

The Cleveland Clinic SEEG Course 2023 – Practical Clinical Cases

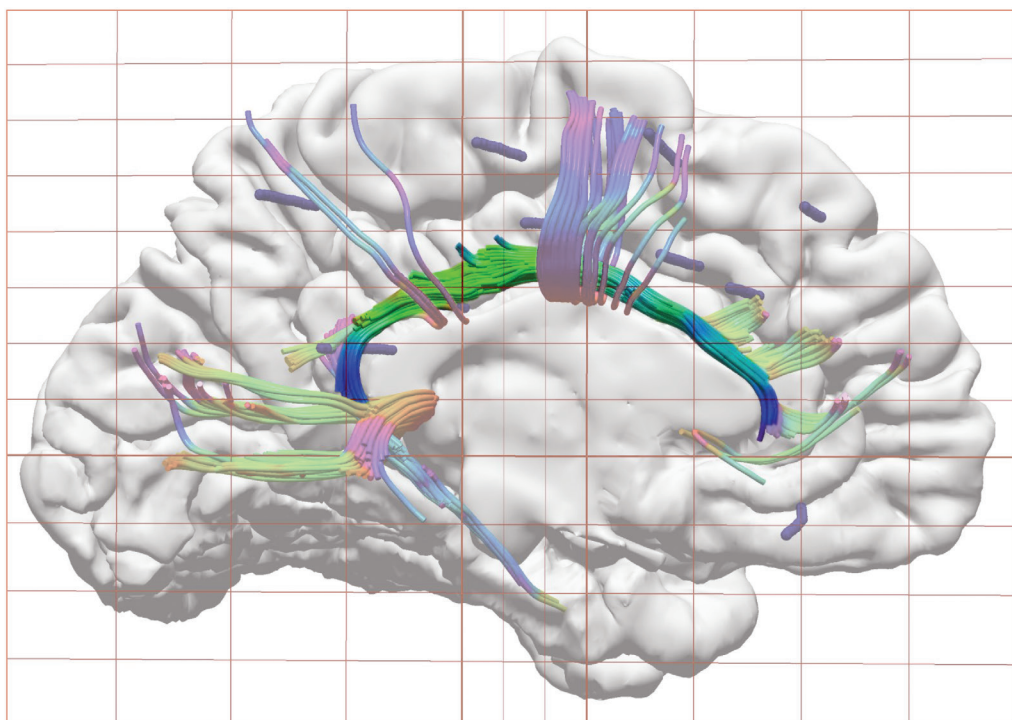
Unraveling the Hub: Cingulate Networks and Its Epilepsies

August 23–26, 2023

Hilton Garden Inn Cleveland Downtown
Cleveland, Ohio

*This program will also be livestreamed for
virtual viewing*

**In person event
limited to 40
participants**



Unraveling the Hub: Cingulate Networks and Its Epilepsies

Overview

The cingulate cortex is a hub for functional connectivity in the brain, with extensive connections to other regions involved in cognitive, emotional, and sensorimotor processing. These connections are mediated by white matter tracts, such as the cingulum bundle, which connects different regions of the cingulate cortex and the prefrontal cortex, parietal cortex, and temporal cortex.

Cingulate epilepsy can originate from different regions of the cingulate cortex, and the specific location of the seizure focus can affect the clinical symptoms and response to treatment. Therefore, accurate localization of the seizure focus is crucial for effective management of cingulate epilepsy.

There have been several advances in the diagnosis and treatment of cingulate epilepsy in recent years. One major advance is the use of advanced neuroimaging and neurophysiological techniques such as magnetic resonance imaging (MRI), positron emission tomography (PET), and magnetoencephalography (MEG) to better localize the epileptogenic zone in this region. Some studies have shown that resection surgery has good results in seizure control.

Additionally, there has been growing interest in the use of neuromodulation techniques, such as responsive neurostimulation (RNS) and deep brain stimulation (DBS), for the treatment of cingulate epilepsy. These advances have the potential to improve outcomes for individuals with cingulate epilepsy, especially those who are difficult to manage with traditional medications or are not surgical candidates.

In this course, we will discuss the use of semiological, neuroimaging and neurophysiological techniques to design a SEEG implantation to identify the epileptogenic zone and eloquent network and to develop a surgical plan in patients with cingulate epilepsy.

Who Should Attend?

Neurologists and Neurosurgeons

Learning Objectives

At the completion of this activity, the participant should be able to:

- Recognize clinical manifestations of cingulate epilepsy, their electro-clinical evolution and correlation with non-invasive diagnostic modalities
- Discuss current insights in the functional anatomy and connectivity of the cingulate
- Integrate presurgical neurophysiological and imaging work-up towards a well-informed SEEG implantation strategy
- Interpret SEEG recordings and cortical stimulation responses in the context of all pre-SEEG workup data and arrive to a successful surgical strategy

Unraveling the Hub: Cingulate Networks and Its Epilepsies

FACULTY

Course Director

Juan Bulacio, MD
Cleveland Clinic

Guest Faculty

Ammar Kheder, MD, MRCP
Emory University and
Children's Healthcare of Atlanta
Atlanta, Georgia

Prachi Parikh, MD
Duke University Health System
Durham, North Carolina

Erasmus Passaro, MD
Director, Florida Center for Epilepsy
Bayfront Health Epilepsy Program
St Petersburg, Florida
Director, Epilepsy Surgery
Johns Hopkins All Children's Hospital
St Petersburg, Florida
Professor (Collaborative),
Neurology University of South Florida
Tampa, Florida

Veronica Pelliccia, MD
Claudio Munari Epilepsy and
Parkinson Surgery Centre
Niguarda Hospital
Milan, Italy

Ghazala Perven, MD
UT Southwestern Medical Center
Dallas, Texas

Hussam Shaker, MD
Trinity Health/Michigan State University
Grand Rapids, Michigan

Stephen Thompson, MD
McMaster University/
Hamilton Health Sciences
Hamilton, Ontario, Canada

Brent Vogt, PhD
Cingulum NeuroSciences Institute
Manlius, New York

Cleveland Clinic Planning Committee

Andreas Alexopoulos, MD, MPH

William Bingaman, MD

Ahsan Moosa Naduvil, MD

Demitre Serletis, MD, PhD

Cleveland Clinic Faculty

Jason Chisholm, MD

Jessica Fesler, MD

Krishna Mourya Galla, MBBS*

Camilo Garcia, MD

Ajay Gupta, MD*

Stephen Harasimchuk

Jean Khoury, MD

Dileep Nair, MD

Imad Najm, MD

Vineet Punia, MD*

Richard Rammo, MD

Elizabeth Spurgeon, MD

Irene Wang, PhD

*Non-CME Faculty Only

Unraveling the Hub: Cingulate Networks and Its Epilepsies

Agenda

Wednesday, August 23, 2023

- 4:30 p.m. **Registration/Continental Breakfast / Exhibits / Sign on**
- 5:00 p.m. **Welcome and Opening Remarks**, Imad Najm and Juan Bulacio

Introductory Conference

- 5:10 p.m. **Semiology and Anatomic-functional Localization in Patients with Cingulate Epilepsy**, Veronica Pelliccia
- 5:50 p.m. **The Eight Subregions Model of Cingulate Cortex: Rationale and Use**, Brent Vogt
- 6:30 p.m. **Q & A**, Course Faculty
- 6:45 p.m. **Adjourn**
- 7:00 p.m. **Welcome Reception**

Thursday, August 24, 2023

Presurgical Approach to Cingulate Epilepsy

Moderator: Jessica Fesler

- 7:30 a.m. **Continental Breakfast / Exhibits / Sign on**
- 8:00 a.m. **Video EEG: Clinical Semiology of Cingulate Seizures**, Ammar Kheder
- 8:45 a.m. **MR Imaging and Post-processing in Cingulate Epilepsy**, Irene Wang
- 9:30 a.m. **Q & A**, Course Faculty
- 9:45 a.m. **Break / Exhibits**

10:00 a.m. **Faculty Hands-on SEEG Analysis Sessions**, Drs. Najm, Passaro, Pelliccia, Khoury, Kheder, Spurgeon, Perven, Chisholm, Alexopoulos, Garcia, Moosa Naduvil, Thompson, Bulacio, Shaker, Nair, Parikh
(available for in-person attendance only)

- 12:30 p.m. **Lunch**
- 1:30 p.m. **Plenary Discussion. Phase I**, Course Faculty
- 4:30 p.m. **Break / Exhibits**

Localization and Functional Connections of the Cingulate

Moderator: Dileep Nair

- 5:00 p.m. **Primate Cingulate Circuitry and Flow of Information Into and Out of the Limbic System**, Brent Vogt
- 5:40 p.m. **Multimodal Diagnostic Investigations in Patients with Cingulate Epilepsies**, Andreas Alexopoulos
- 6:20 p.m. **Q & A**, Course Faculty
- 6:30 p.m. **SEEG implantation and Robotic-Assisted SEEG**
Bill Bingaman, Richard Rammo, Demitre Serletis, Stephen Harasimchuk
- 7:30 p.m. **Adjourn**

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Agenda

Friday, August 25, 2023

Neurophysiology of Cingulate

Moderator: Demitre Serletis

- 7:30 a.m. **Continental Breakfast / Exhibits / Sign on**
- 8:00 a.m. **SEEG Recordings of Cingulate Seizure**, Juan Bulacio
- 8:45 a.m. **Functions and Dysfunctions through the Lens of Electrical Stimulation**, Veronica Pelliccia
- 9:30 a.m. **Q & A**, Course Faculty
- 9:45 a.m. **Break / Exhibits**
- 10:00 a.m. **Faculty Hands-on SEEG Analysis Sessions**, Drs. Najm, Passaro, Pelliccia, Khoury, Kheder, Spurgeon, Perven, Chisholm, Alexopoulos, Garcia, Moosa Naduvil, Thompson, Bulacio, Shaker, Nair, Parikh
(available for in-person attendance only)

- 12:30 p.m. **Lunch / Exhibits**
- 1:30 p.m. **Plenary Discussion SEEG Findings and Proposed Plan**, Course Faculty
- 4:30 p.m. **Break / Exhibits**

Tailoring the Resection

Moderator: Richard Rammo

- 5:00 p.m. **Approach to Surgical Resection of the Cingulate and Complications**, Bill Bingaman
- 5:40 p.m. **Cingulate: When Laser or RFT Are Good Options?** Demitre Serletis
- 6:20 p.m. **Q & A**, Course Faculty
- 6:30 p.m. **Adjourn**
- 6:45 p.m. **Reception**

Saturday, August 26, 2023 (Non-CME)

- 8:00 a.m. **Continental Breakfast / Exhibits / Sign on**
- 8:30 a.m. **Discussion with Case Presentations**
Moderator: Ahsan Moosa Naduvil
Panel: Andreas Alexopoulos, William Bingaman, Dileep Nair, Imad Najm, Krishna Mourya Galla, Veronica Pelliccia
- 10:00 a.m. **Discussion with Case Presentations**
Moderator: Demetri Serletis
Panel: Ajay Gupta, Imad Najm, Veronica Pelliccia, Vineet Punia, Richard Rammo
- 12:00 p.m. **Adjourn**

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General Information

Location

Hilton Garden Inn Cleveland Downtown
1100 Carnegie Avenue
Cleveland, OH 44115
Phone: 216.658.6400
www.clevelanddowntown.gardeninn.com

Hotel Accommodations

A block of rooms has been reserved at the Hilton Garden Inn Cleveland Downtown for a special rate of \$149 plus taxes for conference attendees. To obtain this rate, reservations must be made by Monday, July 24, 2023. To make your reservation, call the hotel at 216.658.6400 and identify yourself as an attendee of the Cleveland Clinic SEEG course conference.

Parking

Self and overnight parking are available at prevailing rates.

Accreditation

In support of improving patient care, Cleveland Clinic Center for Continuing Education is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

American Medical Association (AMA)
Cleveland Clinic Center for Continuing Education designates this live activity for a maximum of 20.25 *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.

Hours of instructions

In-person: 20.25 | Virtual: 15.25

Faculty Disclosure

The Cleveland Clinic Center for Continuing Education has implemented a policy to comply with the current Accreditation Council for Continuing Medical Education Standards for Integrity and Independence requiring mitigation of all faculty conflicts of interest. Faculty declaring a relevant financial relationship will be identified in the activity syllabus.

Health & Safety

All applicable Centers for Disease Control (CDC), state, and local safety protocols will be enforced for this event. Additional attendance requirements may be implemented to ensure attendee health and safety.

Americans with Disabilities Act

The Cleveland Clinic 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.

**For further information about this activity, contact Shana Spade at:
800.223.2273 x49380 or spades@ccf.org**

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Registration Fee is \$25

- **In-person** registration includes course materials, continental breakfasts, lunches, breaks, Wednesday and Friday receptions.
- **Virtual** registration includes viewing access to the lectures and case planning and discussion sessions.

Registration and Cancellation

In-person registrations are accepted online until 2:00 p.m. EST August 18, 2023. Virtual registrations accepted until 2:00 p.m. EST, August 22, 2023 or until attendance has reach capacity. In case of cancellation, email notification is required to process your refund. A full refund will be issued if canceled by August 2, 2023. **No refunds will be issued after August 2, 2023.**

For questions about registering online, call 216.448.8710 or email cmeregistration@ccf.org

Cleveland Clinic Center for Continuing Education reserves the right to cancel or postpone activity in 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 trip cancellations or changes.

