23rd Annual International Epilepsy Symposia
October 5-11, 2014
Cleveland Convention Center/Global Center for Health Innovation

Pediatric Epilepsy Surgery in Children:
Impact of Brain Development and Pathology
October 5-8, 2014

Status Epilepticus Update
October 9-10, 2014

Brain Mapping Workshops:
SEEG in Temporo-Perisylvian Epilepsies
October 8-11, 2014

Emerging Ethical and Legal Challenges in Chronic Neurological Conditions
October 8-9, 2014
Epilepsy Surgery In Children: Impact of Brain Development and Pathology

October 5-8, 2014

Description
This unique epilepsy symposium will provide a comprehensive and at the same time refreshing approach to the evaluation and surgical management of pediatric patients with uncontrolled seizures. Specifically, the symposia will focus on the current state and future directions of presurgical evaluations and epilepsy surgery guided by our renewed understanding of the underlying pathology in each individual. With the widespread use of noninvasive and invasive evaluations and epilepsy neurosurgery the need arises to better define the pathological substrate and tailor our investigations, and expectations accordingly. This goal will be accomplished by detailing the structural and histopathological identification of each epileptic substrate. We will then review neuroimaging, electro-clinical and anatomo-functional, typical and atypical, presentations of each pathological substrate in pediatric patients with medically-intractable epilepsies. We will then review the process of individualized surgical decision-making based on illustrative case discussions.

Target Audience
The symposium is designed for adult and pediatric neurologists and epileptologists, neurosurgeons performing epilepsy surgery in adults and children, neuroradiologists, clinical neurophysiologists, psychiatrists, clinical neuropsychologists, social workers and other expert caretakers of patients across all age groups with epilepsy.

Course Objectives
• Discuss the management of complex and refractory epilepsy in children with various pathologies focusing on epilepsy surgery
• Review individualized per-surgical evaluation, surgical approaches and techniques and outcomes after epilepsy surgery.

Symposium Directors
Ajay Gupta, MD
William Bingaman, MD
Imad Najm, MD
Elaine Wyllie, MD
Cleveland Clinic Faculty
Andreas Alexopoulos, MD
Juan Bulacio, MD
Patrick Chauvel, MD
Jorge Gonzalez-Martinez, MD, PhD
Lara Jehi, MD
Steven Jones, MD, PhD
Prakash Kotagal, MD
Deepak Lachhwani, MD
Elia Pestana-Knight, MD
Paul Ruggieri, MD
Norman So, MD
Ahsan Moosa Naduvil Valappil, MD

Guest Faculty
Mario Alonso, MD
Mexico City, Mexico
Alexis Arzimanoglou, MD
Lyon, France
Sanjiv Bhatia, MD
Miami, FL
Ingmar Blümcke, MD
Erlangen, Germany
Manuel Campos, MD
Santiago, Chile
Fernando Cendes, MD, PhD
Campinas, Brazil
Kevin Chapman, MD
Aurora, CO
Tsu Lee Chen, MD
Akron, OH
Harry Chuagani, MD
Detroit, MI
Helen Cross, MD
London, UK
Dan Curry, MD
Houston, TX
Bertrand Devaux, MD
Paris, France
Michael Duchowny, MD
Miami, FL
John Duncan, MD, PhD
London, UK
Stefano Francione, MD, PhD
Milan, Italy
William Gaillard, MD
Washington, DC
Gerry Grant, MD
Stanford, CA
Hans Holthausen, MD
Vogtareuth, Germany
Gwyneth Hughes, MD
Akron, OH
Prasanna Jayakar, MD
Miami, FL
Bradley Lega, MD
Philadelphia, PA
Giorgio Lo Russo, MD
Milan, Italy
Tobias Loddenkemper, MD
Boston, MA
Helio Machado, MD
Ribeirao Preto, Brazil
Guy McKhann, MD
New York, NY
Mohamad Mikati, MD
Durham, NC
Marcia E Morita, MD
Sao Paulo, Brazil
Roger Packer, MD
Washington, DC
Eliseu Paglioli, MD
Porto Alegre, Brazil
André Palmini, MD, PhD
Porto Alegre, Brazil
Harold Rekate, MD
Great Neck, NY
Loreto Rios-Pohl, MD
Santiago, Chile
Americo Sakamoto, MD
Ribeirao Preto, Brazil
Harvey Sarnat, MD
Calgary, Canada
Michael Sather, MD
Hershey, PA
Demitre Serletis, MD
Little Rock, AR
Nitin Tandon, MD
Houston, TX
Laura Tassi, MD
Milan, Italy
Helder Tedeschi, MD
São Paulo Brazil
W. Hung Tzu, MD
Porto Alegre, Brazil
Sumeet Vadera, MD
Los Angeles, CA
Howard Weiner, MD
New York, NY
Daniel Yoshor, MD
Houston, TX
Day 1: October 5, 2014

7:45-8:10 am  
Opening Remarks and Introductions  
Ajay Gupta/William Bingaman

Morning Session:

8:10-8:40 am  
Keynote Presentation  
Epilepsy Surgery in Children: How Far Have We Come and Where to Go Next?  
Elaine Wyllie

8:40-11:00 am  
Epilepsy Surgery for Focal Cortical Dysplasia (FCD)  
Session Chairs: Harry Chugani and Ajay Gupta

8:40-9:10 am  
EEG in FCD: Developmental Evolution and How It Could Be Progressive?  
Ajay Gupta

9:10-9:40 am  
Role of Brain PET and DTI in FCD: When Is It Necessary and Why?  
Harry Chugani

9:40-10:10 am  
Brain MRI: Changes with Brain Development and Pathological Classifications. Optimal MRI Protocols from Infancy to Childhood?  
Paul Ruggieri

10:10-10:30 am  
Break

10:30-11:00 am  
FCD: Role of SPECT, MEG, and fMRI: When Is It Necessary and Why?  
Andreas Alexopoulos

11:00-12:20 pm  
FCD: Surgical Case Based Discussions  
Session Chairs: André Palmini and Lara Jehi  
Panel Members: Laura Tassi, Norman So, Giorgio Lo Russo, Harry Chugani

11:00-11:40 am  
A Case of Peri-Rolandic Dysplasia  
Andre Palmini

11:40-12:20 pm  
A Case of Opercular or Insular Epilepsy Using Stereo EEG  
Laura Tassi

12:20-1:20 pm  
Lunch

Afternoon Session:

1:20-1:30 pm  
Introductions  
Elaine Wyllie

1:30-2:00 pm  
Keynote Presentation  
Histo-pathological Spectrum of Dysplastic Lesions from Infancy and Beyond: Ever Changing Classification and the Science Behind It  
Ingmar Blumcke

2:00-4:30 pm  
Multi-lobar/hemispheric Dysplasias  
Session Chairs: Giorgio Lo Russo and Fernando Cendes

2:00-2:30 pm  
What are Dysplasias? Genetic and Environmental Mechanisms in Dysplastic vs Normal Brain Development  
Harvey Sarnat

2:30-3:00 pm  
Multi-lobar Dysplasias – Hemispheric Malformations – Hemimegalencephaly: Clinical, MRI and VEEG Findings and Challenges in Epilepsy Surgery Selection  
Hans Holthausen

3:00-3:30 pm  
Surgical Techniques and Outcomes of Hemispherectomy Around the Globe – What and How It Has Changed? Is There a Consensus?  
William Bingaman

3:30-4:00 pm  
Break

4:00-4:30 pm  
Surgical Approaches and Outcomes in FCD: When Is Invasive Extraoperative Video EEG Necessary?  
Imad Najm

4:30-6:00 pm  
Case Discussion  
Session Chairs: Prakash Kotagal and Elia Pestana-Knight  
Panel Members: Helio Machado, Ahsan Moosa Naduvil Valappil, Eliseu Paglioli, Loreto Rios-Pohl

4:30-5:15 pm  
A Case of Multi-Lobar Dysplasia  
Loreto Rios-Pohl

5:15-6:00 pm  
A Case of Reoperative Hemispherectomy  
Ahsan Moosa Naduvil Valappil

Agenda is subject to change.
# Agenda

## Morning Session:

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>7:45-8:00 am</td>
<td><strong>Introductions</strong></td>
<td>Ajay Gupta</td>
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<tr>
<td>8:00-8:30 am</td>
<td><strong>Keynote Presentation</strong></td>
<td>Michael Duchowny</td>
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<tr>
<td>8:30-10:00 am</td>
<td><strong>Morning Session: Vascular and Dual Pathologies in Children</strong></td>
<td>Hans Holthausen and Americo Sakamoto</td>
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<tr>
<td>8:30-9:00 am</td>
<td><strong>Sturge Weber Syndrome – Can We Settle the Debate for Early Surgery:</strong></td>
<td>Alexis Arzimanoglou</td>
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<td>9:00-9:30 am</td>
<td><strong>Ischemic Strokes and Perinatal Substrates:</strong></td>
<td>Prakash Kotagal</td>
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<td>9:30-10:00 am</td>
<td><strong>Dual Hits – Mesial Temporal Sclerosis (MTS) and MTS Plus:</strong></td>
<td>Fernando Cendes</td>
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<td>10:00-10:20 am</td>
<td><strong>Break</strong></td>
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<tr>
<td>10:20-11:40 am</td>
<td><strong>SPECIAL PROGRAM: DUDLEY DINNER LECTURE</strong></td>
<td>Imad Najm</td>
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<tr>
<td>10:20-10:35 am</td>
<td><strong>Introduction</strong></td>
<td>Imad Najm</td>
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<td>10:35-11:25 am</td>
<td><strong>Multimodal Imaging in Epilepsy:</strong></td>
<td>John Duncan</td>
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<td>11:25-11:40 am</td>
<td><strong>Award Ceremony</strong></td>
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<td>11:40-1:00 pm</td>
<td><strong>Case Discussions</strong></td>
<td>Alexis Arzimanoglou and Deepak Lachhwani</td>
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<tr>
<td>11:40-12:20 pm</td>
<td><strong>A Case of Bilateral Perinatal Lesions (PVL or Encephalomalacia or Stroke)</strong></td>
<td>Deepak Lachhwani</td>
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<tr>
<td>12:20-1:00 pm</td>
<td><strong>Sturge Weber Syndrome: Hemispherectomy vs Tailored Resection</strong></td>
<td>Tobias Loddenkemper</td>
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<tr>
<td>1:00-2:00 pm</td>
<td><strong>Lunch</strong></td>
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## Afternoon Session:

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>2:00-4:00 pm</td>
<td><strong>Epilepsy Surgery in Multi-lesional, Subcortical and Progressive Pathologies</strong></td>
<td>Helen Cross and Elaine Wyllie</td>
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<tr>
<td>2:00-2:30 pm</td>
<td><strong>Tuberous Sclerosis Complex: Surgical Strategy in a “Truly” Difficult Patient</strong></td>
<td>Howard Weiner</td>
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<tr>
<td>2:30-3:00 pm</td>
<td><strong>Focal Surgery in Extensive Malformations (Incomplete Resection): Is It Possible and How to Do It?</strong></td>
<td>Prasanna Jayaker</td>
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<tr>
<td>3:00-3:30 pm</td>
<td><strong>Rasmussen’s Syndrome – Immune Modulation vs Hemispherectomy: Not Too Early But Not Too Late</strong></td>
<td>Helen Cross</td>
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<td>3:30-4:00 pm</td>
<td><strong>Subcortical Heterotopia Lesions – Are These Surgical Targets and Need Different Techniques?</strong></td>
<td>Stefano Francione</td>
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<tr>
<td>4:00-4:30 pm</td>
<td><strong>Break</strong></td>
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<td>4:30-6:15 pm</td>
<td><strong>Cases Discussion</strong></td>
<td>Loreto Rios-Pohl and Lara Tassi, Manuel Campos, Stefano Francione, Marcia Morita, Eliseu Paglioli, Daniel Yoshor</td>
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<tr>
<td>4:30-5:05 pm</td>
<td><strong>Focal Resection in a Large Malformation</strong></td>
<td>Manuel Campos</td>
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<tr>
<td>5:05-5:40 pm</td>
<td><strong>Tuberous Sclerosis Case</strong></td>
<td>Eliseu Paglioli</td>
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<tr>
<td>5:40-6:15 pm</td>
<td><strong>Case of Large Temporal- Parietal-Subcortical Heterotopic and Hippocampal Malformations with Temporal Lobe Seizures – What to Do?</strong></td>
<td>Marcia E. Morita</td>
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</tbody>
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*Agenda is subject to change.*
John Duncan MA DM FRCP FMedSci

John Duncan graduated from Oxford University Medical School in 1979 and since 1989 has been an Academic Consultant Neurologist specialising in epilepsy, practicing at the National Hospital for Neurology and Neurosurgery, Queen Square, London, and at the Epilepsy Society in Chalfont St. Peter, UK. He was appointed Professor of Neurology at the UCL Institute of Neurology in 1998, and in 2001 was appointed to be the inaugural head of the Department of Clinical and Experimental Epilepsy.

He chaired the Diagnostic Methods Commission of the International League Against Epilepsy (ILAE) from 2001 to 2005. In 2004 he received the annual Clinical Research recognition award of the American Epilepsy Society. He was President of the UK chapter of the ILAE from 2004 to 2008, and treasurer from 2009 to 2012.

In 2005 he was elected Ambassador for Epilepsy of the ILAE and International Bureau for Epilepsy, and to be a Fellow of the Academy of Medical Sciences. In 2010 he was appointed to be a Senior Investigator of the UK National Institute for Health Research.

In 2012 he was appointed Clinical Director of the National Hospital for Neurology and Neurosurgery, Queen Square, London.

His principal research interest is the application of novel brain imaging to the diagnosis and treatment of the epilepsies, particularly surgical treatment, and is currently supported by the Wellcome Trust, UK Department of Health and the Medical Research Council.

Dudley Dinner, MD (1947-2007) came to the Cleveland Clinic in 1979 as the first fellow in clinical neurophysiology and epilepsy and then joined the Epilepsy Section as staff neurologist and epileptologist. He played a leading role in establishing the epilepsy surgery program, evoked potentials and intraoperative monitoring. Dr. Dinner made many valuable contributions to understanding the usefulness of the intra-carotid amytal (WADA) test and the functional anatomy of the supplementary motor area cortex. He established and directed the sleep disorders center. Dr. Dinner published numerous scientific papers, invited reviews, editorials and chapters and also edited the book Sleep and Epilepsy. His vast knowledge and experience was a source of strength for both the epilepsy surgery and sleep programs at the Cleveland Clinic. He was very active in the American Clinical Neurophysiology Society and was Associate Editor of the Journal of Clinical Neurophysiology. His wisdom and kind, gentle spirit provided guidance and encouragement to patients, colleagues, epilepsy fellows and neurology residents.
Morning Session:

7:45-8:00 am  
Introductions  
William Bingaman

8:00-8:30 am  
Keynote Presentation  
How Could We Better Define “Good Outcome” After Pediatric Epilepsy Surgery Across Severity and Disease Spectrum?  
Helio Machado

8:30-10:00 am  
Epileptogenic Brain Tumors in Children – Is the Outcome Really as Good?  
Session Chairs: Roger Packer and Harold Rekate

8:30-9:00 am  
Pediatric Epileptogenic Tumors and Borderland of Dysplasia – What Is the Connection to Cure Epilepsy?  
Deepak Lachhwani

9:00-9:30 am  
Hypothalamic Hamartoma: Natural History, Surgical Options and Outcomes?  
Harold Rekate

9:30-10:00 am  
Non-AED Management and Longitudinal Imaging “Before and After Surgery” – When Could Epileptologist Sign Off the Case?  
Roger Packer

10:00-10:20 am  
Break

10:20-12:20 pm  
Case Discussions  
Session Chairs: Manuel Campos and Michael Duchowny  
Panel Members: Dan Curry, Kevin Chapman, Harold Rekate, Michael Duchowny

10:20-11:00 am  
Extratemporal Lobe Tumor with Functional Mapping or Challenging Dilemmas  
Elia Pestana-Knight

11:00-11:40 am  
Hypothalamic Hamartoma  
Kevin Chapman

11:40-12:20 pm  
A Case of Heterotopia (or Deeply Located Lesion) – Dan Curry

12:20-1:30 pm  
Lunch

Afternoon Session:

1:30-3:30 pm  
The Challenge of Surgery in MRI Negative Focal Epilepsies  
Session Chairs: Bill Gaillard and Mohamad Mikati

1:30-2:00 pm  
Normal or Equivocal Brain MRI: How May We Bring the Lesion Out?  
Stephen Jones

2:00-2:30 pm  
Normal or Unequivocal Brain MRI: Role of Complimentary Imaging Techniques  
Bill Gaillard

2:30-3:00 pm  
Indications and Choice of Invasive Techniques in MRI Negative Partial Epilepsy  
Jorge Gonzalez-Martinez

3:00-3:30 pm  
Focal Epilepsies in Genetic Metabolic Substrates: Who Could Be a Surgical Candidate for Resection?  
Mohamad Mikati

3:30-4:00 pm  
Break

4:00-6:00 pm  
Case Discussions – Illustrative Non-lesional Epilepsy Cases  
Session Chairs: Juan Bulacio and Patrick Chauvel  
Panel Members: Hans Holthausen, Americo Sakamoto, Elia Pestana Knight, Nitin Tandon

4:00-4:40 pm  
SEEG in a Non-Lesional MRI Negative Case  
Juan Bulacio

4:40-5:20 pm  
Subdural Grids or Combination with Depths in a Non-Lesional Case  
Americo Sakamoto

5:20-6:00 pm  
Surgery and Genetic Condition – (Aicardi Syndrome or Other Genetic Metabolic Condition)  
Elia Pestana-Knight

Day 4: October 8, 2014

7:45-8:00 am  
Introduction  
William Bingaman

Morning Session:

8:00-10:30 am  
Beyond Resective Surgeries in Pediatric Epilepsy  
Session Chairs: William Bingaman and Mario Alonso

8:00-8:45 am  
Non-Resective Epilepsy Surgery – Palliative vs Curative  
Mario Alonso

8:45-9:30 am  
Laser Guided Ablation and Neuromodulation in Pediatric Epilepsy Surgery  
Dan Curry

9:30-10:15 am  
Future of Pediatric Epilepsy Surgery: A Surgeon’s Perspective  
William Bingaman

10:15-10:30 am  
Concluding Remarks  
Ajay Gupta/William Bingaman

10:30 am  
Adjourn Didactic Lectures

10:30-6:00 pm  
Surgical Workshop  
Agenda is subject to change.
## Epilepsy Surgery Workshop

### October 8, 2014, 10:30-6:00 pm

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<tr>
<th>Time</th>
<th>Event</th>
<th>Presenter</th>
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<tbody>
<tr>
<td>10:30-11:00 am</td>
<td>Shuttle to Lutheran Hospital</td>
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<tr>
<td>11:15 am</td>
<td>Welcome and Introduction</td>
<td>William Bingaman</td>
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<tr>
<td>11:30 am</td>
<td>Surgery In and Around Motor Cortex</td>
<td>Giorgio Lo Russo</td>
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<td>11:50 am</td>
<td>Hemispherectomy Technique</td>
<td>William Bingaman</td>
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<td>12:10 pm</td>
<td>Temporal Lobectomy: Anatomy and Technique</td>
<td>Sanjiv Bhatia</td>
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<td>12:30 pm</td>
<td>Lunch Discussion: Use of Intraop EcOG</td>
<td>Eliseu Paglioli</td>
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<td>1:20 pm</td>
<td>Laser Ablation</td>
<td>Dan Curry</td>
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<td>1:40 pm</td>
<td>Corpus Callosotomy</td>
<td>Helio Machado</td>
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<td>2:00 pm</td>
<td>Language Mapping in Children</td>
<td>Gerry Grant</td>
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<td>2:20 pm</td>
<td>Planning Resection After SEEG</td>
<td>Jorge Gonzalez-Martinez</td>
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<td>2:40 pm</td>
<td>Minimizing Complications</td>
<td>Nitin Tandon</td>
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<td>3:00 pm</td>
<td>Transition to Lab</td>
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<td>3:15-5:45 pm</td>
<td>Lab Dissection</td>
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<td>Directors: Jorge Gonzalez-Martinez and W. Hung Tzu</td>
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<td>Lab Staff:</td>
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<td>Manuel Campos</td>
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<td>Daniel Yoshor</td>
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<td>6:00 pm</td>
<td>Shuttle to Marriott Hotel</td>
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<tr>
<td>7:00 pm</td>
<td>Dinner</td>
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**Call for Abstracts**

The **Cleveland Clinic Epilepsy Surgery Symposium** organizing committee invites meeting attendees to submit abstracts describing original epilepsy-related research.

The committee is also happy to announce the institution of the Cleveland Clinic Epilepsy Center Research Award. This award is offered to meeting attendees from within the United States and abroad whose abstracts provide a significant contribution to the Symposium's general theme and the understanding of epilepsy mechanisms and treatments.

Five winners will be selected by the organizing committee. The winners will have their meeting registration fee waived and will be provided free accommodation in the meeting hotel's headquarters, as well as the opportunity to present their data in a dedicated session and ceremony.

Our goal is to encourage young researchers in the field of epilepsy by providing them with an opportunity to showcase and discuss their results with experts in the field, and provide ground for further investigations. All other accepted abstracts will be shown in a poster session.

**Abstracts may be submitted at**


**Deadline for submission is September 5, 2014.**
The status epilepticus symposium will review the fundamentals of status epilepticus, update our colleagues on the modern medical practice, and discuss the future of treatment and recovery. Status epilepticus is often under recognized particularly in the critical care setting and making the diagnosis is the first step before treatment can be initiated. Treating status is not straight forward and our algorithms are out dated and often ineffective at stopping seizures. We will discuss the use of new and innovative medical approaches to stop and prevent seizures. The outcome of status epilepticus is highly dependent on the care and support of the patient during treatment. We will also discuss the future of preventing complications of treatment and innovations to improve patient outcomes.

Target Audience

The symposium is designed for adult and pediatric neurologists and epileptologists, neurosurgeons performing epilepsy surgery in adults and children, neuroradiologists, clinical neurophysiologists, psychiatrists, clinical neuropsychologists, social workers and other expert caretakers of patients across all age groups with epilepsy.

- Discuss the definitions and epidemiology of Status Epilepticus (SE)
- Review the pathophysiology of SE
- Discuss the role of continuous EEG monitoring in the diagnosis and management of SE
- Review the algorithm of medical management of SE and discuss the contributions of new antiepileptic medications and formulations in the modern management of SE
- Discuss the medical complications of SE and the management approach to improve patient outcomes
- Discuss the neurological and cognitive outcomes of SE
Thursday, October 9

8:00-8:15 am  Welcome and Introductions
Stephen Hantus

8:15-9:00 am  ICU EEG Monitoring: What Does the Future Hold – Stephen Hantus

9:00-9:45 am  Case Study #1: Refractory Status Epilepticus with ICH
Moderator: Dhimant Dani

9:45-10:00 am  Break/Exhibits

10:00-11:00 am  Special Considerations of Status Epilepticus in the Pediatric and Neonate
James Riviello Jr

11:00-11:45 am  Case Study #2: Pediatric Status Epilepticus
Moderator: Ahsan Moosa Naduvil Valappil

11:45-1:00 pm  Lunch

1:00-2:00 pm  The Use of Anti-Epileptic Drugs in Status in the Era of ICU EEG
Elizabeth Gerard

2:00-2:45 pm  Case Study #3: Medically Intractable Status and the Rational Use of AEDs
Moderator: Norman So

2:45-3:15 pm  Break/Exhibits

3:15-4:15 pm  The Use of IV Anesthesia for the Suppression of Status Epilepticus
Thomas Bleck

4:15-5:00 pm  Case Study #4: The Efficient Use of Coma in Refractory Status
Moderator: Andreas Alexopoulos

5:00 pm  Adjourn

Friday, October 10

8:00-8:15 am  Introductions
Stephen Hantus

8:15-9:15 am  Managing the Complications of Prolonged Status Epilepticus
Edward Manno

9:15-10:00 am  Case Study #5: Prolonged Status Epilepticus in the ICU
Moderator: Laurie McWilliams

10:00-10:15 am  Break

10:15-11:15 am  The Use of Immune Modulation in Medically Intractable Status Epilepticus
Eric Lancaster

11:15-12:00 noon  Case Study #6: Medically Intractable Status Epilepticus in the Setting of Encephalitis
Moderator: Stephen Hantus

12:00 noon  Adjourn
About the Workshop
Temporal lobe epilepsy surgery is one of the most commonly performed resections for the treatment of pharmocoresistant disease. Despite multiple advances in neurophysiological imaging and invasive evaluation techniques, temporal lobe surgery may not lead to seizure freedom in a sizable number of patients.

The aim of this workshop is to discuss the role of SEEG in the preresection exploration of patients with temporal and perisylvian epilepsies.

Learning Objectives
1. Discuss the functional anatomy of the temporal-perisylvian region and its implications on presurgical evaluation
2. Discuss the electro-chemical presentation of temporal-perisylvian epilepsy
3. Discuss the indications and surgical strategies related to the use of Stereotactic EEG methodology in patients with suspected temporo-perisylvian epilepsies.

Target Audience
Neurosurgeons and Neurologists

Workshop Directors
Andreas Alexopoulos, MD
Cleveland Clinic Epilepsy Center
Juan Bulacio, MD
Cleveland Clinic Epilepsy Center
Patrick Chauvel, MD
Cleveland Clinic Epilepsy Center and Aix-Marseille University, Marseille, France
Jorge Gonzalez-Martinez, MD, PhD
Cleveland Clinic Epilepsy Center

Guest Faculty
Francine Chassoux, MD
Paris Descartes University
Paris, France

Philippe Derambure, MD, PhD
Lille 2 University
Lille, France

Stefano Francione, MD
Niguarda Hospital
Milan, Italy

Martine Gavaret, MD
Aix-Marseille University
Marseille, France

Maxime Guye, MD, PhD
Aix-Marseille University
Marseille, France

Viktor Jirsa, PhD
Aix-Marseille University
Marseille, France

Anca Pasnicu, MD
Rennes I University
Rennes, France

Laura Tassi, MD
Niguarda Hospital
Milan, Italy

Cleveland Clinic Faculty
Jocelyn Bautista, MD
William Bingaman, MD
Richard Burgess, MD, PhD
Ajay Gupta, MD
Lara Jehi, MD
Stephen Jones, MD, PhD
Ahsan Moosa Naduvil Valappil, MD
Imad Najm, MD
Elia Pestana-Knight, MD
Norman So, MD
Zhong Ying, MD, PhD

This activity has been approved for AMA PRA Category 1 Credit.
Wednesday, October 8
5:00-5:30 pm  
Registration

5:30-6:00 pm  
Welcome & Introduction  
Jorge Gonzalez-Martinez, Imad Najm and Patrick Chauvel

6:00-7:00 pm  
What Are the “Borders” of Temporal Lobe Epilepsies?  
Patrick Chauvel

8:00 pm  
Dinner

Thursday, October 9
8:00-8:40 am  
Temporo-Perisylvian Functional Anatomy in the Stereotactic Space  
Jorge Gonzalez-Martinez

8:40-9:20 am  
Electro-Clinical Correlations in the Temporo-Perisylvian Epilepsies  
Juan Bulacio

9:20-10:00 am  
Designing the SEEG Implantation  
Patrick Chauvel

10:00-10:30 am  
Coffee Break

10:30-12:30 pm  
Small Group Workshops, Surgical Cases, Phase I  
The Use of Non Invasive Electroclinical Data for Identifying the Networks and Targets for SEEG Implantation (SEEG Planning)

Moderators
Workshop 1: Patrick Chauvel, Zhong Ying  
Workshop 2: Imad Najm, Anca Pasnicu  
Workshop 3: Laura Tassi, Jorge Gonzalez-Martinez  
Workshop 4: Elia Pestana-Knight, Martine Gavaret  
Workshop 5: Juan Bulacio, Philippe Derambure  
Workshop 6: Andreas Alexopoulos, Jocelyn Bautista  
Workshop 7: Norman So, Francine Chassoux  
Workshop 8: Stefano Francione, Ajay Gupta

12:30-2:00 pm  
Lunch

2:00-4:30 pm  
Grand Workshop, Surgical Cases, Plenary Discussion Phase I
Moderators: Imad Najm and Patrick Chauvel

4:30-5:00 pm  
Break

5:00-5:45 pm  
Dynamic Neural Networks in the Planning of SEEG Implantation: A Case Illustration  
Viktor Jirsa

5:45-6:30 pm  
Brain Stimulation Mapping in TPS Epilepsies: When, Why & How  
Juan Bulacio

6:30 pm  
Dinner
Brain Mapping Workshop II
Temporo-Perisylvian Epilepsies
Proposed Agenda

Friday, October 10

8:00-8:40 am  Noninvasive Interictal & Ictal Electrophysiology in TPS Epilepsies  
Andreas Alexopoulos

8:40-9:20 am  Interictal & Ictal Functional Imaging in TPS Epilepsies  
Maxime Guye

9:20-10:00 am  Physiology & Connectivity of the Insula and Opercular Region  
Imad Najm

10:00-10:30 am  Coffee Break

10:30 am-12:30 pm  Small Group Workshops, Surgical Cases Phase II  
The Analyses and Interpretation of SEEG Data  
Moderators  
Workshop 1: Patrick Chauvel, Zhong Ying  
Workshop 2: Imad Najm, Anca Pasnicu  
Workshop 3: Laura Tassi, Jorge Gonzalez-Martinez  
Workshop 4: Elia Pestana-Knight, Martine Gavaret  
Workshop 5: Juan Bulacio, Philippe Derambure  
Workshop 6: Andreas Alexopoulos, Jocelyn Bautista  
Workshop 7: Norman So, Francine Chassoux  
Workshop 8: Stefano Francione, Ajay Gupta

12:30-2:00 pm  Lunch

2:00-5:00 pm  Grand Workshop, Surgical Cases, Plenary Discussion Phase II  
SEEG Analyses and Interpretation  
Moderators: Patrick Chauvel and Juan Bulacio

5:00-5:30 pm  Coffee Break

5:30-7:00 pm  Round-Table Discussion  
The Primary Irritative Zone: A Pivotal Concept in Non-invasive Localization (MSI, MEG, and EEG-fMRI)  
Moderator: Philippe Derambure  
Panel Members: Richard Burgess, Andreas Alexopoulos

5:30-6:15 pm  SEEG Implantation Technique: Targeting the TPS Networks  
Jorge Gonzalez-Martinez

6:15-7:00 pm  Hands-on Session: SEEG Technical Nuances  
William Bingaman and Jorge Gonzalez-Martinez

Saturday, October 11

9:00 am-12:30 pm  Case Discussion – Learning from Failure & Success  
Jorge Gonzalez-Martinez, Ajay Gupta, Moosa Naduvil, Lara Jehi, Norman So, Anca Pasnicu, Laura Tassi, Francine Chassoux

12:30 pm  Adjourn
About the Workshop

The care of patients with serious chronic neurological conditions poses difficult ethical and legal dilemmas that extend beyond the acute care setting. This conference provides an opportunity for participants to engage in discussions regarding continuously emerging and profound legal and ethical challenges.

The topics for this conference include:

- Obligations to provide or withhold innovative or alternative therapies
- Societal and social issues in our new healthcare systems and the problem of stigma
- Nonepileptic seizures and other conversion disorders: A dialogue about emerging issues
- Public Health & Epilepsy: Considering driving, guns, and advocacy

The format of the conference will offer framework presentations by leading individuals from medicine, law, and ethics, followed by structured exploration and discussions. The paradigm of epilepsy will be used to highlight many of the ethical dilemmas, but there will be connections drawn to a variety of neurological illnesses such as multiple sclerosis, early Alzheimer’s, chronic pain, and Parkinson disease that span from pediatrics to geriatrics.

Learning Objectives

This conference will provide:

- An exploration of dilemmas that arise in an outpatient setting that are relevant to clinicians, ethicists, and public health scholars.
- Practical ethical frameworks and tools to navigate these dilemmas.
- An opportunity for audience members to actively engage in developing new approaches and solutions.

Target Audience

Neurologists, neurosurgeons, psychiatrists, lawyers, advance care nurses, physician assistants, ethicists, psychologists, health services specialists, and social workers who address practical and ethical challenges related to chronic neurological conditions.
Emerging Ethical and Legal Challenges
in Chronic Neurological Conditions
October 8-9, 2014 • Cleveland, OH

Agenda

Day 1 – October 8, 2014

1:00-1:30 Registration
1:30-3:15
Ethical Challenges with Refusal of Recommended Therapy: Alternative Therapy, Surgery, and High Risk Medications – Douglas Diekema, MD, MPH
Short Presentation – Cannabis: The Raging Debate – Camilo Garcia, MD
Short Presentation – Off-Label and Newly Approved Devices – Carmen Paradis, MD, MA
3:15-3:30 Break
3:30-5:00 The Presidential Bioethics Commission's Report on Incidental Findings: Applications for Neuroscience – Elizabeth Pike, JD, LLM
Short Presentation – Applications and Dilemmas of Incidental Findings in Practical Settings – Stephen Jones, MD, PhD

Day 2 – October 9, 2014

8:00-8:30 Continental Breakfast/Registration

Societal and Social Challenges

8:30-10:00 Ethical Implications of ACA and Contract Refusal with Specialty Centers: Complex Patients at Risk? – Valerie Blake, JD, MA; Respondent: Mark Votruba, PhD
10:00-10:15 Break
10:15-11:45 Stigma in Chronic Neurological Diseases: Ethical Challenges in Creating Change – Tatiana Falcone, MD, Jane Timmons-Mitchell, PhD and Paul Ford, PhD
12:00-1:00 Lunch: Nonepileptic Seizures – Dialogue About Emerging Ethical Issues – Xavier Jimenez, MD

Public Health Issues

1:15-3:00 Neurological Disease, Capacity and Personal Responsibility – Jennifer Chandler, JD
Clinicians’ Obligations to Public and Home Safety: Gun Ownership and Safety – Babak Tousi, MD
Short Presentation – Clinicians’ Roles in Restricting Driving for Patients with Cognitive Impairment – Bryn Esplin, JD
3:00-3:15 Break
3:15-4:45 Technical and Neuroethical Challenges in Pain Control: Addressing Harms of Commission and Omission – James Giordano, PhD
Short Presentation – Experimental Brain Surgery for Intractable Pain: Surgeon’s Perspectives of Ethical Challenges at the Translational Edge – Andre Machado, MD, PhD; Respondent: Bryan Kibbe, PhD
4:45-5:00 Close
Target Audience
The symposia are designed for pediatric neurologists and epileptologists, neurosurgeons with an interest in epilepsy surgery in children, psychiatrists, clinical neuropsychologists, social workers and other expert caretakers of patients with epilepsy across all age groups.

Symposia Location
Global Center for Health Innovation and Cleveland Convention Center
St Clair Ave. NE & E 6th Street
Cleveland, OH

Hotel Options
Cleveland Marriott Downtown at Key Center (For Epilepsy Surgery in Children, Status Epilepticus, and Ethical & Legal Challenges sessions)
127 Public Square
Cleveland, OH  44114
216.696.9200

A block of rooms has been reserved at the Cleveland Marriott Downtown at Key Center at the special group rate of $179 per night plus tax. Reservations must be made by Tuesday, September 16, 2014, in order to qualify for this rate.

The Westin Cleveland Downtown (For Brain Mapping Workshop)
77 Saint Clair Ave, NE
Cleveland, OH  44114
216.771.7700

A block of rooms has been reserved at The Westin Cleveland Downtown at the special group rate of $219 per night plus tax. Reservations must be made by Tuesday, September 9, 2014, in order to qualify for this rate.

Information
For further information about this activity, contact Martha Tobin at
Local: 216.445.3449
Toll Free: 800.223.2273 x53449
Email: tobinm@ccf.org

Deadline for Registration and Cancellation
Register at www.ccfmce.org/epilepsy14. Deadline for registration for the symposium is 5:00 pm (EST), Wednesday, October 1, 2014. A request for a refund must be received in writing by October 1, 2014. No refunds will be given after October 1, but registration is transferable through October 11, 2014. A $50 cancellation fee will be deducted from the refund for all cancellations.

If you register by mail, please allow up to three weeks for your registration to be processed.

For questions about registration, please call 216.448.0777 or email cmeregistration@ccf.org.

Accreditation
The Cleveland Clinic Foundation Center for Continuing Education is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The Cleveland Clinic Foundation Center for Continuing Education designates this live activity for a maximum of 56.0 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Participants claiming CME credit from this activity may submit the credit hours to the American Osteopathic Association for Category 2 credit.

Faculty Disclosure Statement
The Cleveland Clinic Foundation Center for Continuing Education has implemented a policy to comply with the current Accreditation Council for Continuing Medical Education Standards for Commercial Support requiring resolution of all faculty conflicts of interest. Faculty declaring a relevant commercial interest will be identified in the activity syllabus.

Americans with Disabilities Act
The Cleveland Clinic Foundation Center for Continuing Education fully intends to comply with the legal requirements of the Americans with Disabilities Act. If you need assistance, please notify Monet Smith at 216.444.9380 at least two weeks prior to the activity.
23rd Annual International Epilepsy Symposia

October 5-11, 2014
Cleveland Convention Center/Global Center for Health Innovation

PLEASE PRINT

First Name    MI  Last Name      Degree

Company/Institution

Address

City     State /Province Zip  Country

Phone       Fax

Specialty       E-Mail

Payment must be received prior to admittance to the course. Purchase orders are not accepted.

Complete details can be found at www.ccfcme.org/epilepsy14
CCF employees should check fees and register online at the above web address.

COURSE FEES
Registration fee includes symposia materials, AM & PM break refreshments, continental breakfast, lunch, and reception.

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☐ I require a vegetarian lunch

Total amount enclosed or to be charged: US $_______________________

PAYMENT

Make check payable and mail to:
The Cleveland Clinic Educational Foundation, P.O. Box 931653, Cleveland, OH 44193-1082

If you would like to register using a credit card, please go to www.ccfcme.org/epilepsy14 or call 216.448.0777 where it will be handled directly by a certified processor.