



**UPMC Presbyterian BST S120 and hosted online via Zoom**

**200 Lothrop St. Pittsburgh, PA 15213**

**EVENT: 2023 EEG and Epilepsy in Clinical Practice**

## Overview and Learning Objectives:

“EEG and Epilepsy in Clinical Practice” (2023) is a course designed to be an intensive, instructional program that is geared towards professionals in the field of Neurology, Neurosurgery, Neurodiagnostics, Critical Care, Family Medicine, Pediatrics, Psychiatry, and Internal Medicine. This course will cover a wide range of topics including fundamentals of Electroencephalography data collection and analysis, ACNS standards, and more advanced concepts related to recent technological developments in the field and modern treatment methods of epilepsy and related neurological conditions. This course is designed to focus on the importance of multidisciplinary teamwork in the management of patients who require treatment by professionals in the aforementioned disciplines.

## Who Should Attend:

This course is designed primarily for Neurologists, neurocritical care specialists, psychiatrists, neurosurgeons, internal medicine and family practice physicians, advance practice providers, technologists, and trainees in these disciplines.

## Course Directors:



**Alexandra Urban, MD, FAAN, FAES**

Associate Professor of Neurology  
Vice Chair, Clinical Affairs  
Director, Epilepsy Fellowship



**Anto Bagić, MD, PhD, FAES, FACNS**

Professor of Neurology  
Chief, Epilepsy Division  
Director, UPMC Epilepsy Monitoring Unit  
Director, University of Pittsburgh  
Comprehensive Epilepsy Center (UPCEC)  
Director, UPMC MEG Epilepsy Program  
Chief Scientific Advisor, MEG Research  
Adjunct Professor, Department of  
Biomedical Engineering, Carnegie Mellon  
University (CMU)

## Claiming Credits: Physicians, Nurses, PAs

For those seeking CME, CNE, or AAPA credit and a certificate of attendance, please follow these instructions to create an account with UPMC's Center for Continuing Education in Health Sciences (CCEHS) and complete the surveys \*do not do this if you need ASET CEUs\*. **MUST BE SUBMITTED BEFORE SEPT 29<sup>th</sup> 2023**

If new user: Create an account at: <http://cce.upmc.com/>

Step 1: Record your attendance:

- Go to <http://cce.upmc.com/code>
- Login to your account
- Enter code: **QOHHAB**

Step 2: Complete the course evaluation

- Go to My Account, My Courses, Choose Pending Activities
- Click on the course title then click the register/complete course button to complete the course evaluation

\*Certificates will be available to download and stored for future reference\*

## Claiming Credits: Neurodiagnostic Techs

For those seeking ASET CEUs and/or a certificate of attendance, please follow this link to complete survey questions regarding the course.

\*Certificate of Attendance will be available to download once surveys are completed\*

<https://www.classmarker.com/online-test/start/?quiz=3pd64ff17d0e529a>

## Link to Course handouts and videos (videos available after the course):

[https://drive.google.com/drive/folders/1pirQ\\_xcZW128ZcbiiTrBN-sLDmJHRCED?usp=sharing](https://drive.google.com/drive/folders/1pirQ_xcZW128ZcbiiTrBN-sLDmJHRCED?usp=sharing)

## Course Faculty:

Ruba Al-Ramadhani, MD – UPMC Children’s Hospital Department of Neurology

Thandar Aung, MD, MS – University of Pittsburgh Department of Neurology

Anto Bagic, MD, PhD - University of Pittsburgh Department of Neurology

Maria Baldwin, MD - University of Pittsburgh Department of Neurology

James Castellano, MD, PhD - University of Pittsburgh Department of Neurology/Neurosurgery

Patrick Chauvel, MD - University of Pittsburgh Department of Neurology

Jonathan Elmer, MD, MS - University of Pittsburgh Department of Emergency Medicine

Joanna Fong-Isariyawongse, MD - University of Pittsburgh Department of Neurology

Jorge Gonzalez, MD, PhD – University of Pittsburgh Department of Neurological Surgery

Patricia Lordeon, R. EEG T, FASET – UPMC Epilepsy Monitoring Unit

Joseph Mettenburg, MD, PhD – University of Pittsburgh Department of Radiology

Page Pennell, MD, FAES - University of Pittsburgh Department of Neurology

Cheryl Plummer, BS, R EEG T, NA-CLTM – UPMC Presbyterian Epilepsy Monitoring Unit

Vijayalakshmi Rajasekaran, MD - University of Pittsburgh Department of Neurology

Mark Scheuer, MD – Chief Medical Officer for Persyst Inc.

Lori Shutter, MD - University of Pittsburgh Department of Neurology/Critical Care Medicine

Shobhit Singla, MD - University of Pittsburgh Department of Neurology

Alexandra Urban, MD - University of Pittsburgh Department of Neurology

Anne Van Cott, MD - University of Pittsburgh Department of Neurology

Hallie Williams, MPAS, PA-C – UPMC Department of Neurology – Epilepsy Division

# Course Schedule:

## Thursday, September 14th, 2023

7:00—7:50am:	Breakfast
7:50—8:00am:	Introduction to EEG and Epilepsy Course / Morning Announcements Alexandra Urban, MD
8:00—8:45am:	Neurophysiology and Basis of EEG James Castellano, MD, PhD
8:45—9:30am:	Review of International 10-20 System of Electrode Placement Cheryl Plummer, BS, R EEG T., NA-CLTM
9:30—10:15am:	Normal EEG Anne Van Cott, MD
<b>10:15—10:30am:</b>	<b>Break</b>
10:30—11:15am:	Benign EEG Variants VS. Interictal Epileptiform Patterns Maria Baldwin, MD
11:15—12:00pm:	Common Ictal Pattern Vijayalakshmi Rajasekaran, MD
<b>12:00—1:00pm:</b>	<b>Lunch</b>
1:00—1:45pm:	Quantitative EEG Analysis Mark Scheuer, MD
1:45—2:30pm:	EEG Findings in Pediatric Epilepsy Ruba Al-Ramadhani, MD
2:30—3:15pm:	Brain Death, Post-anoxic EEG and Prognostication Jonathan Elmer, MD, MS
<b>3:15—3:30pm:</b>	<b>Break</b>
3:30—4:00pm:	ACNS Standardized ICU EEG Nomenclatures Joanna Fong-Isariyawongse, MD
4:00—5:00pm:	WORKSHOP: Interictal-ictal continuum / seizures / status epilepticus MODERATORS: Joanna Fong-Isariyawongse, MD / Pat Lordeon, R. EEG T
5:00pm:	ADJOURNMENT DAY 1
<b>5:00—7:00pm</b>	<b>MEET AND GREET – HILTON GARDEN INN</b>

## **Friday September 15<sup>th</sup>, 2023**

- 7:00—7:50am: Breakfast
- 7:50—8:00am: Introduction to EEG and Epilepsy Course / Morning Announcements  
Anto Bagić, MD, PhD
- 8:00—8:45am: Introduction to Epilepsy, Classification of Seizures and Epilepsies  
Anto Bagić, MD, PhD
- 8:45—9:30am: Optimizing H&P – Pearls in Epilepsy Care  
Hallie Williams, MPAS, PA-C
- 9:30—9:45am: Break**
- 9:45—10:45am: Semiology, Lateralizing and Localizing Signs of Seizures  
Alexandra Urban, MD
- 10:45—11:30am: Introduction to Management of Epilepsy and ASM Updates  
James Castellano, MD, PhD
- 11:30—12:30pm: Lunch**
- 12:30—1:15pm: Treatment of Status Epilepticus  
Lori Shutter, MD
- 1:15—2:00pm: Pediatric Syndromes  
Ruba Al-Ramadhani, MD
- 2:00—2:15pm: Break**
- 2:15—3:00pm: Pregnancy Considerations on WWE  
Page Pennell, MD
- 3:00—4:00pm: Mimickers of Epilepsy and Functional Neurological Disorder  
Anto Bagić, MD, PhD
- 4:00—5:00pm: WORKSHOP: Epilepsy Treatment in Diverse Populations  
PRESENTER: Shobhit Singla, MD  
MODERATORS: Anto Bagić, MD, PhD / Alexandra Urban, MD
- 5:00pm: ADJOURNMENT DAY 2

**Saturday, September 15th, 2023**

7:00—7:50am:	Breakfast
7:50—8:00am:	Introduction to EEG and Epilepsy Course / Morning Announcements Anto Bagić, MD, PhD
8:00—8:30am:	Introduction the Concept of Drug Resistant Epilepsy (DRE) Anto Bagić, MD, PhD
8:30—9:15am:	Neuroimaging in Epilepsy Surgical Evaluation Joseph Mettenburg, MD, PhD
9:15—10:00am:	Pre-Surgical Evaluation, Defining Epileptogenic Zone Patrick Chauvel, MD
<b>10:00—10:30am:</b>	<b>Break - Snacks</b>
10:30—11:15am:	From PMC to the Operating Room Jorge Gonzalez-Martinez, MD, PhD
11:15—11:45am:	Neurostimulation Part 1: VNS Anto Bagić, MD, PhD
11:45—12:15pm	Neurostimulation Part 2: RNS and DBS Alexandra Urban, MD
12:15—1:00pm:	Longitudinal Epilepsy Surgical Outcomes Thandar Aung, MD, MS
1:00pm:	COURSE ADJOURNMENT

**Faculty Disclosure**

All individuals in a position to control the content of this education activity have disclosed all financial relationships with any companies whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients.

All of the relevant financial relationships for the individuals listed below have been mitigated:

Anto Bagić, MD, PhD: Grant/Research Support - LivaNova

James Castellano, MD, PhD: Consultant – Neuro One; Scientific Advisory Board Member – Neuro One

Vijayalakshmi Rajasekaran, MD: Involved in study with no monetary support – UCB BioPharma, Xenon Pharmaceuticals

Mark Scheuer, MD: Employee – Persyst, Inc

Alexandra Urban, MD: Consultant – NeuroPace, Inc

No other planners, members of the planning committee, speakers, presenters, authors, content reviewers and/or anyone else in a position to control the content of this education activity have relevant financial relationships to disclose.

**Accreditation and Designation**

In support of improving patient care, the University of Pittsburgh 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.

**Physician (CME)**

The University of Pittsburgh designates this live activity for a maximum of 20.0 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

**Nursing (CNE)**

The maximum number of hours awarded for this Continuing Nursing Education activity is 20.0 contact hours.

**Physician Assistant (AAPA)**

The University of Pittsburgh has been authorized by the American Academy of PAs (AAPA) to award AAPA Category 1 CME credit for activities planned in accordance with AAPA CME Criteria. This activity is designated for 20.0 AAPA Category 1 CME credits. PAs should only claim credit commensurate with the extent of their participation.

**Other Healthcare Professionals:**

Other health care professionals will receive a certificate of attendance confirming the number of contact hours commensurate with the extent of participation in this activity.

**ASET CEUs**

ASET – The Neurodiagnostic Society has granted 19.5 Continuing Education Units [ASET-CEUs] for this program. Such crediting, however, should not be construed by program participants as an endorsement of any type of instruments or supplies mentioned or involved in these presentations.

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