

43rd Annual Meeting of the Child Neurology Society Scientific Program

Columbus, Ohio

October 22 – October 25, 2014

Nina F. Schor, MD, PhD, President, CNS
Jonathan Mink MD, PhD, Chair, CNS Scientific Selection and Program Planning Committee

This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of The Nationwide Children's Hospital and the Child Neurology Society. The Nationwide Children's Hospital is accredited by the ACCME to provide continuing medical education for physicians.

NCH designates this educational activity for a maximum of 26 AMA PRA *Category 1 credits*TM. Physicians should only claim credit commensurate with the extent of their participation in the activity.



PROGRAM

Wednesday, October 22

7:30 AM –
5:00 PM
Organizer:

Symposium I: Neurobiology of Disease in Children: Autism
Bernard L. Maria, MD, MBA; Goryeb
Children's Hospital, Morristown, NJ



Supported by the National Institutes of Health (5R13NS040925-09), the Child Neurology Society and Autism Speaks

7:30 AM –
7:40 AM

Opening Comments
Bernard L. Maria, MD, MBA
Story Landis, PhD; Director of NINDS,
Bethesda, MD

7:40 AM –
9:55 AM

SESSION I: CLINICAL ASPECTS
Co-Director and Moderator: Stewart H.
Mostofsky, MD; Kennedy Krieger Institute,
Baltimore, MD

7:40 AM –
8:05 AM

Advances and Changes with DSM5
Sarah Spence, MD, PhD; Boston Children's
Hospital, Boston, MA

8:05 AM –
8:30 AM

Epidemiology: Prevalence, Environment, Risk Factors
Craig J. Newschaffer, PhD; Drexel
University, Philadelphia, PA

8:30 AM –
8:55 AM

Early Infant Development and Intervention
Lonnie Zwaigenbaum, PhD; University of
Alberta, Edmonton, AB

8:55 AM –
9:20 AM

Co-Morbid Epilepsy and Sleep Disorders
Roberto Tuchman, MD; Miami Children's
Hospital, Miami, FL

9:20 AM –
9:40 AM

Question and Answer Session

9:40 AM –
9:55 AM

Coffee Break

9:55 AM –
11:30 AM

SESSION II: PATHOGENESIS
Co-Director and Moderator: Stewart
Mostofsky, MD

9:55 AM –
10:20 AM

Genetics
Jonathon Sebat, PhD; UCSD, La Jolla,
CA

10:20 AM –
10:45 AM

MEG Insights into Neural Signaling and Connectivity
Tim Roberts, PhD; CHOP, Philadelphia,
PA

10:45 AM –
11:10 AM

CNS Structure and Neuropathology
Cindy Schumann, PhD; UC Davis MIND
Institute, Davis, CA

11:10 AM –
11:30 AM

Question and Answer Session

11:30 AM –
1:00 PM

Lunch and Presentation by Autism Speaks

1:00 PM – 2:40 PM
SESSION III: TARGETS AND TRANSLATIONAL OPPORTUNITIES
 Moderator: Emanuel DiCicco-Bloom, MD; Robert Wood Johnson Medical School, New Brunswick, NJ

1:00 PM – 1:25 PM
TSC and mTOR Inhibitors
 Mustafa Sahin, MD, PhD; Boston Children's Hospital, Boston, MA

1:25 PM – 1:50 PM
Sinai Shank3 and IGF1
 Joseph Buxbaum, PhD; Seaver Center Mt. Sinai, New York, NY

1:50 PM – 2:15 PM
Rett Syndrome and BDNF
 David Katz, PhD; Case Western University Medical School, Cleveland, OH

2:15 PM – 2:40 PM
Pharmacologic Interventions
 Diane Chugani, PhD; Children's Hospital of Michigan, Detroit, MI

2:40 PM – 3:00 PM
Question and Answer Session

3:00 PM – 3:15 PM
Coffee Break

3:15 PM – 3:45 PM
EXECUTIVE SUMMARY OF THE DAY
 Co-Director and Moderator: Deborah Hirtz, MD; NINDS, Bethesda, MD

3:45 PM – 4:45 PM
SESSION IV: FUTURE DIRECTIONS PANEL DISCUSSION
 Moderator: Deborah Hirtz, MD
PANELISTS:
 Ashura Buckley, MD; NIH, Bethesda, MD
 Michael Johnston, MD; Kennedy Krieger Institute, Baltimore, MD
 Omar Khwaja, MD, PhD; Roche Pharmaceutical Research & Early Development, Basel Switzerland
 Nancy Minshew, MD; University of Pittsburgh, Pittsburgh, PA
 Robert Schultz, MD; University of Pennsylvania, Philadelphia, PA
 Marshalyn Yeargin-Allsopp, MD; Emory University, Atlanta, GA

4:45 PM – 5:00 PM
Closing Comments and Thanks
 Bernard L. Maria, MD, MBA

ADDITIONAL WEDNESDAY MEETINGS/SESSIONS

8:00 AM – 4:30 PM
Association of Child Neurology Nurses

2:00 PM – 5:00 PM
Professors of Child Neurology

6:00 PM – 8:00 PM
OPENING RECEPTION
 Supported by Nationwide Children's Hospital; Columbus, OH

8:00 PM – 10:00 PM
SIG Meetings
 Including Movement Disorders

Thursday, October 23

6:30 AM – 7:00 AM
CONTINENTAL BREAKFAST

7:00 AM – 8:15 AM
SEMINARS

Breakfast Seminar 1: Epilepsy Therapy Update
 Organizer: Renee Shellhaas, MD; MS University of Michigan CS Mott Children's Hospital, Ann Arbor, MI
Epilepsy Therapy Update: Using the Literature to Inform our Choices
 Sudha Kessler, MD; CHOP, Philadelphia, PA
New Medications for the Treatment of Focal Epilepsies
 Katherine Nickels, MD; Mayo Clinic, Rochester, MN
New Medications for the Treatment of Lennox Gastaut Syndrome
 Renee Shellhaas, MD, MS

Breakfast Seminar 2: Update on the Leukodystrophies
 Organizer: Adeline Vanderver, MD; Children's National Medical Center, Washington, D.C.
Introduction: New Information on Diagnosis, an Updated Algorithm and New Diseases
 Adeline Vanderver, MD
Treatment of Common Symptoms
 Keith Van Haren, MD; Stanford University & Lucile Packard Children's Hospital Patient Care, Stanford, CA
Established Therapeutics in Leukodystrophies
 Marc Patterson, MD; Mayo Clinic, Rochester, MN
Clinical Trials in Leukodystrophies: Emerging Therapeutic Approaches
 Florian Eichler, MD; Massachusetts General Hospital, Boston, MA

Breakfast Seminar 3: Neurodevelopmental Examination Using Telemedicine: the neuro exam in the era of mobile devices
 Organizer: Deepa Menon, MBBS; Kennedy Krieger Institute, Baltimore, MD

Learning the Rules and the Technology of Telemedicine

Paul Lipkin, MD; Kennedy Krieger Institute, Baltimore, MD

Practical Application of Telemedicine in the Remote Assessment of Neurodevelopmental Disorders in Children

Deepa Menon, MBBS

Expanding Access: Telemedicine for Pediatric Rare Diseases Clinical Care & Research

Erika Augustine, MD; University of Rochester Medical Center, Rochester, NY

8:45 AM – 8:50 AM

Association of Child Neurology Nurses Claire Chee Award for Excellence

Jo Ellen M. Lee MSN APRN; Nationwide Children's Hospital, Columbus, OH

8:50 AM – 9:00 AM

CNS Lifetime Achievement Awards

- G. Robert DeLong, MD
- Richard Nordgren, MD

9:15 AM – 12:00 PM

Symposium II: Presidential Symposium: Plasticity and Learning in Recovery and Rehabilitation from Brain Injuries

Organizers: Jonathan Mink, MD, PhD and Nina Schor, MD, PhD; University of Rochester Medical Center, Rochester, NY

Regeneration and Repair after Cerebral Injury
Steven Back, MD, PhD; Oregon Health Sciences University, Portland, OR

Rehabilitative Strategies for Children's with CP – Current State of the Art
Darcy Fehlings, MD; University of Toronto, Toronto, ON

Constraint-Induced and Bimanual Therapy for Children with Hemiplegia
Andrew Gordon, PhD; Teachers College Columbia University, New York, NY

Locomotor Adaptation and Plasticity in Children with Brain Injuries
Amy Bastian, PT, PhD; Johns Hopkins University, Baltimore, MD

11:00 AM – 6:00 PM

Exhibits

12:00 PM – 12:30 PM

CNS Business Meeting

12:30 PM – 1:30 PM

Lunch

- **Option 1:** MOC & Lifelong Learning in Child Neurology Luncheon (Reservation Required)
- **Option 2:** Lunch, Poster "Data Blitz"
- **Option 3:** Lunch, Exhibits & Posters

1:45 PM – 4:00 PM

Organizer:

Symposium III: Genetics & Biology of Early Life Epilepsies

Alexander Paciorkowski, MD; University of Rochester Medical Center, Rochester, NY

The History of Epilepsy Classification and the Pediatric Epilepsy Research Consortium

Anne Berg, MD; Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL

Genes Active in the Nucleus and Early Life Epilepsies

Alexander Paciorkowski, MD

The Expanding Universe of Synaptic Acting Genes and Early Life Epilepsies

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

Brain Growth Pathways and Early Life Epilepsies

Ghayda Mirzaa, MD; Seattle Children's Hospital, Seattle, WA

4:00 PM – 6:00 PM

CHILD NEURO NEWS BREAK: POSTER REVIEW

Supported by Eisai, Inc.

Friday, October 24

6:30 AM – 7:00 AM

CONTINENTAL BREAKFAST

7:00 AM – 8:15 AM

SEMINARS

Breakfast Seminar 4: A to ZZZZ's: CNS Hypersomnia Conditions in Children

Kiran Maski, MD; Boston Children's Hospital, Boston, MA

Neurobiology of Sleep & Wake Systems
Kiran Maski, MD

Secondary Hypersomnia Conditions
Shelly Weiss, MD, FRCPC; Hospital for Sick Children, Toronto, ON

Primary Hypersomnias
Suresh Kotagal, MD; Mayo Clinic, Rochester, MN

Breakfast Seminar 5: The Neurological Sciences Academic Developmental Award: The NINDS Physician-Scientist Career Development Award for Pediatric Neurology

Organizer: Bradley Schlagger, MD, PhD; Washington University School of Medicine St. Louis Children's Hospital, St. Louis, MO

Introduction to the NSADA Program
Deborah Hirtz, MD; NINDS, Bethesda, MD

<p><i>Regulation of Vulnerability to Excitotoxicity in Developing Oligodendrocytes</i> Chris Elitt MD, PhD; Boston Children's Hospital, Boston, MA</p> <p><i>Potential Value of Health Information Exchange for People with Epilepsy</i> Zachary Grinspan, MD; Weill Cornell Medical School, New York, NY</p> <p><i>Clinical Research in Tuberous Sclerosis</i> Tanjala Gipson, MD; Johns Hopkins University School of Medicine, Baltimore, MD</p> <p><i>Assessment of Dissociative Steroid as Dexamethasone Substitute for Diffuse Intrinsic Pontine Glioma (DIPG)</i> Elizabeth Wells, MD; Children's National Medical Center, Washington, D.C.</p> <p><i>The Neurobiological Basis for HIV-Associated Neurocognitive Disorders and Depression in Horizontally-Infected Adolescents</i> Jen McGuire, MD; CHOP, Philadelphia, PA</p> <p><i>Intraoperative EEG Monitoring in Congenital Heart Disease</i> Laurie Seltzer, DO; University of Rochester, Rochester, NY</p> <p><i>Assessment of Functional Brain Development in Infants Using fMRI</i> Christopher Smyser, MD; Washington University School of Medicine, St. Louis, MO</p> <p><i>Language Development and Cognitive Plasticity after Early Focal Brain Injury</i> Kevin Shapiro, MD; UCSF, San Francisco, CA</p> <p><i>Source EEG Functional Networks Partially Reflect Underlying Structural Connectivity</i> Catherine Chu, MD; Massachusetts General Hospital, Boston, MA</p> <p>Breakfast Seminar 6: Collaboration, Technology and Innovation in the Age of Health Care Reform: The Updated Child Neurology Encounter Guides Julie M. Sprague-McRae, MS, RN, PPCNP-BC; Kaiser Permanente Medical Group Inc., Fremont, CA</p> <p><i>The Child Neurology Encounter Guide Project and Innovative Electronic Patient Care Encounters</i> Julie M. Sprague-McRae, MS, RN, PPCNP-BC</p> <p><i>Collaboration: The Child Neurology Society and the Association of Child Neurology Nurses</i> Leslie Morrison, MD; University of New Mexico, Albuquerque, NM</p> <p><i>Child Neurology Encounter Guides in Action and Implications for Practice</i></p>	<p>8:30 AM – 10:15 AM</p> <p>8:30 AM – 8:45 AM</p> <p>8:45 AM – 9:00 AM</p> <p>9:00 AM – 9:15 AM</p> <p>9:15 AM – 9:30 AM</p> <p>9:30 AM – 9:45 AM</p> <p>9:45 AM – 10:00 AM</p> <p>10:00 AM – 10:15 AM</p> <p>08:30 AM – 10:15 AM</p> <p>8:30 AM – 8:45 AM</p> <p>8:45 AM – 9:00 AM</p> <p>9:00 AM – 9:15 AM</p> <p>9:15 AM – 9:30 AM</p>	<p>PLATFORM SESSIONS 1 & 2</p> <p>Platform Session 1:</p> <p>PL1-1 Berry-Kravis E et al <i>Arbaclofen in Fragile X Syndrome: results of phase 3 trials</i></p> <p>PL 1-2 Chao HT et al <i>Context Dependent Modulation of GABAergic Gene Expression in Models of Rett Syndrome</i></p> <p>PL1-3 Franz DN et al <i>Everolimus for Subependymal Giant Cell Astrocytoma (SEGA) Associated with Tuberous Sclerosis Complex (TSC): EXIST 1 long-term efficacy and safety result</i></p> <p>PL1-4 Holder JL et al <i>SHANK3 Overexpression Causes Manic-Like Behavior with Unique Pharmacogenetic Properties</i></p> <p>PL 1-5 Jeste SS et al <i>Early Developmental Predictors and Behavioral Correlates of ASD in Infants with Tuberous Sclerosis Complex</i></p> <p>PL 1-6 Monani UR et al <i>Gene Therapy for Glut1 Deficiency Syndrome</i></p> <p>PL1-7 Tobe BTD et al; Evan Snyder, MD, PhD presenting <i>Using a "Molecular Can-Opener" to Model Complex Disease: probing lithium's targets in bipolar hiPSCs suggests a novel underlying developmental disorder</i></p> <p>Platform Session 2</p> <p>PL 2-1 Tully HM et al <i>Clinical Outcome of 237 Children with Developmental Hydrocephalus</i></p> <p>PL 2-2 Fayed N et al <i>Quality of Life among Children with Epilepsy from their Point of View</i></p> <p>PL 2-3 Khan SG et al <i>Hereditary Hypermanganesemia: a new potentially treatable metabolic disorder in four Pakistani siblings</i></p> <p>PL 2-4 Kirton A et al <i>Brain Stimulation and Constraint for Perinatal Stroke Hemiparesis: the plastic champs trial</i></p>
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9:30 AM – 9:45 AM PL 2–5 McKnight D et al
High Positive Diagnostic Yield of Panel Testing and Whole Exome Sequencing for Patients with Epilepsy-related Neurodevelopmental Disorders

9:45 AM – 10:00 AM PL 2–6 Olson HE et al
Genetic Mechanisms of Ohtahara Syndrome, A Cohort Study

10:00 AM – 10:15 AM PL 2–7 Van Hove JLK
Outcome in Nonketotic Hyperglycinemia (NKH)

10:45 AM – 10:50 AM **Outstanding Junior Member Awards**
M. Richard Koenigsberger Scholarship Award

10:50 AM – 10:55 AM **CNS/PCN Blue Bird Circle Training Program Director Award**

- Steven Leber, MD, PhD; University of Michigan, Ann Arbor, MI

10:55 AM – 11:05 AM **Arnold P. Gold Foundation Humanism in Medicine Award**

- Kenton Holden, MD; Medical University of South Carolina, Mt. Pleasant, SC

11:05 AM – 11:15 AM **Child Neurology Foundation Scientific Awards**

11:15 AM – 11:45 AM **Philip R. Dodge Young Investigator Award Lecture**

- Christopher Smyser, MD; Washington University/ St. Louis Children’s Hospital, St. Louis, MO

11:45 AM – 12:30 PM **Bernard Sachs Lecture**

- Gabrielle deVeber, MD; Hospital for Sick Children, Toronto, ON

9:00 AM – 2:30 PM **Exhibits**

12:45 PM – 2:00 PM **Lunch**

- **Option 1:** Junior Members Luncheon: Meet the Editors
- **Option 2:** Lunch, Exhibits & Posters

2:15 PM – 4:30 PM **Symposium IV: Non Progressive Cerebellar Ataxia: Practical Pearls**
Organizer: Michael Salman, MRCP, PhD; Children’s Hospital, Winnipeg, MB

Epidemiology & Clinical Features
Michael Salman, MRCP, PhD

Cognitive & Behavioral Sequelae
Peter Tsai, MD, PhD; Boston Children’s Hospital, Boston, MA

Neuroimaging Evaluation
Andrea Poretti, MD; Johns Hopkins University School of Medicine, Baltimore, MD

Genetic Testing
Grace Yoon, MD, FRCPC, FCCMG; The Hospital for Sick Children, Toronto, ON

4:45 PM – 6:00 PM

Junior Member Seminars

Seminar 1: Med Students: Finding a Residency

Seminar 2: Residents: Finding a Fellowship

Seminar 3: Residents & Fellows: Finding a Job

7:00 PM – 10:00 PM

GALA RECEPTION

Saturday, October 25

7:00 AM – 7:30 AM

CONTINENTAL BREAKFAST

7:30 AM – 8:45 AM

SEMINARS

Breakfast Seminar 7: The Buzz on Medical Marijuana

Organizer: Kristen Park, MD; University of Colorado, Aurora, CO

Introduction
Kelly Knupp, MD; Children’s Hospital Colorado, Aurora, CO

The ABC’s of the Endocannabinoid System
Andrea Giuffrida, PhD; UT Health Science Center, San Antonio, TX

The Good, the Bad, and the Ugly: Clinical Uses of Cannabinoids
Francis Filloux, MD; Primary Children’s Hospital, Salt Lake City, UT

Untangling the “Web” of Medical Marijuana: Lessons from Colorado
Kristen Park, MD

Breakfast Seminar 8: Neuroimaging Update in TBI: Clinical Perspectives & Research Advances

Organizer: Carolyn Pizoli, MD, PhD; Duke University Medical Center, Durham, NC

Prognostic Utility of Advanced MRI in Children with Moderate/Severe Traumatic Brain Injury

Stephen Ashwal, MD; Loma Linda University, Loma Linda, CA

Prospective Neuroimaging of Pediatric Mild Traumatic Brain Injury
Andrew Mayer, PhD; The Mind Research Network, U of New Mexico Health Science Center, Albuquerque, NM

Network Integrity after TBI: Insights from Functional Connectivity MRI
Carolyn Pizoli, MD, PhD

Breakfast Seminar 9: Neuro-Autoimmune Frontiers: Anti NMDAR Encephalitis & Related Conditions

Organizer: Jay Selman, MS, MD; Blythedale Children's Hospital, Valhalla, NY

Introduction and Outcome in a Cohort of Severely Involved Children
Jay Selman, MS, MD

Clinical Presentations and Pathophysiology
Jessica Panzer, MD; CHOP, Philadelphia, PA

When the NMDA Receptor Antibody is Negative: Other Auto Immune Encephalitides in Pediatrics
Mark Gorman, MD; Boston Children's Hospital, Boston, MA

9:00 AM – 9:45 AM
Hower Award Lecture
Michael Shevell, MDCM; McGill University, Montreal QC

10:00 AM – 12:15 PM
Symposium V: Code Stroke
Organizer: Catherine Amlie-Lefond, MD; Seattle Children's Hospital, Seattle, WA
Moderator: Gabrielle deVeber, MD, MSC; The Hospital for Sick Children, Toronto, ON

Preparing for a Childhood "Stroke Alert"
Timothy Bernard, MD; Children's Hospital Colorado, Aurora, CO

Guidelines for Urgent Management
Michael Rivkin, MD; Boston Children's Hospital, Boston, MA

Controversies for Urgent Management
Catherine Amlie-Lefond, MD

Outcome Measures: How Will I Know When I Get There?
Michael Dowling, MD, PhD; UT Southwestern Medical Center, Dallas TX



**Agenda for 2014 ACNN Conference Program
Columbus, Ohio
October 22 – October 24, 2014**

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	Tuesday, October 21		
7:00 PM – 9:00 PM	ACNN Welcome Reception (Nurses Only)	3:00 PM – 4:00 PM	Challenging Families: Trials, Tribulations and Triumphs Jennifer Boyd, RN, MHSc, CNN(C), MSCN
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	Wednesday, October 22	4:00 PM – 4:15 PM	Wrap Up
7:00 AM – 8:00 AM	Registration & Continental Breakfast		
8:00 AM – 8:15 AM	Welcome & Introduction	12:00 PM – 1:00 PM	Lunch
8:15 AM – 9:00 AM	Janet Brucker Keynote Address Project SEARCH J. Erin Riehle, MSN, RN	1:00 PM – 2:00 PM	Those Darn Tics! Diagnosis and Management of Tourette Syndrome Amy Vierhile, RN, MS, PPCNP-BC
9:00 AM – 10:00 AM	<i>Chronic Migraines in the Pediatric Population</i> Maria Laderman, RN, MS, CPNP	2:00 PM – 2:30 PM	A Nursing-Driven Pilot Study to Evaluate the Impact of a Personalized Plan of Care for Children with Autism Spectrum Disorder Preparing for Outpatient EEG's with Anxiolysis Audrey H. Scully, BSN, RN, CPN
10:00 AM – 10:15 AM	Break		5K Run/Walk Fundraiser for ACNN/CNF Nursing Research Grant
10:15 AM – 11:15 AM	<i>An Evidence Based Approach to Neuroimaging of Children with Chronic Headache</i> Scott Turner, MSN, FNP		
11:30 AM – 12:00 PM	Awards and Annual Business Meeting		
12:00 PM – 1:00 PM	Lunch & Networking Opportunity	12:00 PM – 12:30 PM	Lunch-SIG Topics to be announced
1:00 PM – 1:45 PM	Ethosuximide-Induced Lupus-Like Syndrome in a Six Year Old: Case Study Ruth Rosenblum, DNP, RN, PNP-BC	12:30 PM – 1:00 PM	De novo Deletion in SZT2 Resulting in an Early-Onset Epileptic Encephalopathy Jennifer Murphy, CPNP-AC, BSN, RN, CPHON Adeline Vanderver, MD
1:45 PM – 2:45 PM	Novel Treatments for Pediatric Headaches Deanna Duggan, MS, RN, CPNP Amanda Jones, MSN, RN, CPNP		
2:45 PM – 3:00 PM	Break	1:00 PM – 1:30 PM	Safety Considerations in the Epilepsy Monitoring Unit Ruth C. Shinnar, RN, MSN
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			Thursday, October 23
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			Friday, October 24