

Live-streamed September 21-24, 2020 5:00-9:30 PM (US Eastern Daylight Time)

www.ccfcme.org/epilepsyupdate20

#### **About The Program**

The *Cleveland Clinic Epilepsy Update & Review Course 2020* features an outstanding world-renowned faculty who will provide state-of-the-art, comprehensive review and updates of the evaluation of individuals with epilepsy and seizures across the age spectrum. The program will include diagnosis, optimal use of antiseizure drugs, psychiatric and other comorbidities, special considerations for women with epilepsy, medical intractability, contribution of imaging techniques, assessment for epilepsy surgery, neuromodulation and the management of patients with status epilepticus.

#### **Target Audience**

This educational activity is intended for practicing adult and pediatric neurologists and epileptologists, Neurology and Neurosurgery residents and fellowship trainees, as well as mid-level providers, nursing and other health care personnel engaged in epilepsy care.

#### Objectives

#### At the completion of this activity, the participant will be able to do the following:

- 1. Discuss state-of-the-art recent diagnostic and treatment developments in the management of epilepsy
- 2. Review the Essential Pathophysiology and Classification of the Epilepsies
- 3. Review the pharmacology and action of antiseizure drugs (ASDs)
- 4. Describe major epileptic syndromes across the age spectrum
- 5. Discuss the differential diagnosis of epilepsy and related paroxysmal disorders such as syncope, cardiac events and nonepileptic seizures
- 6. Discuss epilepsy management in women of childbearing age
- 7. Describe treatment options for patients with medically refractory epilepsy
- 8. Interpret electroencephalographic information in ambulatory patients, in the Epilepsy monitoring Unit in ICU and in status epilepticus

#### Disclaimer

The information in this educational activity is provided for general medical education purposes only and is not meant to substitute for the independent medical judgment of a physician relative to diagnostic and treatment options of a specific patient's medical condition. The viewpoints expressed in this CME activity are those of the authors/faculty. They do not represent an endorsement by The Cleveland Clinic Foundation. In no event will The Cleveland Clinic Foundation be liable for any decision made or action taken in reliance upon the information provided through this CME activity.

#### 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 internet live activity for a maximum of 17.0 *AMA PRA Category 1 Credits*  $^{\text{TM}}$ . Physicians should claim only the credit commensurate with the extent of their participation in the activity.

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

The American Board of Psychiatry and Neurology has reviewed the Cleveland Clinic Epilepsy Update and Review Course and has approved this program as part of a comprehensive CME program, which is mandated by the ABMS as a necessary component of maintenance of certification. This activity awards up to 17.0 Self-Assessment Category 1 CME credits.

#### Other Health Care Professionals

A certificate of participation will be provided to other health care professionals for requesting credits in accordance with state nursing boards, specialty societies, or other professional associations.

HOW TO OBTAIN AMA PRA CATEGORY 1 CREDITS<sup>™</sup> <u>OR</u> CERTIFICATE OF PARTICIPATION:

#### \*Note - The ability to claim CME credit will be available on Friday, September 28, 2020.

- 1. Go to <u>www.ccfcme.org/cmelogin</u> to begin the activity evaluation and print your certificate. You have <u>30 days</u> following the activity to claim credit.
- 2. New Users: By attending this activity, an account has been created for you. Please follow these steps:
  - Click on 'Reset Password.'
  - Enter email address used for registration.
  - Click on 'Request Password Reset.'
  - You will receive an email to reset your password.

#### Existing Users:

- Enter email address used for registration.
- Enter password.
- 3. Select, and Click here to Complete Evaluation complete all guestions.
- 4. Select the number of credits you are claiming by either using (a) the drop-down
  - <u>OR</u>

(b) checking the box marked 'maximum available.'

- 5. Click 'Save and View Certificate.'
- 6. Your official certificate will be displayed. Please print and keep with your permanent files. You may also access your account at any time to view and/or print CME certificates and transcripts.

\*\* If you need assistance, contact the CME office at 216.444.9990 or myCME@ccf.org.

### **Course Director**

Ajay Gupta, MD

#### **Guest Faculty**

Eishi Asano, MD – Children's Hospital of Michigan Philip Pearl, MD – Boston Children's Hospital Michael Sperling, MD – Jefferson University Elaine Wirrell, MD – Mayo Clinic

#### **Cleveland Clinic Faculty**

Andreas Alexopoulos, MD, MPH Kayela Arrotta, PhD Jocelyn Bautista, MD William Bingaman, MD Juan Bulacio, MD Richard Burgess, MD, PhD Jessica Fesler, MD Nancy Foldvary-Schaefer, DO Stephen Hantus, MD Lara Jehi, MD Prakash Kotagal, MD Deepak Lachhwani, MD Dennis Lal, PhD Ahasan Moosa Naduvil, MD Dileep Nair, MD Imad Najm, MD Christopher Newey, DO Elia Pestana-Knight, MD Vineet Punia, MD Irene Wang, PhD Elaine Wyllie, MD

The Cleveland Clinic Center for Continuing Education Faculty Disclosure

## Cleveland Clinic Epilepsy Update & Review Course 09/21-24/2020

In accordance with the Standards for Commercial Support issued by the Accreditation Council for Continuing Medical Education (ACCME), The Cleveland Clinic Foundation Center for Continuing Education requires resolution of all faculty conflicts of interest to ensure CME activities are free of commercial bias.

The following faculty have indicated that they may have a relationship, which in the context of their presentation(s), could be perceived as a potential conflict of interest:

Ajay Gupta, MD	Eisai Mallinckrodt Inc.	Consulting Consulting Membership on advisory committee or review panels
Dileep Nair, MD	NIH	Grant called Brain Atlas
	Neuropace	Consulting
Imad Najm, MD	Eisai	Membership on advisory committee or review panels
	NIH	Research Funding
Michael Sperling, MD	Cerevel	Research / Independent Contractor
	Medscape	Teaching and Speaking
	NeurologyLive	Teaching and Speaking
Elaine Wirrell, MD	BioMarin	Consulting

The following faculty have indicated they have no relationship which, in the context of their presentation(s), could be perceived as a potential conflict of interest:

Andreas Alexopoulos, MD Kayela Arrotta, PhD Eishi Asano, MD Jocelyn Bautista, MD William Bingaman, MD Juan Bulacio, MD Richard Burgess, MD Jessica R Fesler, MD Nancy Foldvary-Schaefer, DO Stephen Hantus, MD Lara Jehi, MD Prakash Kotagal, MD Deepak Lachhwani, MD Dennis Lal, PhD Ahsan Naduvil, MD Christopher Newey, DO Phillip L Pearl, MD Elia M Pestana Knight, MD Vineet Punia, MD Irene Wang, PhD Elaine Wyllie, MD

The Cleveland Clinic Foundation Center for Continuing Education acknowledges educational grants for partial support of this activity from:

# UCB, Inc.

# Eisai Inc.

**Supernus Pharmaceuticals, Inc.** 

## Agenda

## Monday, September 21, 2020

Classification Schema, Electro-clinical syndromes, and Genetics in Epilepsy

5:00 pm	Welcome and Introductions <i>Ajay Gupta, MD</i>
5:05 pm	Classifying "Seizures" and "Epilepsies": Semiological and the ILAE Classifications <i>Prakash Kotagal, MD</i>
5:40 pm	Epilepsies and Electroclinical Syndromes: Neonatal and Infantile <i>Elaine Wirrell, MD</i>
6:15 pm	Epilepsies and Electroclinical Syndromes: Childhood Elaine Wyllie, MD
6:50 pm	Break
7:10 pm	Keynote Speaker Introduction <i>Ajay Gupta, MD</i>
7:15 pm	Keynote Presentation - Diagnosing Genetic Epilepsies-Impact on Treatment <i>Phillip Pearl, MD</i>
7:50 pm	Distinctive Epilepsies Due to Neuro-cutaneous Disorders and Hypothalamic Hamartoma <i>Ajay Gupta, MD</i>
8:25 pm	Epilepsies and Electroclinical Syndromes: Adolescents and Adults <i>Jessica Fesler, MD</i>
9:00 pm	Selecting the Correct Genetic Test and Interpretation in Epilepsy Dennis Lal, PhD
9:35 pm	Adjourn

Tuesday, September 22, 2020

Source Localization by EEG and MEG, Imaging and Anti-seizure Drugs (ASD)

- 5:00 pm Localization of Epileptiform Discharges on Scalp EEG and Role of MEG *Richard Burgess, MD, PhD*
- 5:35 pm Brain MRI, PET, SPECT, Post-processing Tools and Multimodal Co-registration in Presurgical evaluation *Irene Wang, PhD*
- 6:10 pm ASD I: Principles: Selecting, Starting, Mixing, and Stopping ASDs Deepak Lachhwani, MD
- 6:45 pm Break
- 7:05 pm Keynote Speaker Introduction *Imad Najm, MD*
- 7:10 pm **Keynote Presentation** Seizure Detection Devices and Risk Assessment for SUDEP *Michael Sperling, MD*
- 7:45 pm ASD II: Evidence Based Use of ASD *Ahsan Moosa Naduvil, MD*
- 8:20 pm ASD III: Evidence Based Use of ASD, and Ketogenic Diet *Elaine Wirrell, MD*
- 8:55 pm ASD IV: Evidence Based Use of Newer ASD and Their Interactions *Vineet Punia, MD*
- 9:30 pm Adjourn

## Wednesday, September 23, 2020

## Epilepsy Surgery

5:00 pm	Classical Electroclinical Features of Partial (surgically-amenable) Epilepsies Andreas Alexopoulos, MD
5:35 pm	Semiology and Scalp VEEG Findings: Special Characteristics in Infants and Young Children <i>Ajay Gupta, MD</i>
6:10 pm	Medical Intractability and Pre-surgical Evaluation for Epilepsy: Why, When and How? Imad Najm, MD
6:45 pm	Break
7:05 pm	Keynote Speaker Introduction <i>Ajay Gupta, MD</i>
7:10 pm	<b>Keynote Presentation</b> - Cortical Stimulation and Function Mapping in Extra- and Intra- operative Epilepsy Surgeries <i>Eishi Asano, MD, PhD</i>
7:45 pm	Invasive EEG Evaluation: Indications and Techniques for SEEG and Other Invasive Modalities <i>Juan Bulacio, MD</i>
8:20 pm	Surgical Resection Types and Techniques in Epilepsy Surgery: An Overview <i>William Bingaman, MD</i>
8:55 pm	Neuromodulation in Refractory Epilepsy: VNS, RNS and DBS Systems <i>Dileep Nair, MD</i>
9:30 pm	Adjourn

## Thursday, September 24, 2020

Comorbid Conditions, Status Epilepticus, ICU EEG Monitoring

5:00 pm	Psychiatry Comorbidities and Long-term Outcomes of Epilepsy Treatment Lara Jehi, MD
5:35 pm	Psychogenic Non-epileptic Seizures: Diagnosis and Evidence Based Treatment <i>Jocelyn Bautista, MD</i>
6:10 pm	Women and Pregnancy Issues in Epilepsy Nancy Foldvary-Schaefer, DO
6:45 pm	Break
7:10 pm	Neuropsychological Testing in Epilepsy and Epilepsy Surgery Candidates <i>Kayela Arrotta, PhD</i>
7:45 pm	EEG Developmental Maturation, Neonatal Seizures and Neonatal Encephalopathies
	Elia Pestana-Knight, MD
8:20 pm	ICU EEG: Encephalopathic, Periodic and Coma Patterns Christopher Newey, DO
8:55 pm	Diagnosis and Evidence-based Management of Status Epilepticus Stephen Hantus, MD
9:30 pm	Wrap-up and Closing Remarks <i>Ajay Gupta, MD</i>
9:35 pm	Adjourn