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

Supported by the National Institutes of Health (SR13NS040925-09), 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

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

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

11:10 AM – 11:30 AM Question and Answer Session

11:30 AM – 1:00 PM Lunch and Presentation by Autism Speaks

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**SESSION III: TARGETS AND TRANSLATIONAL OPPORTUNITIES**  
Moderator: Emanuel DiCicco-Bloom, MD; Robert Wood Johnson Medical School, New Brunswick, NJ

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<tr>
<th>Time</th>
<th>Topic</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>1:00 PM</td>
<td>TSC and mTOR Inhibitors</td>
<td>Mustafa Sahin, MD, PhD; Boston Children's Hospital, Boston, MA</td>
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<td>1:25 PM</td>
<td>Sinai Shank3 and IGF1</td>
<td>Joseph Buxbaum, PhD; Seaver Center Mt. Sinai, New York, NY</td>
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<td>1:50 PM</td>
<td>Rett Syndrome and BDNF</td>
<td>David Katz, PhD; Case Western University Medical School, Cleveland, OH</td>
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<td>2:15 PM</td>
<td>Pharmacologic Interventions</td>
<td>Diane Chuagani, PhD; Children's Hospital of Michigan, Detroit, MI</td>
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<tr>
<td>2:40 PM</td>
<td>Question and Answer Session</td>
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<td>3:00 PM</td>
<td>Coffee Break</td>
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<tr>
<td>3:15 PM</td>
<td>EXECUTIVE SUMMARY OF THE DAY</td>
<td>Co-Director and Moderator: Deborah Hirtz, MD; NINDS, Bethesda, MD</td>
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<td>3:45 PM</td>
<td>SESSION IV: FUTURE DIRECTIONS</td>
<td>Moderator: Deborah Hirtz, MD</td>
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<td>4:15 PM</td>
<td>PANEL DISCUSSION</td>
<td>Ashura Buckley, MD; NIH, Bethesda, MD</td>
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<td>Michael Johnston, MD; Kennedy Krieger Institute, Baltimore, MD</td>
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<td>Omar Khwaja, MD, PhD; Roche Pharmaceutical Research &amp; Early Development, Basel Switzerland</td>
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<td>Nancy Minshew, MD; University of Pittsburgh, Pittsburgh, PA</td>
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<td>Robert Schultz, MD; University of Pennsylvania, Philadelphia, PA</td>
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<td>Marshallyn Yergin-Allsopp, MD; Emory University, Atlanta, GA</td>
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<td>5:00 PM</td>
<td>Closing Comments and Thanks</td>
<td>Bernard L. Maria, MD, MBA</td>
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**ADDITIONAL WEDNESDAY MEETINGS/SESSIONS**

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<td>8:00 AM</td>
<td>Association of Child Neurology Nurses</td>
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<tr>
<td>4:30 PM</td>
<td>Professors of Child Neurology</td>
<td>Deepa Menon, MBBS; Kennedy Krieger Institute, Baltimore, MD</td>
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**OPENING RECEPTION**  
Supported by Nationwide Children's Hospital; Columbus, OH

**SIG Meetings**  
Including Movement Disorders

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**Thursday, October 23**

**CONTINENTAL BREAKFAST**

**SEMINARS**

**Breakfast Seminar 1: Epilepsy Therapy Update**  
Organizer: Sudha Kessler, MD; CHOP, Philadelphia, PA

**Breakfast Seminar 2: Update on the Leukodystrophies**  
Organizer: Adeline Vanderver, MD; Children’s National Medical Center, Washington, D.C.

**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

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
Symposium III: Genetics & Biology of Early Life Epilepsies
Organizer: 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

CONTINENTAL BREAKFAST

SEMINARS

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

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Regulation of Vulnerability to Excitotoxicity in Developing Oligodendrocytes
Chris Elitt MD, PhD; Boston Children's Hospital, Boston, MA

Potential Value of Health Information Exchange for People with Epilepsy
Zachary Grinspan, MD; Weill Cornell Medical School, New York, NY

Clinical Research in Tuberous Sclerosis
Tanjala Gipson, MD; Johns Hopkins University School of Medicine, Baltimore, MD

Assessment of Dissociative Steroid as Dexamethasone Substitute for Diffuse Intrinsic Pontine Glioma (DIPG)
Elizabeth Wells, MD; Children's National Medical Center, Washington, D.C.

The Neurobiological Basis for HIV-Associated Neurocognitive Disorders and Depression in Horizontally-Infected Adolescents
Jen McGuire, MD; CHOP, Philadelphia, PA

Intraoperative EEG Monitoring in Congenital Heart Disease
Laurie Seltzer, DO; University of Rochester, Rochester, NY

Assessment of Functional Brain Development in Infants Using fMRI
Christopher Smyser, MD; Washington University School of Medicine, St. Louis, MO

Language Development and Cognitive Plasticity after Early Focal Brain Injury
Kevin Shapiro, MD; UCSF, San Francisco, CA

Source EEG Functional Networks Partially Reflect Underlying Structural Connectivity
Catherine Chu, MD; Massachusetts General Hospital, Boston, MA

Breakfast Seminar 6: Collaboration, Technology and Innovation in the Age of Health Care Reform: The Updated Child Neurology Encounter Guides
Organizer: Julie M. Sprague-McRae, MS, RN, PPCNP-BC; Kaiser Permanente Medical Group Inc., Fremont, CA

8:30 AM – 10:15 AM
PL 2-1 Tully HM et al
Clinical Outcome of 237 Children with Developmental Hydrocephalus

8:45 AM – 10:15 AM
PL 2-2 Fayed N et al
Quality of Life among Children with Epilepsy from their Point of View

9:00 AM – 10:15 AM
PL 2-3 Khan SG et al
Hereditary Hypermanganesemia: a new potentially treatable metabolic disorder in four Pakistani siblings

9:45 AM – 10:15 AM
PL 2-4 Kirton A et al
Brain Stimulation and Constraint for Perinatal Stroke Hemiparesis: the plastic champs trial

Ruth Rosenblum, DNP, MS, RN, PPCNP-BC; Valley Foundation School of Nursing, San Jose, CA

8:30 AM – 10:15 AM
PL 1-1 Berry-Kravis E et al
Arbaclofen in Fragile X Syndrome: results of phase 3 trials

8:45 AM – 10:15 AM
PL 1–2 Chao HT et al
Context Dependent Modulation of GABAergic Gene Expression in Models of Rett Syndrome

9:00 AM – 10:15 AM
PL 1–3 Franz DN et al
Everolimus for Subependymal Giant Cell Astrocytoma (SEGA) Associated with Tuberous Sclerosis Complex (TSC): EXIST 1 long-term efficacy and safety result

9:15 AM – 10:15 AM
PL 1–4 Holder JL et al
SHANK3 Overexpression Causes Manic-Like Behavior with Unique Pharmacogenetic Properties

9:30 AM – 10:15 AM
PL 1–5 Jeste SS et al
Early Developmental Predictors and Behavioral Correlates of ASD in Infants with Tuberous Sclerosis Complex

9:45 AM – 10:15 AM
PL 1–6 Monani UR et al
Gene Therapy for Glut1 Deficiency Syndrome

10:00 AM – 10:15 AM
PL 1–7 Tobe BTD et al; Evan Snyder, MD, PhD presenting
Using a “Molecular Can-Opener” to Model Disease: probing lithium's targets in bipolar hiPSC's suggests a novel underlying developmental disorder

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Using a “Molecular Can-Opener” to Model Disease: probing lithium's targets in bipolar hiPSC's suggests a novel underlying developmental disorder
High Positive Diagnostic Yield of Panel Testing and Whole Exome Sequencing for Patients with Epilepsy-related Neurodevelopmental Disorders

Genetic Mechanisms of Ohtahara Syndrome, A Cohort Study

Outcome in Nonketotic Hyperglycinemia (NKH)

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

Junior Member Seminars
Seminar 1: Med Students: Finding a Residency
Seminar 2: Residents: Finding a Fellowship
Seminar 3: Residents & Fellows: Finding a Job

GALA RECEPTION

Saturday, October 25

CONTINENTAL BREAKFAST

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

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

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, CHOE; Philadelphia, PA
When the NMDA Receptor Antibody is Negative: Other Auto Immune Encephalitides in Pediatrics
Mark Gorman, MD; Boston Children’s Hospital, Boston, MA
Agenda for 2014 ACNN Conference Program
Columbus, Ohio
October 22 – October 24, 2014

Tuesday, October 21

7:00 PM – 9:00 PM
ACNN Welcome Reception (Nurses Only)

Wednesday, October 22

7:00 AM – 8:00 AM
Registration & Continental Breakfast

8:00 AM – 8:15 AM
Welcome & Introduction

8:15 AM – 9:00 AM
Janet Brucker Keynote Address Project
J. Erin Riehle, MSN, RN

9:00 AM – 10:00 AM
Chronic Migraines in the Pediatric Population
Maria Laderman, RN, MS, CPNP

10:00 AM – 10:15 AM
Break

10:15 AM – 11:15 AM
An Evidence Based Approach to Neuroimaging of Children with Chronic Headache
Scott Turner, MSN, FNP

11:30 AM – 12:00 PM
Awards and Annual Business Meeting

12:00 PM – 1:00 PM
Lunch & Networking Opportunity

Thursday, October 23

1:00 PM – 2:00 PM
Those Darn Tics! Diagnosis and Management of Tourette Syndrome
Amy Vierhile, RN, MS, PPCNP-BC

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

5K Run/Walk Fundraiser for ACNN/CNF Nursing Research Grant

Friday, October 24

12:00 PM – 12:30 PM
Lunch-SIG
Topics to be announced

1:00 PM – 1:30 PM
De novo Deletion in SZT2 Resulting in an Early-Onset Epileptic Encephalopathy
Jennifer Murphy, CPNP-AC, BSN, RN, CPHON
Adeline Vanderver, MD

1:30 PM – 2:00 PM
Safety Considerations in the Epilepsy Monitoring Unit
Ruth C. Shinnar, RN, MSN