Cleveland Clinic Neurological Institute Summit 2019:
Epilepsy – Focal Cortical Dysplasia

Course Director: Imad Najm, MD

September 12-15, 2019

InterContinental Hotel & Bank of America Conference Center
9801 Carnegie Ave
Cleveland, Ohio 44106
Since the first clinical classification of focal cortical dysplasia (FCDs) almost two decades ago, there have been many advances in the recognition and management of this diverse pathology in the setting of pharmacoresistant focal epilepsies. These advances include better understanding of the electro-clinical manifestations of the FCDs, advanced imaging-pathological correlations and new insights on the genetic characterization of these pathologies. The Summit has the esteemed endorsement of the ILAE and our goal is to chart the future of research and management of FCD by bringing together world leaders to discuss the advances they have made in this field, identify challenges and act on the opportunities.

Learning Objectives
After completing this educational activity, participants will be able to do the following:

- Review the evidence base supporting the revised focal cortical dysplasia (FCD) classification and describe its impact on clinical practice.
- List the challenges of FCD classification from a pathological standpoint and highlight the role of molecular/genetics/imaging findings in addressing the current shortcomings in the current classification.
- Discuss the role of genetics in the FCD classification update.
- Address the clinical implications of FCD classification on epilepsy treatment, both medical and surgical.

Target audience

Target Audience: Adult and Pediatric Neurologists, Neurosurgeons, Epilepsy Fellows, Residents in Adult and Pediatric Neurology, Neuroscientists, Molecular Biologists, Pathologists, Pharmacists and Geneticists

www.ccfcme.org/NISummitEpilepsy19
Cleveland Clinic Neurological Institute Summit 2019:
Epilepsy – Focal Cortical Dysplasia

Invited Faculty

Gulcan Akgul, PhD
Storrs, CT

Eleonora Aronica, MD, PhD
Amsterdam, Netherlands

Stephanie Baulac, PhD
Paris, France

Ingmar Blumcke, MD
Erlangen, Germany

Fernando Cendes, MD, PhD
Campinas, Brazil

Helen Cross, MD
London, UK

Petia Dimova, MD
Sofial, Bulgaria

David Ellison, MD, PhD
Memphis, TN

Sam El-Osta, PhD
Melbourne, Australia

Renzo Guerrini, MD
Florence, Italy

Hans Holthausen, MD
Vogtareuth, Germany

Graham Huesmann, MD
Urbana, IL

Katja Kobow, PhD
Erlangen, Germany

Jeong Ho Lee, MD, PhD
Daejeon, Korea

Steve McCarroll, PhD
Boston, MA

Hajime Miyata, MD, PhD
Akita, Japan

Andre Palmini, MD, PhD
Porto Alegre, Brazil

Harvey Sarnat, MD
Alberta, Canada

Maria Thom, MD
London, UK

Christopher Walsh, MD, PhD
Boston, MA

Samuel Wiebe, MD
Alberta, Canada

Dong Zhou, MD
Sichuan, China

Cleveland Clinic Faculty

Imad Najm, MD – Summit Director
Andreas Alexopoulos, MD, PhD
Bill Bingaman, MD
Juan Bulacio, MD
Patrick Chauvel, MD
Lara Jehi, MD
Dennis Lal, PhD
Dileep Nair, MD
Irene Wang, PhD

General Information

Location
InterContinental Hotel & Bank of America Conference Center
9801 Carnegie Ave
Cleveland, Ohio 44106
Phone: 216.455.1260

Hotel Accommodations
A block of rooms has been reserved at InterContinental Hotel & Conference Center until August 13, 2019. To make your reservations, contact the Hotel Reservations Department at 855.765.8709. Please identify yourself as being with the Cleveland Clinic Epilepsy Summit, for the special rate of $179 plus 16.5% tax.

Parking
Valet Parking available, with in/out privileges at the hotel for a daily fee of $20.

www.ccfcme.org/NISummitEpilepsy19
Proposed Agenda

Thursday Sept. 12, 2019

12:30-1:00 PM  Welcome and Opening Remarks – Ingmar Blumcke and Imad Najm

10 Years’ Experience with the ILAE Classification on Focal Cortical Dysplasia
Co-Chairs: Ingmar Blumcke and Imad Najm

1:00-1:45 PM       Developing a Clinically Meaningful FCD Disease Classification System: Where We Have Come From and How to Move On – Imad Najm

1:45-2:30 PM     A Histopathology-based Classification System of FCD Is Not Enough: Roadmap Towards an Integrated Clinico-pathological and Molecular-genetic Classification Approach – Ingmar Blumcke

2:30-2:45 PM     BREAK

2:45-3:30 PM     The Integration of Molecular-genetics with Histopathology: What Can We Learn From the WHO 2016 Classification of Brain Tumors – David Ellison

3:30-4:15 PM     How Can Neuroembryology Guide the FCD Classification? – Harvey Sarnat

4:15-5:00 PM     Round Table Discussion

5:00-5:30 PM     BREAK

5:30-6:30 PM     Keynote Lecture: The Use of Single Cell Genetics to Create a Human Brain Atlas
Steve McCarroll

6:30 PM         RECEPTION
Friday Sept. 13, 2019

Opportunities From Clinical Practice and Large Cohort Genetics

Co-Chairs: Fernando Cendes and Andreas Alexopoulos

8:00-8:45 AM  Electrographic Findings in FCD Subtypes According to the Current ILAE Classification: Scalp and Acute ECoG – Andre Palmini

8:45-9:30 AM  Seizure Generation from Dysplastic Tissue: Role of Multimodality Co-registration Studies in Human Brain Tissue – Andreas Alexopoulos

9:30-9:45 PM  BREAK

9:45-10:30 PM  A View From Within: SEEG Recorded Ictal and Interictal Electrographic Patterns in FCD Subtypes – Juan Bulacio

10:30-11:15 AM  Dissecting the Genetic Basis of FCD – Stephanie Baulac

11:15 AM-12:00 PM  Round Table Discussion

Genetic Basics and Promises for the FCD Classification Update

Co-Chairs: Dennis Lal and Ingmar Blumcke

1:00-1:45 PM  Role of Genetics in Understanding FCD: Opportunities and Challenges for a Classification Update – Christopher Walsh

1:45-2:30 PM  Brain Somatic Mutations in FCD and Other Epilepsy-Associated Lesions – Jeong Ho Lee

2:30-2:45 PM  BREAK

2:45-3:30 PM  Germline Mutations: Could They Predict Extent of the Lesion, Multiple Lesions, Bilaterality and Surgical Outcome? – Renzo Guerrini

3:30-4:15 PM  Epigenetic Indices Define FCD – Assam El-Osta

4:15-5:00 PM  Round Table Discussion

5:00-5:30 PM  BREAK

5:30-6:30 PM  Keynote Lecture: Perspective of the International League Against Epilepsy (ILAE) on Disease Classification, International Cooperation and Big Data Management – Samuel Wiebe

6:30 PM  RECEPTION
# Cleveland Clinic Neurological Institute Summit 2019:
## Epilepsy – Focal Cortical Dysplasia

### Saturday Sept. 14, 2019

**Imaging and Molecular Mechanisms**

*Co-Chairs: Christopher Walsh and Graham Huesmann*

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>8:00-8:45 AM</td>
<td><strong>How to Classify Cortical Dysplasia Subtypes by Neuroimaging?</strong> – Fernando Cendes</td>
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<td>8:45-9:30 AM</td>
<td><strong>The Role of Post-processing and Fingerprinting in the Non-invasive Clinical Work-up of FCD</strong> – Irene Wang</td>
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<td>9:30-9:45 AM</td>
<td><strong>BREAK</strong></td>
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<tr>
<td>9:45-10:30 AM</td>
<td><strong>Waking Up Dormant Dysplasia: From Clinical Observations to Molecular Mechanisms</strong> – Imad Najm</td>
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<td>10:30-11:15 AM</td>
<td><strong>What Do Animal and Experimental Models Teach Us About FCD?</strong> – Gulcan Akgul</td>
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<td>11:15 AM-12:00 PM</td>
<td><strong>Round Table Discussion</strong></td>
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### FCD Classification Update 2020

*Co-Chairs: Hajime Miyata and Maria Thom*

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<tr>
<th>Time</th>
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<tr>
<td>1:00-1:45 PM</td>
<td><strong>Knowledge Acquired Since 2011 and Persistent Gaps</strong> – Maria Thom</td>
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<tr>
<td>1:45-2:30 PM</td>
<td><strong>The Classification and Differential Diagnosis of FCD Type I and III</strong> – Ingmar Blumcke</td>
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<td>2:30-2:45 PM</td>
<td><strong>BREAK</strong></td>
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<td>2:45-3:30 PM</td>
<td><strong>FCD Type II: IIA, IIB and Bottom-of-sulcus Lesions</strong> – Eleanora Aronica</td>
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<td>3:30-4:15 PM</td>
<td><strong>A DNA-methylation-based Approach to Classify FCD</strong> – Katja Kobow</td>
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<td>4:15-5:00 PM</td>
<td><strong>Round Table Discussion</strong></td>
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<td>5:00-5:30 PM</td>
<td><strong>BREAK</strong></td>
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<td>5:30-6:30 PM</td>
<td><strong>Keynote Lecture: Temporal Perisylvian Epilepsies as Defined by SEEG</strong> – Patrick Chauvel</td>
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<tr>
<td>6:30 PM</td>
<td><strong>RECEPTION</strong></td>
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Sunday Sept. 15, 2019

The Role of FCD Classification in Tailoring Surgical Strategies

Co-Chairs: Andre Palmini and Dong Zhou

8:00-8:45 AM  
Puzzling Surgical Outcomes in FCD: Raising Hypothesis from Success and Failures – Lara Jehi

8:45-9:30 AM  
Is Resective Surgery a Good Option in Patients with FCD Type 1? – Hans Holthausen

9:30-9:45 AM  
BREAK

9:45-10:30 AM  
Surgical Approach and Management of FCD Type II and BOS Dysplasia
William Bingaman

10:30-11:15 AM  
Role of Connectivity Studies in the Presurgical Mapping of the Epileptogenicity of FCD
Dileep Nair

11:15-12:00 PM  
Functionality of Dysplastic Tissue and Reorganization of Function in FCD – Hellen Cross

Time for questions and answers is included in each presentation.
Accreditation

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

The Cleveland Clinic Foundation Center for Continuing Education designates this live activity for a maximum of 25.50 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.

The Ohio Board of Nursing will accept at face value the number of contact hours awarded for an educational activity that has been approved for CE by a nationally accredited system of CE approval. Nurses are able to obtain CE that has been approved or provided by a nationally recognized accreditation system of continuing education.

Examples include:
- The American Nurses Credentialing Center (ANCC)
- The Accreditation Council for Continuing Medical Education (ACCME)
- The International Association for Continuing Education and Training (IACET)

For further information about this activity, contact Shana Spade at Local: 216.444.9380; Toll Free: 800.223.2273 x49380; Email: spades@ccf.org

Faculty Disclosure

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 Shana Spade at 216.444.9380 at least two weeks prior to the activity.
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Register Online! www.ccfcme.org/NISummitEpilepsy19

Fee includes: Syllabus, continental breakfasts, lunches, refreshment breaks, and evening receptions.

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<th>Fee Type</th>
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<tr>
<td>Physicians</td>
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<tr>
<td>Residents/Fellows*</td>
<td>$295</td>
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<tr>
<td>Non-Physicians</td>
<td>$295</td>
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*Letter from Program Director/Chairman must be received in our office prior to the course to receive this fee.

Registration and Cancellation

Preregistrations are accepted online until **9:00 AM ET, Tuesday, September 10, 2019**. To register after this date, please contact Shana Spade, 216.444.9380. In case of cancellation, a full refund will be issued if canceled in writing by August 16, 2019. After August 16, 2019, a $75 cancellation fee will be deducted from your refund. Written notification of your cancellation to cmeregistration@ccf.org is required in order to process your refund. No refunds will be issued after September 3, 2019.

For questions about registration, please call 216.448.8710 or email cmeregistration@ccf.org.

Cleveland Clinic Center for Continuing Education reserves the right to cancel or postpone an activity at our sole discretion. In the unlikely event that this occurs, any registration fee(s) paid will be refunded. Be advised that Cleveland Clinic is not responsible for related costs including airline tickets, hotel costs, or any similar fee penalties incurred as a result of any activity cancellations or changes.