lama Fawaz, Joumana Zeidan, Jacqueline Chen, Farzaneh Jalili, Dominique Gauchat, Marjorie Bowman, Jack Antel, Doug Arnold, Mark Freedman, Harold Atkins, Rafick Sekaly, Remi Cheynier, Alexandre Prat, Amit Bar-Or, Canadian BMT Study Group*

**P09.097** Predictive Biomarkers of Clinical Response to Glatiramer Acetate (GA) Therapy in Multiple Sclerosis (MS) *Reuben Valenzuela, Michael Kaufman, Priscilla Russo, Mary Anne Picone, June Halper, Kathy Costello, Yaritza Rosario, Konstantin Balashov, Kouichi Ito, Suhayl Jalbut*

**P09.098** Glatiramer Acetate-Induced Human Type II Monocytes Influence Differentiation of Naïve T Cells *Collin Spencer, Martin Weber, Thomas Prod'homme, Nicolas Molnarfi, Scott Zamvil*

**P09.099** Multiple Sclerosis (MS): IFN $\beta$ -1b Induces Expression of Immunoinhibitory Immunoglobulin-Like Transcript 3 (ILT3) on Myeloid Cells *Mark Jensen, David White, Rachel Yanowitch, Barry Arason*

**P09.100** Impaired CD4+ T Effector: T Regulatory Cell Conversion in Relapsing Multiple Sclerosis: Reversal by Treatment with Glatiramer Acetate *Lloyd Kasper, Alan Bergeron, Randolph Noelle, Jacqueline Channon*

**P09.101** Helminth Antigens Modulate Immune Responses in Multiple Sclerosis Patients with TLR2-Dependent Mechanisms *Jorge Correale, Farez Mauricio*

**P09.102** Assessment of a Possible Bioenergetic Marker of Cellular Immunocompetence in MS-Patients Undergoing Immunotherapy: Longitudinal Analyses *Aiden Haghikia, Derek Pappas, Bartosz Pula, Susan Goelz, Dominic Paes, Ralf Gold, Sergio Baranzini, Andrew Chan*

**P09.103** Pilot Study To Measure ATP Expression in Lymphocytes of MS Patients Undergoing Various Therapies Using the Cylex™ ImmunoKnow® Assay *Samia Khoury, Howard Weiner, Xiaojun You, Susan Goelz, Leonid Gorelik*

**P09.104** T Cell Activation and Th2 Cytokine Secretion Correlate with Disease Activity in Multiple Sclerosis Patients Treated with Glatiramer Acetate *Finn Sellebjerg, Martin Krakauer, Dan Hesse, Henrik Lund, Helle Sondergaard, Per Sorensen*

**P09.105** Cellular Expression of Genes Involved in Cladribine Metabolism *Catherine Salvat, Marie-Laure Curchod, Emmanuel Guedj, Virginie Debailleul, John Challier, Bruno Laugel, Jerome Wojcik, Robert Weissert*

**P09.106** Autoantibodies to GAD and Cell Surface Determinants in Stiff Person Syndrome *Thashi Chang, Philippa Pettingill, Haris Alexopoulos, Leslie Jacobson, Peter Brown, Angela Vincent*

**P09.107** Luteolin and Interferon- $\beta$  Modulate Immune Response(s) in Peripheral Blood Mononuclear Cells from Multiple Sclerosis Patients *Zohara Sternberg, Kailash Chadha, Alicia Lieberman, Allison Drake, David Hohnacki, Bianca Weinstock-Guttman, Frederick Munschauer*

**P09.108** Multiple Sclerosis: Glatiramer Acetate Differentially Regulates Monocytic Production of IL-1b and IL-1 Receptor Antagonist *Danielle Burger, Nicolas Molnarfi, Martin Weber, Karim Brandt, Lyssia Gruaz, Michel Chofflon, Scott Zamvil, Patrice Laive*

**P09.109** Granzyme B Mediates T Cell-Induced Neurotoxicity through Cytoskeletal Disruption in Human Cortical Neurons *Yohannes Haile, Dion Pasichnyk, Katia Simmen, Chris Bleackley, Fabrizio Giuliani*

**P09.110** Low Production and Defective Regulation of Neurotrophins mRNA in Immune Cells of Patients with RR-MS *Natali Urshansky, Karin Fainberg-Mausner, Firas Fahoum, Arnon Karni*

**P09.111** A Reverted Expression of Inflammation-Related Genes during Pregnancy Correlate with Decreased Disease Activity in Multiple Sclerosis: The GEXPRIMS Study *Francesca Gilli, Paola Valentino, Nicole Navone, Alessia Di Sapio, Francesca Sperli, Marco Capobianco, Simona Malucchi, Fabiana Marnetto, Antonio Bertolotto*

**P09.112** MBP-Specific Th17 Lymphocytes Selectively Increase during MS Relapses. A Multicenter Longitudinal Study *Luca Durelli, Laura Conti, Marinella Clerico, Daniela Boselli, Giulia Contessa, Paolo Ripellino, Delon Lapuma, Antonio Uccelli, Mauro Zaffaroni, Paola Cavalla, Luciano Rinaldi, Cristoforo Comi, Francesco Novelli*

**P09.113** The Cytopathic Viral Effect (CPE) Assay in Sera of Naive Patients with Relapsing-Remitting Multiple Sclerosis *Andres Villa, Cristina Videla, Julianna Leoni, Orlando Garcea*

**P09.114** Dimethyl Fumarate (BG00012) Inhibits Macrophage Inflammatory Activity In Vivo and In Vitro *Pradeep Bista, Weike Zeng, Sarah Ryan, Normand Allaire, Yi Luo, Kyungmin Hahm, Matvey Lukashov*

**Ageing and Dementia: Epidemiology**

**P09.115** A Dietary Pattern Protective Against Alzheimer's Disease (AD) *Yian Gu, Jeri Nieves, Yaakov Stern, Nicole Schupf, Jose Luchsinger, Nikolaos Scarmeas*

**P09.116** Physical Activity (PA) and Longevity in Alzheimer's Disease (AD) *Nikolaos Scarmeas, Stephanie Cosentino, Yaakov Stern, Nicole Schupf, Jose Luchsinger*

**P09.117** Smoking in Midlife and Increased Risk of Alzheimer's Disease *Rachel Whitmer, Minna Rusanen, Miia Kivipelto, Charles Quesenberry, Jr.*

**P09.118** Body Mass Index and Cognitive Systems in Older Black and White Persons *Zoe Arvanitakis, Sue Leurgans, David Bennett, Lisa Barnes*

**P09.119** Biomarker Screening for Alzheimer's Disease: The Impact of Sensitivity and Specificity Parameters *Kristin Kahle-Wroblewski, Eric Siemers, Christopher Callahan, Eric Sarpong, Nicolas Furiak, Timothy Klein, Robert Klein*

**P09.120** Correlates and Cognitive Decline Associated with White Matter Lesions Progression in the Elderly. The 3C-Dijon Study *Ophélie Godin, Pauline Maillard, Fabrice Crivello, Annick Alperovitch, Bernard Mazoyer, Christophe Tzourio, Carole Dufouil*

**P09.121** Behavioral Disturbances in the Very Old with and without Dementia: The Monzino 80-Plus Population-Based Study *Giancarlo Logrosino, Mauro Tettamanti, Maria Teresa Garri, Alessandro Nobili, Emma Riva, Pietro Tiraboschi, Ugo Lucca*

**P09.122** Lewy Body Dementia: The Caregiver Experience of Clinical Care *James Galvin, John Duda, Daniel Kaufer, Carol Lippa, Angela Taylor, Steven Zarit*

**P09.123** Low Walking Speed Is Associated with Increased Mortality and the Risk of Incident Dementia in Well-Functioning Elderly: The Three-City Study *Julien Dumurgier, Alexis Elbaz, Beatrice Tavernier, Annick Alperovitch, Christophe Tzourio*

**P09.124** Untreated Hypertension Is a Risk Factor for Senile Dementia. Data from the NEDICES Cohort Study *Felix Bermejo-Pareja, Julian Benito-Leon, Rocio Trincado, Cilia Rodriguez Rodriguez, Saturio Vega, Agustin Gomez de la Camara*

**P09.125** Long-Term Use of Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) Is Associated with Decreased Risk of All-Cause Dementia in the Oldest-Old: Results from The 90+ Study *Maria Corrada, Adar Kravitz, Claudia Kawas*

**P09.126** Retinal Abnormalities and Cognitive Decline – The ARIC Study *Suzanne Lesage, Thomas Mosley, Tien Wong, David Knopman, Ronald Klein, Josef Coresh, Richey Sharrett*

**P09.127** Late-Life Orthostatic Hypotension and the Incidence of Clinical Alzheimer's Disease *Helen Petrovitch, Robert Abbott, G. Webster Ross, Kamal Masaki, Lon White*

**P09.128** Metabolic Syndrome, Inflammation, and Mild Cognitive Impairment Subtypes in Elderly Persons: The Mayo Clinic Study of Aging *Rosebud Roberts, Yonas Geda, David Knopman, Bradley Boeve, Ruth Cha, Vernon Pankratz, Walter Rocca, Ronald Petersen*

**P09.129** Compliance and Persistence of Oral Cholinesterase Inhibitors in Patients with Alzheimer's Disease *Nikita Mody-Patel, Francis Vekeman, François Laliberté, Kristijan Kahler, Patrick Lefebvre, Mei Duh*

**P09.130** Factors Associated with Nursing Home Placement in Alzheimer's Disease *Trent McLaughlin, Peter Neumann, Eldon Spackman, Lisa Mucha, Eddie Jones, Loretto Lacey, Christopher Leibman, Yaakov Stern*

**P09.131** Age at Onset and Pre-Morbid IQ Influence Early Progression Rates in AD *Rachelle Doody, Wen Chan, Valory Pavlik, Paul Massman, Eveleen Darby, Susan Rountree, Kinga Szigeti*

**P09.132** Chronic Kidney Disease Is an Independent Risk Factor of Cerebral Atrophy *Yusuke Yakushiji, Hirotsu Tatsumi, Makoto Eriguchi, Tomoyuki Noguchi, Satomi Yakushiji, Yusuke Nanri, Junko Nakajima, Masanori Nishiyama, Koichi Node*

**P09.133** The Geographic Distribution of Alzheimer's Disease Mortality: Overlap with the US Stroke Belt *M. Glymour, Anna Kosheleva*

**P09.134** Clinical Dementia Is More Highly Associated with Braak Tangle Stage Than NIA-Reagan Criteria in the Oldest-Old *Dan Berlau, Maria Corrada, Claudia Kawas*

**P09.135** Late-Life Systolic Blood Pressure and the Incidence of Alzheimer's Disease *Robert Abbott, Helen Petrovitch, George Ross, Kamal Masaki, Lon White*

**P09.136** Praying at Mid-Life Is Associated with Decreased Risk of Cognitive Decline in Women: A Door-to-Door Survey *Rivka Inzelberg, Magdalena Massarwa, Amin Abuful, Edna Schechtman, Rosa Strugatsky, Robert Friedland*

**P09.137** Prediction of Medial Temporal Atrophy Scores in Cognitively Normal Subjects in the Florida ADRC *Amy Borenstein, James Mortimer, Yougui Wu, Elizabeth Schofield, David Loewenstein, Elizabeth Potter, Jason Appel, Ashok Raj, Maria Greig, Ranjan Duara*

**P09.138** Refusal and Passive Loss-to-Follow-Up in the NIA Alzheimer's Disease Program Uniform Data Set *Leslie Phillips, Thomas Koepsell, Walter Kukull*

**P09.139** A Population-Based Survey on Cognitive Performance in Sicily. Cognitive Impairment Is Modified in Women by Fertile Life Characteristics *Paolo Ragonese, Paolo Aridon, Marco D'Amelio, Maria Mazzola, Giuseppe Salemi, Giovanni Savettieri*

**P09.140** Hypertension Increases the Probability of Alzheimer's Disease and of Being Cognitively Impaired Not Demented in Wadi Ara Villages: A Door-to-Door Population Study *Rivka Inzelberg, Magdalena Massarwa, Edna Schechtman, Amin Abuful, Rosa Strugatsky, Simon Israeli-Korn, Shiri Avni, Lindsay Farrer, Robert Friedland*

**P09.141** Death in Newly Diagnosed Dementia *Laura Hemmy, Michael Kuskowski, Susan Rottunda, John McCarten*

**P09.142** Motor Vehicle Crashes, Moving Violations, and Driving Cessation in Early Alzheimer's Disease *Jeffrey Dawson, Elizabeth Dastrup, Ergun Uc, Steven Anderson, Matthew Rizzo*

**P09.143** Clinical and Neuropathological Features of Atypical FTLD-U *Salvatore Spina, Rose Richardson, Jill Murrell, Pietro Pietrini, Eric Wassermann, Jordan Grafman, Bernardino Ghetti*

### Behavioral Neurology II

**P09.144** What's in a Naming Error? *Maggi Budd, Kathleen Kortte, Lauren Cloutman, Melissa Newhart, Rebecca Gottesman, Cameron Davis, Jennifer Heidler-Gary, Argye Hillis*

**P09.145** What Causes Non-Fluent Speech in Progressive Non-Fluent Aphasia? *Delani Gunawardena, Corey McMillan, Sharon Ash, William Hu, Rachel Goldmann Gross, Murray Grossman*

**P09.146** Apraxia of Speech Localizes to the Inferior Frontal Gyrus *Jesia Hasan, Judith Robillard Shultz, Denise Klein, Ron Postuma*

**P09.147** Memantine and Constraint-Induced Aphasia Therapy in Chronic Post-Stroke Aphasia: A Randomized Controlled Trial with an Open-Label Extension Phase *Marcelo Berthier, Cristina Green, Pablo Lara, Carolina Higuera, Miguel Barbancho, Guadalupe Dávila, Friedemann Pulvermüller*

**P09.148** Contributors to Naming Impairment in Corticobasal Syndrome *Rachel Gross, David Libon, Peachie Moore, Lauren Richmond, Brianna Morgan, Alea Khan, Corey McMillan, William Hu, Murray Grossman*

**P09.149** Novel Throwing Sign Discriminates Patients with Progressive Supranuclear Palsy *Adolfo Mínguez-Castellanos, Cristóbal Carnero-Pardo, Francisco Escamilla-Sevilla, Carmen Sáez-Zea, Laura Montiel-Navarro, Beatriz Espejo-Martínez, María José Pérez-Navarro, Ángel Ortega-Moreno*

**P09.150** Progressive Logopenic Aphasia Versus Progressive Non-Fluent Aphasia: Clinical Differences and Progression *Mario Mendez, Sarah Kremen, Ronald Saul*

**P09.151** Cognitive and Neural Correlates of Written Language Impairment in Progressive Aphasia *Steven Rapcsak, Maya Henry, Pélagie Beeson, Bryan Woodruff, Richard Caselli*

**P09.152** Autonomic Nervous System and Aphasia *Yutaka Tanaka, Martin Albert, Koji Fujita, Chieko Nonaka, Masao Miyazaki, Eriko Yokoyama*

**P09.153** The Neuroanatomical Localization of Graphemic Buffer Deficits in Spelling *Lauren Cloutman, Leila Gingis, Melissa Newhart, Cameron Davis, Jennifer Heidler-Gary, Argye Hillis*

**P09.154** Non-Fluent Speech in Non-Fluent Progressive Aphasia and Logopenic Progressive Aphasia *Delani Gunawardena, Corey McMillan, Sharon Ash, William Hu, Rachel Goldmann Gross, Murray Grossman*

**P09.155** Constructional Apraxia in Multiple Sclerosis *Manuela De Stefano, Raffaella Migliaccio, Daniela Buonanno, Gioacchino Tedeschi, Ugo Nocentini, Patrizia Montella*

**P09.156** Analysis of Spelling and Written Grammar in Primary Progressive Aphasia Variants *Maralyssa Bann, Melissa Newhart, Cameron Davis, Jennifer Heidler-Gary, Argye Hillis*

**P09.157** Disruption of Grapheme-to-Phoneme Correspondence Mapping during Single Word Reading in Patients with Epilepsy: Implications for Models of Reading *Kerry Ledoux, Dana Boatman, Barry Gordon*

**P09.158** Recurrent Epileptic Wernicke Aphasia *Kinshuk Sahaya, Upinder Dhand, Chetan Soni, Munish Goyal, Pradeep Sahota*

**P09.159** Clinical Dementia Rating for Primary Progressive Aphasia (CDR-ppa) *Cecilia Serrano, Carol Dillon, Diego Sarasola, Leonardo Bartoloni, Paulo Caramelli, Fernando Taragano, Ricardo Nitrini, Ricardo Allegri*

**P09.160** Using Category Fluency Data To Create Phylogenetic Trees of Cognitive-Phenotypes *Alan Lerner, Jason Messer, Taruna Singh, James Leverenz, Cyrus Zabetian, Peter Thomas, Wojbor Woczyński*

**P09.161** Neuropsychiatric Symptoms in Primary Progressive Aphasia *Cecilia Serrano, Carol Dillon, Galeno Rojas, Fernando Taragano, Ricardo Allegri*

**P09.162** Impaired Processing of Narratives in Parkinson's Disease *Rachel Gross, Christine Farag, Murray Grossman*

**P09.163** Clinical and Survival Profiles of Patients with Frontotemporal Dementia and Motor Neuron Disease *William Hu, Harro Seelaar, Keith Josephs, David Knopman, Bradley Boeve, Daniel Drubach, Eric Sorenson, Leo McCluskey, Lauren Elman, Helenius Schelhaas, Joseph Parisi, Benno Kuester, Virginia Lee, John Trojanowski, Ronald Petersen, John Van Swieten, Murray Grossman*



**P09.164** Insensitive to Hierarchy: ALS and FTD Display Overlapping Executive Impairment *Christine Farag, Leo McCluskey, Lauren Elman, Rachel Goldmann Gross, Michael Bonner, Murray Grossman*

**P09.165** “Frontal” Behavior: A Set of Factors, a Hierarchy of Symptoms, or Both? *Lesley Fellows, Lois Finch, Ami Tsuchida, Tahir Shaikh, Dalia Rotstein*

**P09.166** Executive Function and Instrumental Activities of Daily Living in Aging and Alzheimer’s Disease *Gad Marshall, Dorene Rentz, Meghan Frey, Joseph Locascio, Keith Johnson, Reisa Sperling*

**P09.167** Comparison of Delayed Recall Tasks in a Memory Clinic *Kimberly Hook, Glen Finney*

**P09.168** Clinical Diagnosis of Frontotemporal Dementia: Caveat Emptor *Winnie Pao, Dennis Dickson, Neill Graff-Radford*

**P09.169** Quantitative and Qualitative Differences in Visual Confrontation Naming in Parkinson’s Disease with and without Dementia and Alzheimer’s Disease *Alexander Tröster, Julie Fields, April McTaggart, Rebecca Williams, Daniel Kaufer*

**P09.170** Factors Contributing to Quantifier Comprehension in Corticobasal Syndrome *Brianna Morgan, Lauren Richmond, Alea Khan, Robin Clark, Corey McMillan, Rachel Goldmann Gross, Murray Grossman*

**P09.171** Computerized Visual Field Defects in Posterior Cortical Atrophy *Shawn Smyth, Christopher Filley, Phillip Boyer, Victoria Pelak*

**P09.172** Alien Limb Syndrome in a Left-Handed Individual *Daniel Antonello, Svetlana Zaydman, Morris Scantlebury, Shirin Issa, Steven Sparr*

**P09.173** Validation of the Cognitive Linguistic Quick Test with the Frontal Assessment Battery in PD *Sotirios Parashos, Catherine Wielinski, Cordelia Erickson-Davis, Sarah Lenarz*

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## Future of Neuroscience Conference: New Genetics: The Future of Neurology

9:00 a.m.–5:00 p.m.

Hyatt Amphitheater

This interactive day-long program focuses on new genetics, and will feature poster sessions, platform presentations, a series of case vignettes and several invited lectures discussing new developments in the field. The presenters will combine high-level science with practical clinical application. Registration is required to attend this session, in addition to Annual Meeting registration fee.

9:00 a.m.

WELCOME AND INTRODUCTION

*Jeffery M. Vance, MD, PhD*

9:55 a.m.

HISTORY OF GENETICS

*Kenneth H. Fischbeck, MD, FAAN*

10:30 a.m.

GENETICS 101: CLINICAL

*Thomas B. Bird, MD, FAAN*

11:05 a.m.

GENETICS 101: TECHNICAL/ TOYS

*Stephen Zuchner, MD*

11:05 a.m.

BREAK AND POSTERS

11:25 a.m.

SC01.001

OAS1 GENOTYPE PREDICTS RESPONSE TO BETA INTERFERON THERAPY IN RELAPSING MULTIPLE SCLEROSIS

*Roisin Lonergan, Margaret O'Brien, Lisa Costelloe, Jean Fletcher, Cliona O'Farrelly, Killian O'Rourke, Michael Hutchinson, Niall Tubridy*

11:40 a.m.

SC01.002

NOVEL GENETIC ANIMAL MODELS OF AUTISM: MOLECULAR MECHANISMS TO THERAPEUTIC TARGETS

*Craig Powell, Jacqueline Blundell, Katsuhiko Tabuchi, Jing Zhou, Chang Kwon, Mark Etherton, Robert Hammer, Xinran Liu, Luis Parada, Thomas Sudhof*

11:55 a.m.

EPIGENETICS

*Massimo Pandolfo, MD*

12:30 p.m.

LUNCHEON AND POSTERS

1:30 p.m.

REGULATORY SYSTEMS

*Derek Dykxhoorn, PhD*

2:05 p.m.

SC01.003

IDENTICAL ASSOCIATION WITH DEPRESSION IN BOTH ALZHEIMER AND PARKINSON DISEASE

*Michael Slifer, Jeffery Vance, Gary Beecham, Gaofeng Wang, Paul Gallins, Patrice Whithead, William Scott, Eden Martin, Jonathan Haines, Margaret Pericak-Vance*

2:20 p.m.

SC01.004

REVERSAL OF MYOTONIA AND SPLICING DEFECTS BY ANTISENSE OLIGOMERS IN A TRANSGENIC MOUSE MODEL OF MYOTONIC DYSTROPHY TYPE 1 (DM1)

*Thurman Wheeler, Krzysztof Sobczak, John Lueck, Robert Osborne, Xiaoyan Lin, Robert Dirksen, Charles Thornton*

2:35 p.m.

COMPLEX GENETICS: MULTIPLE SCLEROSIS

*Jonathan Haines, MD*

3:10 p.m.

BREAK

3:30 p.m.

COMPLEX GENETICS: AUTISM

*Margaret A. Pericak-Vance, PhD*

4:05 p.m.

PERSONALIZED MEDICINE

*Jeffery M. Vance, MD, PhD*

4:40 p.m.

QUESTIONS AND ANSWERS

NEW GENETICS: THE FUTURE OF NEUROLOGY POSTERS

SC02.001 Aβ42 Trimer Gal 4-UAS Gene Vaccine with the Gene Gun To Prevent Alzheimer's Disease  
*Roger Rosenberg, Bao-xi Qu, Doris Lambracht-Washington, Min Fu*

SC02.002 Inhibition of Parkin or PINK1 Expression in SH-SY5Y Dopaminergic Cells Increases SH-SY5Y Sensitivity to Paraquat Induced Cytotoxicity  
*Loren Ornelas, Stefan Pulst, Duong Huynh*

SC02.003 Uptake and Outcome of Genetic Testing among Participants of the DuchenneConnect Registry  
*Vanessa Rangel Miller, Giovanna Spinella, Ken Loud, W. Andrew Faucett, Madhuri Hegde, Pat Furlong*

SC02.004 Family History of Melanoma and Parkinson's Disease Risk  
*Xiang Gao, Kelly Simon, Jiali Han, Michael Schwarzschild, Alberto Ascherio*

SC02.005 Genetic Studies on the NNIPPS Cohort: A New Tau Sub-Haplotype in Progressive Supranuclear Palsy  
*Michael Parkinson, Ammar Al-Chalabi, Peter Leigh, Gilbert Bensimon, Albert Ludolph, Yves Agid, Nick Wood, Karen Morrison, Alexandra Durr, Alexis Brice*

SC02.006 Transvascular Delivery of siRNAs into the Rat Brain  
*Rafael Marchesini, Vinicius Pascoal, Tiago Pereira, Rovilson Gilioli, Iscia Lopes-Cendes*

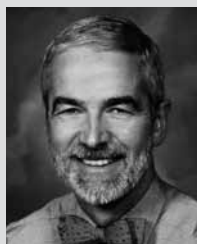
SC02.007 A Human Trial of HSV-Mediated Gene Transfer for the Treatment of Chronic Pain  
*David Fink, Darren Wolfe, James Wechuck, David Krisky, Marina Mata*

SC02.008 Candidate Gene Associations and Epistatic Interactions in Cerebrovascular Disease on MRI: The Atherosclerosis Risk in Communities (ARIC) Study  
*Myriam Fornage, Dean Shibata, David Knopman, Mark Meeks, Diane Catellier, Laura Coker, Eric Boerwinkle, Thomas Mosley*

SC02.009 Gene Expression Levels as Endophenotypes in Genome-Wide Association Studies To Identify Susceptibility Variants for Late-Onset Alzheimer's Disease  
*Nilufer Ertekin-Taner, Fanggang Zou, Minerva Carrasquillo, Vernon Pankratz, Olivia Belbin, Kevin Morgan, Samantha Wilcox, Li Ma, Louise Walker, Naomi Kouri, Linda Younkin, Samuel Younkin, Curtis Younkin, Gina Bisceglia, Julia Crook, Dennis Dickson, Ronald Petersen, Neill Graff-Radford, Steven Younkin*

SC02.010 Meta-Analysis of Genome Scans and Replication Identify CD6, ICSBP1, and TNFRSF1A as Novel Multiple Sclerosis Susceptibility Loci  
*Philip De Jager, Paul De Bakker, Joanne Wang, International MS Genetics Consortium, Alastair Compston, Stephen Sawcer, Stephen Hauser, David Hafler, Jorge Oksenberg*

## Scientific Program Highlights Plenary Session



5:15 p.m.–6:15 p.m.

Washington State Convention and Trade Center, Exhibit Hall 4A

**Moderator: Stefan M. Pulst, MD, FAAN, Chair, Science Committee and Scientific Program Subcommittee**

This plenary reviews the most critical new research from more than 2,000 studies presented throughout the 2009 Scientific Program. Education Programs will end at 5:00 p.m. Friday, allowing time for meeting participants to attend this session.

# INTEGRATED NEUROSCIENCE SESSION: TRAUMATIC BRAIN INJURY

Friday, May 1 / 1:00 p.m.–5:00 p.m.

Coordinators: Jeffery Bazarian, MD and Geoffrey Ling, MD, FAAN

## Invited Speaker Session\* / 1:00 p.m.–2:30 p.m. / Room 3AB

- 1:00 p.m.–1:20 p.m.** Emerging Issues of Moderate to Severe Traumatic Brain Injury *Geoffrey Manley, MD, PhD*  
**1:20 p.m.–1:40 p.m.** Neuroimaging of Traumatic Brain Injury *Alisa D. Gean, MD*  
**1:40 p.m.–2:00 p.m.** Emerging Issues of Concussive and Mild Traumatic Brain Injury *James P. Kelly, MD, FAAN*  
**2:00 p.m.–2:20 p.m.** Traumatic Brain Injury of Modern War *Michael Jaffee, MD*  
**2:20 p.m.–2:30 p.m.** Questions and Answers

## Poster Session / 2:30 p.m.–3:30 p.m. / Room 3AB

- IN6-1.001** The Critical Role of  $\beta$  1-Integrin and Its Interaction with the Centrosome in Astrocyte Wound Healing *Marie-Pierre Thibeault-Eybalin, Salvatore Carbonetto, Paul Holland, Huashan Peng, Yen May Ong*
- IN6-1.002** Subtypes of Post-Traumatic Epilepsy: Clinical, Electrophysiologic, and Imaging Features *Nasreen Sayed, Puneet Gupta, Mark Agostini, Paul Van Ness, Ramon Diaz-Arrastia*
- IN6-1.003** Post Traumatic Epilepsy and Anti-Epileptic Drug Therapy *Jyoti Pillai, Shruti Badhwar, Lindsay Pharmer, Andi Rosso*
- IN6-1.004** Subtypes of Traumatic Brain Injury in Children: Usefulness of CT Measures *Victoria Pan, Katrina Vandebrouinhorst, Caryn Harper, Carol Moore, Pieter Vos, Ramon Diaz-Arrastia*
- IN6-1.005** Diffusion Tensor Imaging in Traumatic Axonal Injury: Evolution of Fractional Anisotropy Measures over the First Six Months after Injury *Tricia Teoh, Leandra Uribe, Khamid Bakhadirov, Carlos Marquez De La Plata, Carol Moore, Caryn Harper, Michael Devous, Christopher Madden, Ramon Diaz-Arrastia*
- IN6-1.006** The Use of Advanced MR Imaging Methods in Traumatic Brain Injury: Development of Imaging Biomarkers for Improving Diagnosis, Outcome Prediction and Treatment *Randall Benson, Ramtilak Gattu, Zhifeng Kou, E. Haacke*
- IN6-1.007** Treatment Outcomes of Chronic Post-Traumatic Headaches in U.S. Soldiers with Mild Head Injury *Jay Erickson*
- IN6-1.008** Incidence and Clinical Features of Autonomic Dysfunction in a Military Severe Traumatic Brain Injury Population *William Allred, Louis French, Xiao-Feng Wang, Ronald Riechers*
- IN6-1.009** Head Injury Is Associated with Alzheimer Dementia and Neuropathologic Lesions in the Honolulu-Asia Aging Study *Lon White, Helen Petrovitch, G. Ross, Kamal Masaki, Robert Abbott*
- IN6-1.010** Development of Tailored Outcomes Measures for Traumatic Brain Injury and Spinal Cord Injury *David Tulskey, Pamela Kisala, David Victorson, Noelle Carozzi, David Cella*

## Platform Session / 3:30 p.m.–5:00 p.m. / Room 3AB

- 3:30 p.m.** Challenges and New Directions in the Rehabilitation of Executive Functioning: Theory, Application and Pilot Study Results *Tatjana Novakovic-Agopian, Anthony Chen, Scott Rome*
- 3:45 p.m.** Prevalence of Subclinical Seizures with Continuous EEG Monitoring *Dawn Eliashiv, Eugene Tsimerinov, Jeffrey Chung*
- IN6-2.001** **4:00 p.m.** Electroencephalography as a Screening Test for Boxers *Anthony Alessi, Jeffrey Kutcher, Stephanie Alessi*
- IN6-2.003** **4:15 p.m.** The Post-Acute Impact of Mild Traumatic Brain Injury on Memory: An fMRI Study *Pieter Vos, Maja Stulemeijer, Sieber van der Werf, Gert van Dijk, Mark Rijpkema, Guillen Fernandez*
- IN6-2.004** **4:30 p.m.** Post-Traumatic Headaches after Mild Head Injury in U.S. Soldiers Returning from Iraq or Afghanistan *Brett Theeler, Frederick Flynn, Jay Erickson*
- IN6-2.005** **4:45 p.m.** Headaches among Veterans of Operations Iraqi Freedom and Enduring Freedom with Mild Traumatic Brain Injury Caused by Exposures to Explosions *Robert Ruff, Suzanne Ruff, Xiao-Feng Wang*
- IN6-2.006**



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# GENERAL INFORMATION

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The AAN designates select Annual Meeting activities for a specific number of AMA PRA Category 1 Credit™ hours towards the American Medical Association Physician's Recognition Award. (See individual program description for specific number of credits per program.) Physicians should only claim credit commensurate with the extent of their participation in the activity.

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AMA PRA Category 1 Credits are awarded for courses, seminars, workshops, luncheons, and kick-off programs. (See individual program description for specific number of credits per program). Confirmation of CME credits earned at the 2009 Annual Meeting will be sent to attendees approximately four to six weeks after the Annual Meeting.

### CME: Scientific Program

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The AAN requires all Annual Meeting presenters to disclose if a product is not labeled for the use being discussed or if the product is still investigational. Unlabeled use disclosures will be included in individual program materials.

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Some Annual Meeting education and scientific programs are supported in part by education grants from the AAN's industry supporters. Support acknowledgment statements are included in the individual program descriptions and materials. Although industry support is received, all programs are developed and implemented solely by the AAN Education Committee and its Annual Meeting Subcommittee, the Science Committee and its Scientific Program Subcommittee, and AAN staff. Industry supporters must sign an AAN Letter of Agreement stating they will not influence the faculty or directors and agreeing to no direct control or input. 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 is available in Seattle. Check with the concierge at your hotel on or before your arrival to make your arrangements.

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Complimentary shuttle bus service will be provided between designated official AAN hotels and the convention center. Schedules will be available at the Washington State Convention and Trade Center and will also be posted in each hotel lobby.

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A wheelchair-accessible First Aid station is located on Level 4 of the Washington State Convention and Trade Center. The station is staffed by licensed medical professionals and fully equipped with supplies, including automatic external defibrillators (AED). A private area for infant nursing is also available. The station is operational throughout the duration of the Annual Meeting.

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The AAN strictly prohibits all unauthorized photography (flash, digital, or otherwise), audio and/or videotaping during the Annual Meeting. Equipment will be confiscated.

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Registration and attendance at, or participation in, AAN/AAN Professional Association meetings and other related activities constitutes attendee's authorization to AAN's use and distribution (both now and in the future) of the attendee's image or voice in photographs, video recordings, electronic reproductions, and audio recordings of the events and activities

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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.

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The Washington State Convention and Trade Center 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.

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Only authorized media may use the Press Room at the Annual Meeting. Journalists must check in at the Press Room and provide proper credentials. Media guidelines, press releases, and other materials will be provided. For more information, contact Angela Babb at [ababb@aan.com](mailto:ababb@aan.com) or (651) 695-2789.

## **Volunteer Opportunities**

### **Education and Scientific Program Monitors**

Monitors are needed for all education program offerings and platform sessions to distribute and collect evaluation materials and assist directors, faculty, session co-chairs, and staff as required. The AAN will waive all monitors' Annual Meeting registration and program fees as well as grant CME credit for the monitored program. Space is available on a first-come, first-served basis. For an application form or more information, contact Kyle Krause at [kkrause@aan.com](mailto:kkrause@aan.com) or (651) 695-2733.

### **EMG Skills Workshop Volunteers**

Volunteers are needed to participate in the EMG Clinical Skills Workshop on Monday, April 27, and Friday, May 1. 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. For more information, contact Naomi Reeves at [nreeves@aan.com](mailto:nreeves@aan.com) or (651) 695-2814.

## **Weather/Attire**

The climate in Seattle in early spring is generally cool and damp. In April, temperatures usually range from 42 degrees to 70 degrees Fahrenheit. It can be quite wet, so a waterproof coat and umbrella are a good idea, as are layered clothing and a good jacket. 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.

# ANNUAL MEETING REGISTRATION

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Enjoy the convenience and efficiency of registering online at [www.aan.com/abstractreg](http://www.aan.com/abstractreg).

### Early Registration Deadline: March 20, 2009

Register early to avoid increased general registration and Education Program fees. Any registrations received after March 20, 2009, will not be processed. After March 20, 2009, registration is available on-site only. On-site registration opens at 8:00 a.m. on Saturday, April 25, 2009, at the Washington State Convention and Trade Center.

US and Canadian registrants who submit their registration form before March 20, 2009, will receive Annual Meeting name badges and Education Program tickets by mail.

## Fees

### General Registration Fee

The general registration fee is mandatory for all registrants and is determined by AAN member type.

### AAN Member Types Include:

**Medical Student/PhD Candidate Members:** Medical Students and PhD candidates who are members of the AAN are not required to pay the general registration fee and pay non-neurologist rates for Education Programs.

**Junior Members:** Non-neurologist rates are for Junior (resident, fellow, post-doctoral graduate) members of the AAN. Physicians in training who are not Junior members must pay nonmember rates.

**Business Administrator, Research Scientist, Non-Neurologist Clinician Members:** These members pay non-neurologist member rates.

**Fellow, Active, Associate, Honorary, and Senior Members:** AAN members must pay their current year's dues to register at neurologist member rates. Honorary and Senior members are not required to pay the general registration fee.

### Special Membership Considerations

**Nonmembers:** Become an AAN member and receive significant discounts on Annual Meeting registration and Education Program fees. For an AAN membership application, contact AAN Member Services at (800) 879-1960 or (651) 695-2717.

**Medical Student/PhD Candidate nonmembers:** To be eligible for the student rate as a nonmember, a student ID card or a letter from a professor must be submitted. The general Annual Meeting registration fee will be waived but nonmember rates must be paid for all Education Programs. For an AAN membership application, contact AAN Member Services at (800) 879-1960 or (651) 695-2717 (international).

### Underserved Countries

If you are from one of the following countries, you are entitled to receive your general registration fee waived and access to lower cost hotels. To register online, enter an Invitation Code of "unmbr" if you are an AAN member or "unnon" if you are not an AAN member. The countries are: Afghanistan, Bangladesh, Benin, Bolivia, Burkina Faso, Burundi, Cambodia, Cameroon, Central African Rep., Chad, Comoros, Congo Dem. Rep., Congo

Rep., Cote d'Ivoire, Eritrea, Ethiopia, Gambia, Ghana, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Kenya, Korea Dem. Rep. North, Kyrgyz Rep., Lao PDR, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Myanmar, Nepal, Nicaragua, Niger, Nigeria, Pakistan, Papua New Guinea, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, Sudan, Tajikistan, Tanzania, Togo, Uganda, Uzbekistan, Vietnam, Yemen Rep., Zambia, and Zimbabwe.

## Support Research, Buy a Brain

Purchase a "brain" and help ensure the future of neurology and support clinical research training fellowships. For each \$5 donation, you will receive a colorful brain certificate to which you can add your name or the name of someone you are honoring. Donate now on the registration form to support research in neurology!

## AAN Foundation Wine Tasting and Auction

Sample some of the finest wines in the Pacific Northwest and enjoy an array of food, music, and fun at this exclusive event on Wednesday, April 29. Bid on exciting silent and live auction prizes including wine, entertainment, and gifts. Proceeds benefit the AAN Foundation Research Program. Tickets are \$100 per guest. Register today!

## Scientific Program Presenters

All platform and poster presenters must submit a registration form and pay the applicable registration fee. Note that on-site fees are significantly higher. Registration by March 20, 2009, is encouraged.

## Education Programs

There is a fee for each selected offering within the Education Program. Enrollment is limited. Registration by March 20, 2009, is encouraged.

## Syllabi on CD / Webcast-on-Demand

If you place an order for Syllabi on CD before March 20, 2009, you receive a discounted price of \$99 for members and \$149 for nonmembers. The 2009 Annual Meeting Practice CD are available for \$39. Price includes sales tax. Members and nonmembers can purchase access to the AAN online library Webcast-on-Demand if purchasing the Syllabi on CD at a reduced rate.

AAN Junior members may purchase the 2009 Annual Meeting Syllabi on CD at a discounted pre-meeting rate of \$49. This rate is only available to AAN Junior members (one copy per Junior member). Note: The discounted rate is only available until March 20, 2009.

## Celebration for Research; Neuro Bowl<sup>®</sup>, Neuro Idol, Josh Blue on Main Stage, Neuro Hop, and more!

Each registered meeting attendee will receive one free ticket to these celebration events. Guest tickets are \$50 each. See page 22.

## American Academy of Neurology & American Academy of Neurology Foundation Awards Luncheon

Join the leaders of the AAN, the Science Committee, and the Lecture Awards Subcommittee in honoring recipients of the 2009 Scientific Awards Program on April 29, 2009. A limited number of seats are available for \$50. Junior and Medical Student members may attend this event at no cost, but must obtain a ticket through registration. Microsoft Co-Founder and well-known philanthropist Paul G. Allen is the recipient of the 2009 Public Leadership in Neurology Award.

## What's Free with Your Badge?

Every Annual Meeting attendee has free access to a variety of programs and events, including:

- Scientific Platform and Poster Sessions
- Plenary Sessions
- Celebration for Research: Neurobowl, Neuro Idol, Josh Blue on Main Stage, and Neuro Hop
- Advocacy Events
- Guidelines, Practice, and Advocacy Open House
- All Colloquiums
- Exhibits (guest passes are available for purchase)
- Resident Activities
- Scientific Topic Highlights
- Corporate Therapeutic Updates

## Group Registration Deadline: March 6

Group registrations are those in which 10 or more individuals' fees are paid for with one check or credit card. No administrative fee is charged to register a group as long as housing is secured through the AAN's official housing company, Convention Management Resources (CMR). Groups that have not secured housing through CMR can still register as a group; however, a \$1,000 administrative fee will be charged. Contact CMR's Group Registration at (800) 676-4226 (US/Canada) or (415) 979-2283 (international) to receive special registration instructions. See page 110 for housing information.

### Download Your Syllabi

Obtaining your Education Program syllabi is quicker and easier than ever. All registered attendees will be able to download the full syllabi for selected programs. Syllabi can be downloaded starting in April. All registered attendees will receive an email notification in April. You can also pick up a printed copy on-site at the room where your course is located. Program syllabi will be available 30 minutes prior to the start in the program's room.

## Exhibits Only

To view the exhibits without registering for the Annual Meeting, a single-day pass is available at on-site registration for \$100 per day.

## Changes in Education Programs

Select education programs carefully. An administrative fee of \$20 will be charged for each program change or cancellation. To assure correct mailing of your name badge and tickets, changes must be submitted in writing and received no later than March 20, 2009. After that date, changes must be made on-site and will be charged an administrative fee of \$30 for each program change or cancellation.

## Canceled or Closed Programs

Education programs may be canceled or closed due to capacity or insufficient enrollment. If any selections are canceled or closed and payment was made by credit card, the amount charged will include only the available programs. If paid by check, a full refund will be issued for affected programs. Allow four to six weeks after the Annual Meeting for processing refunds.

### CANCELLATIONS/REFUNDS OF REGISTRATION

Until March 20, 2009..... Full refund  
March 21–April 17, 2009..... Refund less \$50 administrative fee  
After April 17, 2009..... No refund

All cancellations must be submitted in writing to [aan2009reg@cmrus.com](mailto:aan2009reg@cmrus.com) or faxed to (414) 979-2260.

No-shows will not receive a refund.

Name substitutions are not permitted.

No refunds will be processed for amounts of \$20 or less.

Programs are subject to cancellation if enrollment is insufficient. In the event of cancellation, registration for the cancelled course will be fully refunded.

The AAN is not responsible for airfare, hotel, or other costs incurred by participants in the event of program or registration cancellation.

## Special Needs Deadline: April 10

The Washington State Convention and Trade Center and the AAN are in compliance with the Americans with Disabilities Act and 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, contact Franziska Schwarz no later than April 10, 2009, at [fschwarz@aan.com](mailto:fschwarz@aan.com) or (651) 695-2807.

*Note: Kosher meals can be provided at any breakfast, lunch, or dinner seminar and should be arranged no later than March 20, 2009, by contacting Franziska Schwarz at (651) 695-2807.*

*There is a \$25 surcharge per meal. On-site requests cannot be accommodated.*



# HOW TO REGISTER

The deadline for early registration is March 20, 2009. After this date, you must register on-site. Register quickly and easily at [www.aan.com/abstractreg](http://www.aan.com/abstractreg)

## Step 1: Personal Information

Remove the mailing label on the back of this book and affix it to the Personal Information box on the registration form. If the information on the label is incorrect, make corrections on the label or in the space provided.

*Note: It is important that this information be current. A confirmation letter will be emailed or faxed. Name badge, tickets, and CME transcripts will be mailed to the address provided.*

Indicate your Primary Focus of Practice: Aging/Dementia, Behavioral Neurology, Cerebrovascular Disease, Chronic Pain, CNS Infectious Disease, Critical Care, EEG, EMG, Epilepsy, General Neurology, Headache, Interventional Neurology, Movement Disorders, Neuro-oncology, Neuro-ophthalmology, Neuropharmacology, Neurorehabilitation, Sleep Disorders, Spine Related Conditions, Worker's Compensation, or currently not in practice.

## Step 2: Education Program

Shade the boxes corresponding to the Education Program numbers for which you wish to register.

## Step 3: Fees

**Box A: General Registration Fee:** Select the appropriate fee. All attendees and Scientific Program presenters are required to pay this fee. See page 106 for fee inclusion details.

**Box B: Education Program Fees:** Calculate the total fees using the Education Program Fee Schedule.

**Box C: Virtual Annual Meeting (optional):** Select a Syllabi on CD, Webcast-on-Demand, and/or Practice CD. Price includes applicable sales tax. If you do not pick up your CD at the AAN Store during the Annual Meeting, there will be an additional \$15 shipping and handling charge.

**Box D: Additional Activities (optional):** Select a guest ticket for the Celebration for Research and the AAN/AAN Foundation Awards Luncheon, Wine Tasting and Auction, Run/Walk for Brain Research, and Buy a Brain. Check box to select a ticket to the Awards Luncheon.

**TOTAL:** Enter the total of your selected fees.

## Step 4: Payment

Indicate method of payment. Full payment in US funds must accompany your registration form. Include credit card information or enclose a check made payable to the **American Academy of Neurology**. Note: Government credit cards are not accepted for advance registration, as they cannot be processed without the actual credit card. Government credit cards may be used on-site.

## Deadline: March 20

Registrations will be processed according to the date of receipt. Registrations received after March 20, 2009, will not be processed. After March 20, 2009, you must register on-site. On-site registration opens Saturday, April 25, 2009, at 8:00 a.m., at the Washington State Convention and Trade Center.

## Questions

US/Canada: (800) 676-4226  
International: (415) 979-2283  
Email: [aan2009reg@cmrus.com](mailto:aan2009reg@cmrus.com)

## Education Program Fee Schedule

Use this table to calculate the fees for the number of registered programs. Tally the number of each type of program. Multiply the amount by the fee for your membership type. Transfer the total amount to Box B on the registration form.

*Note: Do not use this schedule for on-site registration. Neurologist member and nonmember fees increase \$20.00 per program on-site.*

| Program Type:              | Non-Neurologist Member:<br>(Junior, Research Scientist, Non-neurologist Clinician,<br>Business Administrators, Students) | Neurologist Member:<br>(Honorary, Senior, Fellow, Active,<br>Associate) | Nonmember:      |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|-----------------|
| AC/PC (Half-Day Course)    | x \$45 = _____                                                                                                           | x \$105 = _____                                                         | x \$130 = _____ |
| AS (After-Dinner Seminar)  | x \$75 = _____                                                                                                           | x \$105 = _____                                                         | x \$140 = _____ |
| BS (Breakfast Seminar)     | x \$70 = _____                                                                                                           | x \$90 = _____                                                          | x \$115 = _____ |
| CS (Case Studies Program)  | x \$80 = _____                                                                                                           | x \$110 = _____                                                         | x \$145 = _____ |
| CL (Coding Lunch)          | x \$70 = _____                                                                                                           | x \$90 = _____                                                          | x \$115 = _____ |
| DS (Dinner Seminar)        | x \$110 = _____                                                                                                          | x \$155 = _____                                                         | x \$175 = _____ |
| EP* (Directors Conference) | x \$125 = _____                                                                                                          | x \$250 = _____                                                         | x \$375 = _____ |
| FC (Full-Day Course)       | x \$90 = _____                                                                                                           | x \$205 = _____                                                         | x \$255 = _____ |
| KP (Kick-Off Program)      | x \$55 = _____                                                                                                           | x \$80 = _____                                                          | x \$100 = _____ |
| LS (Luncheon Seminar)      | x \$70 = _____                                                                                                           | x \$90 = _____                                                          | x \$115 = _____ |
| PW (PM Skills Workshop)    | x \$180 = _____                                                                                                          | x \$230 = _____                                                         | x \$305 = _____ |
| SC** (Science Conference)  | x \$100 = _____                                                                                                          | x \$150 = _____                                                         | x \$200 = _____ |
| SW (Skills Workshop)       | x \$350 = _____                                                                                                          | x \$455 = _____                                                         | x \$605 = _____ |
| TP (Therapy Program)       | x \$20 = _____                                                                                                           | x \$40 = _____                                                          | x \$50 = _____  |

### Total Program fees

(Enter in Box B on Registration Form): \_\_\_\_\_

\*If you are attending the Clerkship and Program Directors' Conference (1EP.001) only and no other Annual Meeting events, the cost increases \$50.

\*\* If you are attending the Future of Neuroscience Conference (7SC.001) only, and no other Annual Meeting events, the cost increases \$70 (\$170 on-site) and includes Thursday and Friday Scientific events. Medical students and PhD candidates may attend at no charge but MUST register and receive a ticket.

# AAN 61<sup>ST</sup> ANNUAL MEETING REGISTRATION FORM / DEADLINE: MARCH 20, 2009

## 1. Personal Information / One form per registrant

AAN ID Number \_\_\_\_\_ Primary Focus of Practice \_\_\_\_\_

Name (last, first, middle) and degree (MD, DO, PhD, RN) \_\_\_\_\_

Address \_\_\_\_\_

City/State \_\_\_\_\_ ZIP/Postal Code \_\_\_\_\_

Telephone \_\_\_\_\_ Fax \_\_\_\_\_

Email \_\_\_\_\_

## 3. Fees

| BOX A: General Registration Fee                                                                                        |                 |                |
|------------------------------------------------------------------------------------------------------------------------|-----------------|----------------|
|                                                                                                                        | Before March 20 | After March 20 |
| <b>Student</b>                                                                                                         | \$0             | \$0            |
| <b>Non-Neurologist Member</b><br>(Junior, Business Administrator,<br>Non-Neurologist Clinician,<br>Research Scientist) | \$70            | \$100          |
| <b>Neurologist Member</b><br>(Active, Associate, Fellow)                                                               | \$190           | \$305          |
| <b>Neurologist Member</b><br>(Senior, Honorary)                                                                        | \$0             | \$0            |
| <b>Nonmember</b>                                                                                                       | \$445           | \$645          |

| BOX B: Education Program Fees                  |  |  |
|------------------------------------------------|--|--|
| Calculated in program fee schedule on page 108 |  |  |

| BOX C: Virtual Annual Meeting                           |       |       |
|---------------------------------------------------------|-------|-------|
| Syllabi on CD                                           |       |       |
| Junior member (limit 1)                                 | \$49  | \$169 |
| Member                                                  | \$99  | \$169 |
| Nonmember                                               | \$149 | \$199 |
| Webcast-On-Demand (with purchase of Syllabi on CD)      |       |       |
| Junior member                                           | \$49  | \$99  |
| Member                                                  | \$99  | \$149 |
| Nonmember                                               | \$149 | \$199 |
| Webcast-On-Demand (if Not purchasing the Syllabi on CD) |       |       |
| Junior member                                           | \$69  | \$119 |
| Member                                                  | \$119 | \$169 |
| Nonmember                                               | \$169 | \$219 |
| <b>Practice CD</b>                                      | \$39  | \$39  |

| BOX D: Additional Opportunities (check all that apply)                                           |           |       |
|--------------------------------------------------------------------------------------------------|-----------|-------|
| <b>Celebration for Research Guest Tickets</b><br>(one free ticket per registrant)                | \$50 ea.  | _____ |
| <b>Run/Walk for Brain Research</b>                                                               | \$25 ea.  | _____ |
| <b>AAN and AAN Foundation Awards Luncheon</b><br>(Junior Members and Students free upon request) | \$50 ea.  | _____ |
| <b>Wine Tasting and Auction</b>                                                                  | \$100 ea. | _____ |
| <b>Support Research, Buy a Brain</b> (enter donation amount)                                     |           | _____ |

|                                                                     |       |
|---------------------------------------------------------------------|-------|
| <b>TOTAL</b>                                                        | _____ |
| Registrations received after March 20, 2009, will not be processed. |       |

## 4. Payment

**Check/Money Order** Payment must accompany registration. Make check payable to American Academy of Neurology (US funds only). A \$25 charge will apply to checks returned for insufficient funds.

VISA  Master Card  American Express  Diner's Club

Card number: \_\_\_\_\_

Expiration date: \_\_\_\_ / \_\_\_\_ No government credit cards.

I authorize the AAN to charge my credit card the amount determined by the AAN as registration fees.

Signature \_\_\_\_\_

Fed ID# 41-0726167AAN

## 2. Education Program

There is a fee for each selected Education Program. Calculate the total in the Education Program Fee Schedule on page 108 and enter in Box B in the Fees section. To register for a program, shade the box.

### Saturday, April 25, 2009

- |                                  |                                  |                                  |                                  |
|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| <input type="checkbox"/> 1EP.001 | <input type="checkbox"/> 1PC.002 | <input type="checkbox"/> 1KP.004 | <input type="checkbox"/> 1KP.008 |
| <input type="checkbox"/> 1AC.001 | <input type="checkbox"/> 1KP.001 | <input type="checkbox"/> 1KP.005 | <input type="checkbox"/> 1KP.009 |
| <input type="checkbox"/> 1FC.001 | <input type="checkbox"/> 1KP.002 | <input type="checkbox"/> 1KP.006 |                                  |
| <input type="checkbox"/> 1PC.001 | <input type="checkbox"/> 1KP.003 | <input type="checkbox"/> 1KP.007 |                                  |

### Sunday, April 26, 2009

- |                                  |                                   |                                  |                                  |
|----------------------------------|-----------------------------------|----------------------------------|----------------------------------|
| <input type="checkbox"/> 2BS.001 | <input type="checkbox"/> 2AC.004  | <input type="checkbox"/> 2CL.001 | <input type="checkbox"/> 2DS.004 |
| <input type="checkbox"/> 2BS.002 | <input type="checkbox"/> 2AC.005  | <input type="checkbox"/> 2LS.001 | <input type="checkbox"/> 2DS.005 |
| <input type="checkbox"/> 2BS.003 | <input type="checkbox"/> 2FC.001  | <input type="checkbox"/> 2PC.001 | <input type="checkbox"/> 2DS.006 |
| <input type="checkbox"/> 2BS.004 | <input type="checkbox"/> 2FC.002  | <input type="checkbox"/> 2PC.002 | <input type="checkbox"/> 2DS.007 |
| <input type="checkbox"/> 2BS.005 | <input type="checkbox"/> 2FC.003  | <input type="checkbox"/> 2PC.003 |                                  |
| <input type="checkbox"/> 2BS.006 | <input type="checkbox"/> 2FC.004  | <input type="checkbox"/> 2PC.004 |                                  |
| <input type="checkbox"/> 2BS.007 | <input type="checkbox"/> 2FC.005  | <input type="checkbox"/> 2PC.005 |                                  |
| <input type="checkbox"/> 2AC.001 | <input type="checkbox"/> 2FC.006  | <input type="checkbox"/> 2DS.001 |                                  |
| <input type="checkbox"/> 2AC.002 | <input type="checkbox"/> 2FC.007  | <input type="checkbox"/> 2DS.002 |                                  |
| <input type="checkbox"/> 2AC.003 | <input type="checkbox"/> 2PW.001* | <input type="checkbox"/> 2DS.003 |                                  |

\* Must also register for 2AC.004

### Monday, April 27, 2009

- |                                  |                                  |                                  |                                  |
|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| <input type="checkbox"/> 3BS.001 | <input type="checkbox"/> 3AC.005 | <input type="checkbox"/> 3PC.002 | <input type="checkbox"/> 3DS.008 |
| <input type="checkbox"/> 3BS.002 | <input type="checkbox"/> 3AC.006 | <input type="checkbox"/> 3PC.003 | <input type="checkbox"/> 3AS.001 |
| <input type="checkbox"/> 3BS.003 | <input type="checkbox"/> 3FC.001 | <input type="checkbox"/> 3PC.004 | <input type="checkbox"/> 3AS.002 |
| <input type="checkbox"/> 3BS.004 | <input type="checkbox"/> 3FC.002 | <input type="checkbox"/> 3PC.005 | <input type="checkbox"/> 3AS.003 |
| <input type="checkbox"/> 3BS.005 | <input type="checkbox"/> 3FC.003 | <input type="checkbox"/> 3PC.006 | <input type="checkbox"/> 3AS.004 |
| <input type="checkbox"/> 3BS.006 | <input type="checkbox"/> 3FC.004 | <input type="checkbox"/> 3DS.001 | <input type="checkbox"/> 3AS.005 |
| <input type="checkbox"/> 3BS.007 | <input type="checkbox"/> 3FC.005 | <input type="checkbox"/> 3DS.002 | <input type="checkbox"/> 3AS.006 |
| <input type="checkbox"/> 3BS.008 | <input type="checkbox"/> 3SW.001 | <input type="checkbox"/> 3DS.003 | <input type="checkbox"/> 3AS.007 |
| <input type="checkbox"/> 3AC.001 | <input type="checkbox"/> 3CL.001 | <input type="checkbox"/> 3DS.004 | <input type="checkbox"/> 3AS.008 |
| <input type="checkbox"/> 3AC.002 | <input type="checkbox"/> 3CL.002 | <input type="checkbox"/> 3DS.005 |                                  |
| <input type="checkbox"/> 3AC.003 | <input type="checkbox"/> 3CL.003 | <input type="checkbox"/> 3DS.006 |                                  |
| <input type="checkbox"/> 3AC.004 | <input type="checkbox"/> 3PC.001 | <input type="checkbox"/> 3DS.007 |                                  |

### Tuesday, April 28, 2009

- |                                  |                                  |                                  |                                  |
|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| <input type="checkbox"/> 4BS.001 | <input type="checkbox"/> 4BS.004 | <input type="checkbox"/> 4PC.001 | <input type="checkbox"/> 4PC.004 |
| <input type="checkbox"/> 4BS.002 | <input type="checkbox"/> 4LS.001 | <input type="checkbox"/> 4PC.002 | <input type="checkbox"/> 4PC.005 |
| <input type="checkbox"/> 4BS.003 | <input type="checkbox"/> 4LS.002 | <input type="checkbox"/> 4PC.003 |                                  |

### Wednesday, April 29, 2009

- |                                  |                                  |                                  |                                  |
|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| <input type="checkbox"/> 5BS.001 | <input type="checkbox"/> 5LS.001 | <input type="checkbox"/> 5PC.004 | <input type="checkbox"/> 5CS.003 |
| <input type="checkbox"/> 5BS.002 | <input type="checkbox"/> 5PC.001 | <input type="checkbox"/> 5PC.005 | <input type="checkbox"/> 5CS.004 |
| <input type="checkbox"/> 5BS.003 | <input type="checkbox"/> 5PC.002 | <input type="checkbox"/> 5CS.001 |                                  |
| <input type="checkbox"/> 5BS.004 | <input type="checkbox"/> 5PC.003 | <input type="checkbox"/> 5CS.002 |                                  |

### Thursday, April 30, 2009

- |                                  |                                  |                                  |                                  |
|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| <input type="checkbox"/> 6BS.001 | <input type="checkbox"/> 6LS.001 | <input type="checkbox"/> 6PC.004 | <input type="checkbox"/> 6CS.001 |
| <input type="checkbox"/> 6BS.002 | <input type="checkbox"/> 6PC.001 | <input type="checkbox"/> 6TP.001 | <input type="checkbox"/> 6CS.002 |
| <input type="checkbox"/> 6BS.003 | <input type="checkbox"/> 6PC.002 | <input type="checkbox"/> 6TP.002 | <input type="checkbox"/> 6CS.003 |
| <input type="checkbox"/> 6BS.004 | <input type="checkbox"/> 6PC.003 | <input type="checkbox"/> 6TP.003 | <input type="checkbox"/> 6CS.004 |

### Friday, May 1, 2009

- |                                  |                                  |                                  |                                  |
|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| <input type="checkbox"/> 7BS.001 | <input type="checkbox"/> 7AC.002 | <input type="checkbox"/> 7FC.005 | <input type="checkbox"/> 7SW.001 |
| <input type="checkbox"/> 7BS.002 | <input type="checkbox"/> 7AC.003 | <input type="checkbox"/> 7FC.006 | <input type="checkbox"/> 7TP.001 |
| <input type="checkbox"/> 7BS.003 | <input type="checkbox"/> 7AC.004 | <input type="checkbox"/> 7SC.001 | <input type="checkbox"/> 7TP.002 |
| <input type="checkbox"/> 7BS.004 | <input type="checkbox"/> 7AC.005 | <input type="checkbox"/> 7CL.001 | <input type="checkbox"/> 7TP.003 |
| <input type="checkbox"/> 7BS.005 | <input type="checkbox"/> 7AC.006 | <input type="checkbox"/> 7CL.002 |                                  |
| <input type="checkbox"/> 7BS.006 | <input type="checkbox"/> 7FC.001 | <input type="checkbox"/> 7PC.001 |                                  |
| <input type="checkbox"/> 7BS.007 | <input type="checkbox"/> 7FC.002 | <input type="checkbox"/> 7PC.002 |                                  |
| <input type="checkbox"/> 7BS.008 | <input type="checkbox"/> 7FC.003 | <input type="checkbox"/> 7PC.003 |                                  |
| <input type="checkbox"/> 7AC.001 | <input type="checkbox"/> 7FC.004 | <input type="checkbox"/> 7PC.004 |                                  |

### Saturday, May 2, 2009

- |                                  |                                  |                                  |                                  |
|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| <input type="checkbox"/> 8BS.001 | <input type="checkbox"/> 8BS.005 | <input type="checkbox"/> 8AC.001 | <input type="checkbox"/> 8AC.005 |
| <input type="checkbox"/> 8BS.002 | <input type="checkbox"/> 8BS.006 | <input type="checkbox"/> 8AC.002 | <input type="checkbox"/> 8AC.006 |
| <input type="checkbox"/> 8BS.003 | <input type="checkbox"/> 8BS.007 | <input type="checkbox"/> 8AC.003 | <input type="checkbox"/> 8AC.007 |
| <input type="checkbox"/> 8BS.004 | <input type="checkbox"/> 8BS.008 | <input type="checkbox"/> 8AC.004 | <input type="checkbox"/> 8AC.008 |

**REGISTER:** Online: [www.aan.com/abstractreg](http://www.aan.com/abstractreg) / Fax: (415) 979-2260

Mail: AAN Registration / CMR

33 New Montgomery, Suite 1420 / San Francisco, CA 94105

**QUESTIONS:** [aan2009reg@cmrus.com](mailto:aan2009reg@cmrus.com)

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

# HOTEL RESERVATIONS

## Hotel Reservations

Take advantage of the AAN's special hotel rates to make your trip more affordable. Annual Meeting hotel accommodations are processed by Convention Management Resources (CMR).

## AAN Online Hotel Reservations

[www.aan.com/abstractreg](http://www.aan.com/abstractreg)

The AAN makes it easy and convenient to book your hotel rooms for the 61<sup>st</sup> 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

## Mail, Fax, or Telephone Reservations

All correspondence, questions, and inquiries should be directed to CMR at:

### Mail:

AAN Housing c/o CMR  
33 New Montgomery, Suite 1420  
San Francisco, CA 94105  
email: [aan2009housing@cmrus.com](mailto:aan2009housing@cmrus.com)

### Fax:

Credit card reservations only  
(415) 979-2260

### Phone:

Credit card reservations only  
US/Canada (800) 676-4226  
International (415) 979-2283

### Hours:

Monday–Friday  
6:00 a.m.–6:00 p.m. (PST)

[www.aan.com/go/reg](http://www.aan.com/go/reg)

## Deposits

- All hotels require a credit card guarantee or a check deposit of \$300 per room and \$500 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 or a deposit.
- 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.

## Changes and Cancellations

- You will receive your hotel confirmation from CMR. This is the only confirmation you will receive.
- Contact CMR if your housing confirmation is not received within one week of mailing.
- Please check your arrival and departure dates carefully.  
*Note: Some hotels may charge a penalty for changes made to your departure date after you have checked in.*
- After March 20, 2009, you may still submit your hotel form to CMR. After this date, however, rooms are subject to availability.

## Group Accommodations

Blocks of 10 or more sleeping rooms are considered a group. Fax your written request to (415) 979-2260, or email to [aan2009housing@cmrus.com](mailto:aan2009housing@cmrus.com), and you will be contacted by an AAN Housing Consultant.

## Additional Tax/Assessments

- Rates do not include the 15.60% hotel tax.
- An \$8 per night assessment fee is included to cover the expense of the convention center.



# HOTEL RESERVATION FORM

If more than one room is required, this form may be photocopied

**RESERVATION DEADLINE: MARCH 20, 2009 / MEETING DATES: APRIL 25–MAY 2, 2009**

## 1. Confirmation to:

Please type or print clearly. One form per registrant. Confirmations sent by mail, fax, or email.

Name (last, middle, first)

Company name

Mailing address

City/State/Zip

Country

Telephone

Fax

Email

International attendees indicate country/city code: \_\_\_\_\_

## 2. Hotel Preference:

Please indicate your choice (list ten hotels).

Hotel rooms assigned on a first-come, first-served basis.

1. \_\_\_\_\_ 6. \_\_\_\_\_
2. \_\_\_\_\_ 7. \_\_\_\_\_
3. \_\_\_\_\_ 8. \_\_\_\_\_
4. \_\_\_\_\_ 9. \_\_\_\_\_
5. \_\_\_\_\_ 10. \_\_\_\_\_

## 3. Accommodations:

- Single:** 1 person, 1 bed       **Double:** 2 people, 1 bed  
 **Double/Double:** 2 people, 2 beds       **Triple:** 3 people, 2 beds  
 **Quad:** 4 people, 2 beds       **Suite:** 1 bedroom  
 **Suite:** 2 bedrooms

**Note: Suites are available on a limited basis. All persons requesting a suite will be contacted by an AAN Housing Consultant.**

## 4. Arrivals and Departures:

Day and date of arrival: \_\_\_\_\_

Day and date of departure: \_\_\_\_\_

**Note: Some hotels may charge a penalty for departure date changes after check-in.**

## 5. Special Requests:

- Special Needs: \_\_\_\_\_  
 Smoking room       Nonsmoking room

**Note: Special requests are forwarded to the hotels for their consideration and are subject to availability.**

## 6. Occupants:

List all occupants, giving primary occupant first:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

## 7. Payment:

All AAN hotel reservations must be guaranteed with a credit card or check deposit of \$300 per room, \$500 per suite. No hotel reservations will be processed without a guarantee. Cancellation deadline is seven days prior to arrival date. Late cancellations subject to forfeit of room deposit or one night's room plus tax charge.

Check enclosed; Check no. \_\_\_\_\_  
**Payable to: Convention Management Resources**

Visa     MasterCard     American Express     Diner's Club

Card number: \_\_\_\_\_

Expiration date: \_\_\_\_\_

Cardholder's name: \_\_\_\_\_

Signature: \_\_\_\_\_

**To register online visit [www.aan.com/amrapreg](http://www.aan.com/amrapreg)**

### By mail:

AAN Housing/CMR  
33 New Montgomery, Suite 1420  
San Francisco, CA 94105

### By email:

[aan2009housing@cmrus.com](mailto:aan2009housing@cmrus.com)

### By phone: Credit card reservations only

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

### By fax: Credit card reservations only

(415) 979-2260

### Hours:

Monday–Friday  
6:00 a.m.–6:00 p.m. (PST)

# TRAVEL INFORMATION

## General Information

Book your travel now to Seattle and take advantage of special airline discounts available to meeting attendees and their companions.

## Airport

Seattle is served by the Seattle/Tacoma International Airport, which is located approximately 16 miles from the downtown area.

## Reservations and Discounts

### Carlson Wagonlit Travel

Carlson Wagonlit Travel has been selected as the official travel agency for the Annual Meeting. As the world's second-largest travel management company, Carlson Wagonlit Travel provides quality service and exceptional value. For discounted airline tickets to the Annual Meeting and all of your pre- or post-meeting vacation plans including tours, event tickets, car rental, and more, contact Carlson Wagonlit Travel at:

**Phone:** (866) 978-1071

**Email:** [aanparticipants@carlsonwagonlit.com](mailto:aanparticipants@carlsonwagonlit.com)

**Hours:** Monday–Friday, 7:30 a.m.–5:00 p.m. CST *Closed weekends and holidays*

A \$24 domestic/\$52 international per ticket service charge will be assessed.

## Direct Through Airlines

You may also call your preferred airline directly and receive a 5- to 10- percent discount off regularly published fares. You must reference the AAN Annual Meeting and provide the appropriate airline discount codes listed below.

| Airline   | Discount Codes | Phone Number   |
|-----------|----------------|----------------|
| Northwest | NM2PV          | (800) 328-1111 |
| United    | 585DH          | (800) 521-4041 |

Discounts are subject to availability—book well in advance. Normal mileage and status upgrades apply for all airline programs.

### Travel Updates

For travel information updates, visit the AAN Annual Meeting website at [www.aan.com/am](http://www.aan.com/am).

# AAN ALLIANCE TOUR REGISTRATION

## Tours Available in the Seattle Area

The AAN Alliance offers a variety of tours during the AAN's 61<sup>st</sup> Annual Meeting in Seattle. Tours are open to all Annual Meeting attendees, their families, and guests. Tours are sponsored by the AAN Alliance and operated by the Seattle Hospitality tour company. Reservations for all tours are available by advance registration only and must be received by March 25, 2009, to guarantee space.

To register, contact Seattle Hospitality Services:

Jani Lauvrak Lee  
1000 Dexter Ave N  
Suite 502  
Seattle, WA 98109  
Fax: (206) 623-2540

When registering, keep the following in mind:

- Credit card, check, and money order payments will be accepted until March 25, 2009. Registrations will be accepted based on availability.
- Advance registration is required.
- All tour buses depart from and return to the the Washington State Convention and Trade Center. Please arrive 15 minutes prior to departure.
- A jacket and comfortable walking shoes are recommended for all tours.

## Tour Information

### Sunday, April 26

9:00 a.m.–1:00 p.m.  
Seattle City Highlights Tour

### Monday, April 27

10:00 a.m.–3:00 p.m.  
Best of Seattle Tour

### Tuesday, April 28

9:00 a.m.–1:00 p.m.  
Eastside Highlights Tour

### Wednesday, April 29

11:30 a.m.–3:30 p.m.  
Seattle's Great Outdoors Tour

### Thursday, April 30

9:00 a.m.–1:00 p.m.  
Seattle City Highlights Tour

### Friday, May 1

10:00 a.m.–2:30 p.m.  
Boeing Plant and Aviation Tour

Visit [www.aan.com/go/about/alliance](http://www.aan.com/go/about/alliance) for more details.

AAN staff contact  
Donna Honeyman  
[dhoneyman@aan.com](mailto:dhoneyman@aan.com)  
phone: (651) 695-2713  
fax: (651) 361-4813

# OPPORTUNITIES FOR STUDENTS, RESIDENTS, AND FELLOWS

To help build careers in neurology, the AAN 61<sup>st</sup> Annual Meeting offers a variety of opportunities to students, residents, and fellows. Annual Meeting registration for students, residents, and fellows includes scientific platform and poster sessions, Plenary Sessions, Colloquiums, Awards Luncheon, Celebration for Research, and Exhibits. Medical students and residents also receive a reduced rate for Education Programs. Medical and graduate students and PhD candidates who present a student ID card or are AAN members receive free admission to the Annual Meeting. See page 106 for registration rates for residents and fellows.

## Basic Science Resident Curriculum

The resident neuroscience initiative is a concept to develop a three year basic science curriculum for residents at the Annual Meeting. The curriculum is intended to help neurology residents prepare for requirements from the Neurology Review Committee (NRC), Part I of the Neurology Boards, and the Resident In-Service Training Examination (RITE). Topics over the three year cycle are neuroanatomy, neurophysiology, neuropathology, neuropharmacology, genetics, and development. Programming will be held as two half-day courses on the first Saturday of the Annual Meeting. This year's topics are:

1AC.001 Resident Basic Science I: Neurogenetics

1PC.001 Resident Basic Science II: Neurometabolic Disorders

## Residents and Fellows Luncheon

**Sunday, April 26 / 12:00 p.m.–2:00 p.m.**

This luncheon honors Annual Meeting Resident Scholarship recipients. The Consortium of Neurology Residents and Fellows Business Meeting is incorporated into the luncheon. Elections will be conducted for the new chair-elect position and activities for involvement within the AAN will be highlighted. Free and open to all registered residents and fellows; however, RSVP is required. To secure a seat, RSVP to Cheryl Alementi at [calementi@aan.com](mailto:calementi@aan.com) by March 3, 2009.

## Celebration for Research: Neurobowl<sup>®</sup>, Neuro Idol, Josh Blue on Main Stage, and Neuro Hop

**Sunday, April 26 / 6:30 p.m.–10:30 p.m.**

See page 22 for details.

## Residents and Fellows Career Forum and Reception

**Monday, April 27 / 6:30 p.m.–9:00 p.m.**

Learn how to search for a fellowship, how program directors select fellows, and how a fellowship could benefit your career. Find out how to start a career in academics/research and private practice. Socialize with other residents and fellows as well as representatives from various neurology programs and learn about potential positions from headhunters. Advertisers in AAN Dendrite™ Careers in Neurology will also be on hand to discuss job opportunities.

## **NEW!** International Component Posters

Programs that feature an international element will have the opportunity to showcase their programs. Free and open to all meeting registrants. See page 26 for more information.

## American Board of Psychiatry and Neurology Resident Informational Session

**Monday, April 27 / 5:00 p.m.–6:30 p.m.**

Meet members of the American Board of Psychiatry and Neurology (ABPN). The panel will discuss all aspects of the neurology boards and what is expected from candidates. Free and open to all meeting registrants.

## SIGN Meeting and Reception

**Monday, April 27 / 5:30 p.m.–6:30 p.m.**

Student and faculty representatives from existing Student Interest Groups in Neurology (SIGN) chapters and those interested in starting chapters will gather for presentations and discussions. This is free and open to all medical students.

## American Academy of Neurology and American Academy of Neurology Foundation Awards Luncheon

**Wednesday, April 29 / 12:00 p.m.–1:30 p.m.**  
**Sheraton Grand Ballroom AD**

Join AAN leaders as they honor the recipients of the 2009 AAN Awards. From enterprising high school students to world renowned researchers, this program recognizes some of the top accomplishments in neuroscience research. See page 53 for more information.

## Resident/Medical Student Rush Line

Check in at the Special Registration Services Booth each morning for tickets to available courses for that day. Two tickets will be held for each course, available on a first-come, first-served basis. Eligible participants are limited to one free course per day, two free courses for the week unless there are unclaimed tickets ten minutes prior to a course starting. The program is available for half-day and full-day courses, case-study programs, and kick-off and therapy programs. Seminars, workshops, and luncheons are not included.

Opportunities to Save Money: Education and Scientific Program Monitors, EMG Workshop Volunteers (see page 105). Discount for Syllabi on CD if ordered before Annual Meeting (see page 106).



# EXHIBITOR LISTING

The AAN would like to acknowledge the following exhibitors' participation in the 61<sup>st</sup> Annual Meeting,  
Exhibit Hours / Monday, April 27, 5:00 p.m.–7:00 p.m. / Tuesday, April 28, 11:30 a.m.–5:00 p.m. /  
Wednesday, April 29, 11:30 a.m.–5:00 p.m. / Thursday, April 30, 11:30 a.m.–4:00 p.m.

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|                                                                                                 |                                                                                      |                                                                                                       |                                                                                         |
|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 4-D Neuroimaging<br>(858) 453-6300                                                              | Benign Essential Blepharospasm<br>Research Foundation, Inc.<br>(409) 832-0788        | Cure CMD<br>(866) 400-3626                                                                            | Forest Pharmaceuticals, Inc.<br>(212) 224-6676                                          |
| Accera<br>(303) 999-3700                                                                        | Billings Clinic<br>(303) 554-6337                                                    | Demos Medical Publishing<br>(212) 683-0072                                                            | Gaitrite - CIR Systems Inc.<br>(610) 449-4879                                           |
| Accredo<br>(901) 381-7400                                                                       | Bio-logic Systems Corp.<br>A Natus Company<br>(847) 949-5200                         | Diagnostic MD / NeuroBrain<br>Diagnostic<br>(954) 985-5633                                            | GBS/CIDP Foundation<br>International<br>(610) 667-0131                                  |
| Acorda Therapeutics<br>(914) 347-4300                                                           | Biogen Idec, Inc. and<br>Biogen Idec/Elan Pharmaceuticals,<br>Inc.<br>(617) 914-7074 | Diplomat Specialty Pharmacy<br>(616) 242-1082                                                         | GE Healthcare<br>(262) 544-3011                                                         |
| Admar Instruments, Inc.<br>(516) 223-7042                                                       | BioScrip Infusion Services<br>(800) 552-3462                                         | Dystonia Medical Research<br>Foundation<br>(312) 755-0198                                             | Genzyme Corporation<br>(617) 252-7500                                                   |
| Allergan, Inc.<br>(714) 246-4500                                                                | Boehringer Ingelheim<br>Pharmaceuticals, Inc.<br>(203) 798-4047                      | E-MDs<br>(512) 767-6109                                                                               | Genzyme MS<br>(617) 252-7549                                                            |
| Alpine BioMed Corp.<br>(714) 839-8426                                                           | Borgess Health<br>(269) 226-5065                                                     | ECTRIMS (European Committee<br>for Treatment and Research in<br>Multiple Sclerosis)<br>41-61-686-7777 | Grass Technologies, An Astro-<br>Med, Inc. Product Group<br>(401) 828-4000              |
| Alzheimer's Association<br>(312) 604-1666                                                       | Borm Bruckmeier Publishing<br>(310) 414-8300                                         | Eisai Inc./Pfizer Inc<br>(212) 773-2323                                                               | Group Health Permanente<br>(206) 448-6192                                               |
| AMBU, Inc.<br>(800) 262-8673                                                                    | Buffalo Neuroimaging Analysis<br>Center<br>(716) 859-7040                            | Electrical Geodesics, Inc.<br>(541) 687-7962                                                          | HCA Physician Recruitment<br>(866) 889-0203                                             |
| American Association<br>of Neuromuscular and<br>Electrodiagnostic Medicine<br>(507) 288-0100    | Cadwell Laboratories, Inc.<br>(509) 735-6481                                         | Electro-Cap International, Inc.<br>(937) 456-6099                                                     | Health Learning Systems/LEAD<br>(973) 352-4465                                          |
| American Board of Psychiatry &<br>Neurology<br>(847) 229-6500                                   | Cambridge University Press<br>(212) 924-3900                                         | Elekta, Inc.<br>(770) 670-2592                                                                        | Heidelberg Engineering<br>(800) 931-2230                                                |
| American Epilepsy Society<br>(860) 586-7505                                                     | Cardinal Health (formerly VIASYS<br>Healthcare)<br>(608) 273-5000                    | Eli Lilly and Company<br>(317) 276-2000                                                               | Holzer Clinic<br>(740) 446-5965                                                         |
| American Parkinson Disease<br>Association<br>(718) 981-8001                                     | Cephalon, Inc.<br>(800) 782-3656                                                     | EMD Serono, Inc./Pfizer Inc<br>(781) 681-2329                                                         | HRA Research<br>(973) 240-1200                                                          |
| American Stroke Association,<br>Division of the American Heart<br>Association<br>(214) 706-1882 | CleveMed<br>(216) 791-6720                                                           | Endo Pharmaceuticals Inc.<br>(610) 558-9800                                                           | IDEA League<br>(312) 821-9020                                                           |
| Applied Neuro Tech<br>(714) 771-4502                                                            | Clinical Neurology News<br>(973) 290-8200                                            | Epilepsy Phenome/Genome<br>Project<br>(415) 519-8962                                                  | IgG America, Inc.<br>(877) 674-9700                                                     |
| AstraZeneca<br>(800) 456-3669                                                                   | CNS Vital Signs<br>(888) 750-6941                                                    | ESO (European Stroke<br>Organisation)<br>41-61-686-7777                                               | IMDO<br>(760) 918-0377                                                                  |
| Athena Diagnostics, Inc.<br>(800) 394-4493                                                      | CompHealth<br>(800) 453-3030                                                         | European Federation of<br>Neurological Societies (EFNS)<br>39-055-4362-098                            | In-Step Mobility Products, Inc.<br>(847) 676-1275                                       |
| BAS Health Care (formerly<br>Medsource Consultants)<br>(703) 378-0004                           | Compumedics USA, LTD.<br>(704) 749-3200                                              | European Neurological Society<br>41-61-686-7711                                                       | Informa Healthcare<br>(212) 520-2777                                                    |
| Baxter<br>(847) 940-2000                                                                        | Computational Diagnostics, Inc<br>(412) 681-9990                                     | European Stroke Conference<br>(ESC)<br>41-61-686-7777                                                 | Innogenetics, Inc.<br>(888) 310-8788                                                    |
| Bayer HealthCare Pharmaceuticals<br>(973) 305-5000                                              | Coram, Inc.<br>(303) 672-8654                                                        | Faith Medical, Inc.<br>(573) 676-3231                                                                 | Innovative Neurotronics<br>(512) 721-1900                                               |
| Baylor Health Care System<br>(972) 860-8500                                                     | Covidien<br>(303) 305-2334                                                           | Fold Rx Pharmaceuticals, Inc.<br>(617) 252-5500                                                       | International Essential Tremor<br>Foundation (IETF)<br>(913) 341-3880                   |
|                                                                                                 | Cyberonics, Inc.<br>(281) 228-7200                                                   |                                                                                                       | Intracranial Hypertension Research<br>Foundation<br>(360) 693-4473                      |
|                                                                                                 |                                                                                      |                                                                                                       | Ipsen Pharmaceuticals Inc. (former<br>Vernalis Pharmaceuticals, Inc.)<br>(650) 238-1548 |

|                                                                |                                                                                      |                                                                       |                                                                                            |
|----------------------------------------------------------------|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| Jain Foundation, Inc.<br>(425) 882-1659                        | National Headache Foundation<br>(888) 643-5552                                       | Practical Neurology/Avondale<br>Medical Publishers<br>(484) 581-1800  | The Electrode Store<br>(360) 829-0400                                                      |
| Jali Medical, Inc.<br>(781) 376-0008                           | National Institute of Neurological<br>Disorders and Stroke (NINDS)<br>(301) 496-5751 | PracticeLink.com - The Online<br>Physician Job Bank<br>(800) 776-8383 | The Movement Disorder Society<br>(414) 276-2145                                            |
| Jari Electrode Supply<br>(408) 847-1895                        | National Spasmodic Dysphonia<br>Association<br>(630) 250-5404                        | Prize 4 Life<br>(617) 500-7523                                        | The Neurological Society of<br>Thailand<br>+46 708-136-066                                 |
| Jazz Pharmaceuticals, Inc.<br>(650) 496-2667                   | National Spasmodic Torticollis<br>Association<br>(714) 378-9837                      | Professional Risk Management<br>Services, Inc.<br>(703) 907-3800      | Therapath<br>(800) 681-4338                                                                |
| Karger Publishers<br>(860) 675-7834                            | Nature Publishing Group<br>(212) 726-9200                                            | Projects In Knowledge<br>(973) 890-0985                               | Thieme New York<br>(212) 760-0888                                                          |
| Kronus, Inc.<br>(208) 377-4800                                 | NeuroCall<br>(305) 227-4838                                                          | Questcor Pharmaceuticals<br>(510) 400-0700                            | Tourette Syndrome Association<br>(718) 224-2999                                            |
| La Lettre Du Neurologue<br>33-1-466-76283                      | NeuroCom International, Inc.<br>(503) 653-2144                                       | Reach Call, Inc.<br>(706) 814-2487                                    | Transgenomic, Inc.<br>(866) 500-4363                                                       |
| Lewy Body Dementia Association<br>(404) 935-6444               | Neurology Reviews<br>(973) 206-3434                                                  | Rochester Electro-Medical, Inc.<br>(800) 328-5544                     | Tremor Action Network<br>(925) 462-0111                                                    |
| LifeLines Neurodiagnostic<br>Systems, Inc.<br>(866) 889-6505   | NeuroMetrix, Inc.<br>(781) 890-9989                                                  | RX Solutions<br>(630) 495-2899                                        | Trigeminal Neuralgia Association<br>(352) 331-7009                                         |
| MAP Pharmaceuticals, Inc.<br>(650) 386-3100                    | Neurosign Direct<br>(905) 582-1139                                                   | Saunders/Mosby-Elsevier, Inc.<br>(215) 23-3490                        | UCB, Inc.<br>(770) 970-7500                                                                |
| Martek Biosciences Corp.<br>(410) 740-0081                     | NeuroTrax Corp.<br>(888) 418-0380                                                    | Screen, Inc<br>(206) 517-5087                                         | United Council for Neurologic<br>Subspecialties (UCNS)<br>(651) 695-2813                   |
| McGraw-Hill<br>(212) 904-5449                                  | Next Generation Clinical Research<br>(608) 835-5811                                  | Sentara Medical Group<br>(757) 252-3021                               | UpToDate<br>(781) 392-2493                                                                 |
| Medex Bio Care<br>(901) 380-5899                               | Nextgen Healthcare Information<br>Systems, Inc.<br>(215) 657-7010                    | SleepMed DigiTrace<br>(803) 779-5454                                  | VISTA Staffing Solutions<br>(800) 366-1884                                                 |
| Medivation<br>(415) 543-3470                                   | Nihon Kohden America, Inc.<br>(800) 325-0283                                         | SMA Organizations<br>(646) 253-7100                                   | WE MOVE (Worldwide Education<br>and Awareness for Movement<br>Disorders)<br>(212) 875-8312 |
| MedLink Corporation<br>(619) 640-4660                          | Novartis Pharmaceuticals<br>Corporation<br>(862) 778-8300                            | Solstice Neurosciences, Inc.<br>(267) 620-8044                        | Wiley-Blackwell<br>(781) 388-8361                                                          |
| Medtronic, Inc.<br>(763) 514-4000                              | Origin Biomed Inc.<br>(902) 404-3908                                                 | Springer<br>(212) 460-1500                                            | Wolters Kluwer Health (Lippincott<br>Williams & Wilkins)<br>(215) 521-8300                 |
| Merck & Co, Inc.<br>(267) 305-5000                             | Ovation Pharmaceuticals<br>(847) 282-1000                                            | Steele, A Frisby Technologies<br>Company<br>(360) 297-4555            | World Neurology Foundation<br>(802) 558-1640                                               |
| Merz Pharmaceuticals, LLC<br>(336) 856-2003                    | Oxford University Press<br>(212) 726-6000                                            | Stellate Systems<br>(514) 486-1306                                    | World Parkinson Congress<br>(646) 388-7650                                                 |
| Minnesota Epilepsy<br>Group, P.A.<br>(651) 241-5285            | Pamlab, LLC<br>(985) 893-4097                                                        | Strategic Ancillaries LLC<br>(360) 736-0928                           | WR Medical Electronics Co.<br>(651) 430-1200                                               |
| Multigon Industries, Inc.<br>(914) 376-5200                    | Parent Project Muscular Dystrophy<br>(404) 778-0553                                  | Talecris Biotherapeutics<br>(607) 674-2666                            |                                                                                            |
| Multiple Sclerosis Association of<br>America<br>(856) 488-4500 | Parkinson's Disease Foundation,<br>Inc.<br>(212) 923-4700                            | TEVA Neuroscience<br>(816) 718-1624                                   |                                                                                            |
| Multiple Sclerosis Foundation<br>(888) 673-6287                | Pfizer Inc<br>(212) 773-2323                                                         | The ALS Association<br>(818) 587-2206                                 |                                                                                            |
| Muscular Dystrophy Association<br>(520) 529-2000               | Physicians Neurology Network<br>(469) 365-7834                                       | The American Epilepsy Outreach<br>Foundation<br>(773) 456-7729        |                                                                                            |
| National Society of Genetic<br>Counselors<br>(312) 321-6834    |                                                                                      | The Churkendoose Project - The<br>Handle Institute<br>(704) 755-0200  |                                                                                            |
| National Ataxia Foundation<br>(763) 553-0020                   |                                                                                      |                                                                       |                                                                                            |

## Annual Meeting Committees

### Meeting Management Committee

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# OFFICES AND HOURS OF OPERATIONS\*

## **AAN Alliance Booth and Registration**

### **WSCC West Lobby (6<sup>th</sup> floor)**

Saturday, April 25 – Friday, May 1 ..... 8:30 a.m.–4:00 p.m.

## **AAN Foundation Booth**

### **WSCC East Lobby (6<sup>th</sup> floor)**

Saturday, April 25–Friday, May 1 ..... 8:00 a.m.–6:00 p.m.

Saturday, May 2 ..... 8:00 a.m.–10:00 a.m.

## **AAN Information Booth**

### **WSCC South Galleria (4<sup>th</sup> floor)**

Saturday, April 25, ..... 8:00 a.m.–7:00 p.m.

Sunday, April 26–Friday, May 1 ..... 8:00 a.m.–6:30 p.m.

Saturday, May 2 ..... 6:30 a.m.–1:00 p.m.

## **The AAN Store**

### **WSCC South Lobby (4<sup>th</sup> floor)**

Saturday, April 25 ..... 8:00 a.m.–7:00 p.m.

Sunday, April 26–Friday, May 1 ..... 8:00 a.m.–6:00 p.m.

Saturday, May 2 ..... 8:00 a.m.–1:00 p.m.

## **Bookbag Distribution**

### **WSCC Room 657 (6<sup>th</sup> floor)**

Saturday, April 25–Sunday, April 26 ..... 8:00 a.m.–7:00 p.m.

Monday, April 27–Thursday, April 30 ..... 6:30 a.m.–6:30 p.m.

Friday, May 1 ..... 6:30 a.m.–9:00 a.m.

## **BrainPAC Booth**

### **WSCC South Lobby (4<sup>th</sup> floor)**

Saturday, April 25–Friday, May 1 ..... 8:00 a.m.–6:00 p.m.

Saturday, May 2 ..... 8:00 a.m.–10:00 a.m.

## **Coat and Baggage Check**

### **WSCC Room 202 (2<sup>nd</sup> floor)**

Saturday, April 25, ..... 7:00 a.m.–9:30 p.m.

Sunday, April 26–Monday, April 27 ..... 6:00 a.m.–11:00 p.m.

Tuesday, April 28 ..... 6:00 a.m.–8:00 p.m.

Wednesday, April 29–

Thursday, April 30 ..... 6:00 a.m.–10:30 p.m.

Friday, May 1 ..... 6:00 a.m.–9:30 p.m.

Saturday, May 2 ..... 6:00 a.m.–1:00 p.m.

## **Center for Health Policy Booth**

### **WSCC South Lobby (4<sup>th</sup> floor)**

Saturday, April 25–Friday, May 1 ..... 8:00 a.m.–6:00 p.m.

Saturday, May 2 ..... 8:00 a.m.–10:00 a.m.

## **Exhibitor Registration**

### **WSCC South Lobby (4<sup>th</sup> floor)**

Saturday, April 25 ..... 8:00 a.m.–7:00 p.m.

Sunday, April 26–Wednesday, April 29 ..... 6:30 a.m.–6:30 p.m.

Thursday, April 30 ..... 6:30 a.m.–12:00 p.m.

## **Housing Desk**

### **WSCC South Lobby (4<sup>th</sup> floor)**

Saturday, April 25–Thursday, April 30 ..... 8:00 a.m.–6:00 p.m.

Friday, May 1 ..... 8:00 a.m.–2:00 p.m.

## **Lost and Found**

### **WSCC Registration South Lobby (4<sup>th</sup> floor)**

(see hours under Registration)

## **Meeting Administration Office**

### **WSCC Room 601**

Saturday, April 25 ..... 8:00 a.m.–6:30 p.m.

Sunday, April 26 ..... 6:00 a.m.–6:30 p.m.

Monday, April 27 ..... 6:00 a.m.–8:00 p.m.

Tuesday, April 28 ..... 6:00 a.m.–6:30 p.m.

Wednesday, April 29–Friday, May 1 ..... 6:00 a.m.–7:30 p.m.

Saturday, May 2 ..... 6:00 a.m.–1:00 p.m.

## **Sheraton Meeting Administration Office**

### **SHE Room Spruce**

Saturday, April 25 ..... 8:00 a.m.–6:30 p.m.

Sunday, April 26 ..... 6:00 a.m.–6:30 p.m.

Monday, April 27 ..... 6:00 a.m.–6:30 p.m.

Tuesday, April 28 ..... 6:00 a.m.–5:30 p.m.

Wednesday, April 29 ..... 6:00 a.m.–8:30 a.m.

Thursday, April 30 ..... 6:00 a.m.–8:30 a.m. and

6:00 p.m.–7:30 p.m.

Friday, May 1 ..... 6:00 a.m.–5:30 p.m.

Saturday, May 2 ..... 8:00 a.m.–1:00 p.m.

## **Grand Hyatt Meeting Administration Office**

### **HYT Room Favorita**

Saturday, April 25 ..... 8:00 a.m.–5:30 p.m.

Sunday, April 26 ..... 8:00 a.m.–6:30 p.m.

Monday, April 27 ..... 8:00 a.m.–8:00 p.m.

Tuesday, April 28–Thursday, April 30 ..... 1:00 p.m.–6:30 p.m.

Friday, May 1 ..... 8:00 a.m.–7:30 p.m.

Saturday, May 2 ..... closed

## **Membership**

### **WSCC South Lobby (4<sup>th</sup> floor)**

Saturday, April 25 ..... 8:00 a.m.–7:00 p.m.

Sunday, April 26–Friday, May 1 ..... 6:30 a.m.–6:30 p.m.

Saturday, May 2 ..... 6:30 a.m.–9:00 a.m.

**Neurology Community Information**  
**4th Floor, Exhibit Hall**

**Press Room**

**WSCC Room 309/310**

Saturday, April 25–Sunday, April 26.....8:00 a.m.–6:00 p.m.  
Monday, April 27–Thursday, April 30 .....7:30 a.m.–6:00 p.m.  
Friday, May 1.....8:00 a.m.–12:00 p.m.

**Registration**

**WSCC South Lobby (4<sup>th</sup> floor)**

Saturday, April 25–Sunday, April 26.....8:00 a.m.–7:00 p.m.  
Monday, April 27–Thursday, April 30 .....6:30 a.m.–6:30 p.m.  
Friday, May 1.....6:30 a.m.–9:00 a.m.

**Speaker Ready Room**

**WSCC 618/619/620**

Saturday, April 25.....8:00 a.m.–6:30 p.m.  
Sunday, April 26 ..... 6:00 a.m.–6:30 p.m.  
Monday, April 27.....6:00 a.m.–8:00 p.m.  
Tuesday, April 28.....6:00 a.m.–6:00 p.m.  
Wednesday, April 29–Friday, May 1.....6:00 a.m.–7:30 p.m.  
Friday, May 1 .....8:00 a.m.–7:30 p.m.  
Saturday, May 2 .....6:00 a.m.–1:00 p.m.

**Sheraton Speaker Ready Room**

**SHE Douglas**

Saturday, April 25.....8:00 a.m.–6:30 p.m.  
Sunday, April 26 .....6:00 a.m.–6:30 p.m.  
Monday, April 27.....6:00 a.m.–6:30 p.m.  
Tuesday, April 28.....6:00 a.m.–5:30 p.m.  
Wednesday, April 29 .....6:00 a.m.–8:30 a.m.  
Thursday, April 30 .....6:00 a.m.–8:30 a.m. and  
6:00 p.m.–7:30 p.m.  
Friday, May 1.....6:00 a.m.–5:30 p.m.  
Saturday, May 2 .....8:00 a.m.–1:00 p.m.

**Grand Hyatt Speaker Ready Room**

**HTY Portland A**

Saturday, April 25.....8:00 a.m.–5:30 p.m.  
Sunday, April 26 .....8:00 a.m.–6:30 p.m.  
Monday, April 27.....8:00 a.m.–8:00 p.m.  
Tuesday, April 28–Thursday, April 30 ..... 1:00 p.m.–6:30 p.m.  
Friday, May 1 .....8:00 a.m.–7:30 p.m.  
Saturday, May 2 ..... closed

**Internet and Message Center**

**International Meeting Place (3<sup>rd</sup> floor)**

Saturday, April 25.....8:00 a.m.–7:00 p.m.  
Sunday, April 26–Friday, May 1 .....6:30 a.m.–7:00 p.m.  
Saturday, May 2 .....6:30 a.m.–1:00 p.m.





# IMPORTANT ANNUAL MEETING INFORMATION

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## Registration and Hotel Reservation Deadline: March 20, 2009

Registration and Hotel and Travel Reservations: [www.aan.com/am](http://www.aan.com/am)

### Registration and Hotel

**Mail:**

AAN Registration and Housing c/o CMR  
33 New Montgomery, Suite 1420  
San Francisco, CA 94105

**Fax:**

Credit card reservations only  
(415) 979-2260

**Phone:**

Credit card reservations only  
US/Canada (800) 676-4226  
International (415) 979-2283

**Email:**

Registration: [aan2009reg@cmrus.com](mailto:aan2009reg@cmrus.com)  
Housing: [aan2009housing@cmrus.com](mailto:aan2009housing@cmrus.com)

**Hours:**

Monday–Friday  
6:00 a.m.–6:00 p.m. Pacific Standard Time

### Travel

**Airline Reservations:**

Carlson Wagonlit Travel

**Phone:**

(877) 317-0006

**Fax:**

(866) 914-2817

**Email:**

[aanparticipants@carlsonwagonlit.com](mailto:aanparticipants@carlsonwagonlit.com)

**Hours:**

Monday–Friday, 7:30 a.m.–5:00 p.m. CST  
Closed weekends and holidays

## Suggest an Education Program for Upcoming Meetings

### 2010 Annual Meeting: Toronto

The AAN invites you to submit an Education Program suggestion for the 62<sup>nd</sup> Annual Meeting, April 10 through April 17, 2010, in Toronto. Proposals for new programs are due by May 8, 2009.

Submit a proposal via the Annual Meeting website at [www.aan.com/am](http://www.aan.com/am).

For questions or more information on the Annual Meeting Education Program, contact Naomi Reeves at [nreeves@aan.com](mailto:nreeves@aan.com) or (651) 695-2814.



## REGISTER EARLY

The deadline for registering without incurring increased general registration and Education Program fees is March 20, 2009. Registrations received after March 20, 2009, will not be processed and will need to be handled on-site beginning at 8:00 a.m. on Saturday, April 25, 2009, at the Washington State Convention and Trade Center.

### Visit the Annual Meeting Online

Visit the AAN Annual Meeting website at [www.aan.com/am](http://www.aan.com/am) to:

- Register for the Annual Meeting
- Make travel and hotel arrangements
- Search the Education Program
- Learn more about special events
- Submit abstracts
- Apply for awards

### Upcoming Annual Meeting Dates

**2010: Toronto**  
April 10–April 17

**2011: Honolulu**  
April 9–April 16

**2012: New Orleans**  
April 21–April 28