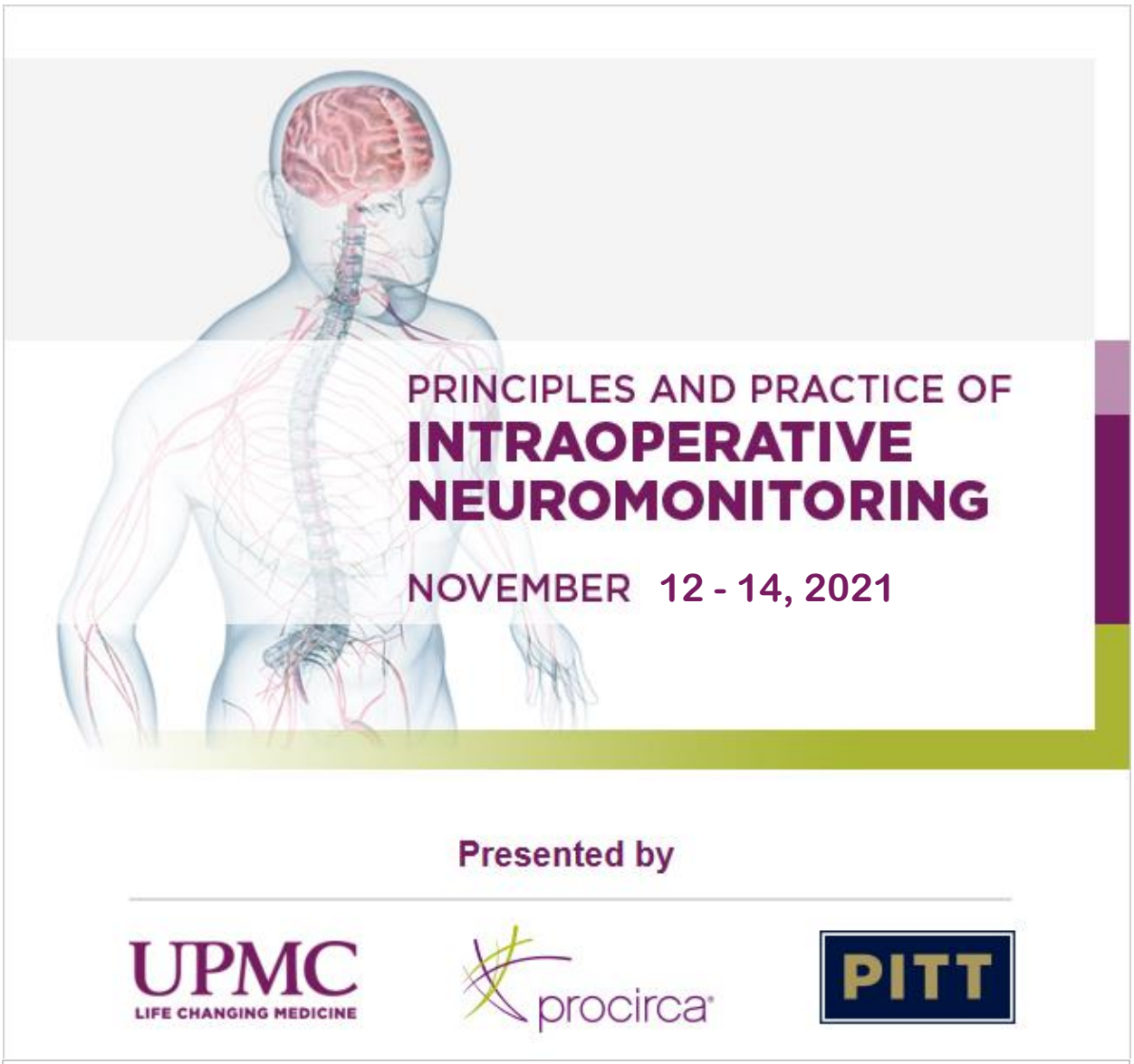

Hosted Online Via "Zoom"

EVENT: Principles and Practice of Intraoperative Neuromonitoring
Date: Nov. 12 - 14, 0730 AM EST

https://us02web.zoom.us/j/85261759441?pwd=UlRSSUttdTEzSnVDa2ZDOHY0Z2tFdz09

Meeting ID: 852 6175 9441

Passcode: 462008

LEARNING OBJECTIVES

The course will highlight practice specifications, multimodality protocols, recent advances in the field, pre-/post-operative neurological evaluation and management, and telemedicine. Presentations will make reference to current literature, technical developments, methodologies and clinical efficacy. The faculty includes University of Pittsburgh Medical Center physicians and neurophysiologists with extensive clinical and academic expertise in IONM. The course is designed to expose the participants to material that will allow them to acquire a comprehensive understanding of IONM and how it relates to a wide variety of relevant topics such as:

- Advanced principles for neurophysiological monitoring, including instrumentation, neuromonitoring protocols, alarm criteria and clinical efficacy.

- Minimally invasive spine surgery, including transpsoas approaches.

- Pre-, peri- and post-operative evaluation of neurological complications including stroke, cognitive deficits, seizure and spinal cord injury.

- Multimodality monitoring techniques for a broad array of procedures including spine and vascular.

- Cranial nerve monitoring during skull base procedures.

- Interpretation and communication with surgical team.
- Development of a Policy & Procedure manual; documentation and communication with the technologist; development of quality assurance metrics; and staff training.

- Problem based learning with real-time data analysis and formulation of differential diagnoses.

TARGET AUDIENCE

- Neurologists
- Surgical Neurophysiologists
- PM&R physicians
- Neurological Surgeons
- Anesthesiologists
- Orthopedic Surgeons
- Board Certified Neurophysiologists
- Vascular Surgeons
- Senior Neurophysiology Technologists
- ENT Surgeons
- Cardiac surgeons

Faculty:

Taylor Abel, MD - University of Pittsburgh Department of Neurological Surgery

Gregory Adams, CNIM - Procirca Center for Clinical Neurophysiology

Katherine Anetakis, MD – University of Pittsburgh Department of Neurological Surgery

Jeffrey Balzer, PhD – University of Pittsburgh Department of Neurological Surgery

James Castellano, MD, PhD - University of Pittsburgh Department of Neurological Surgery

Mindy Corridoni, CNIM – Procirca Center for Clinical Neurophysiology

Donald Crammond, PhD - University of Pittsburgh Department of Neurological Surgery

Jorge Gonzalez-Martinez, MD, PhD - University of Pittsburgh Department of Neurological Surgery

Anthony Gossett, CNIM - Procirca Center for Clinical Neurophysiology

Carly Kleynen, CNIM – Procirca Center for Clinical Neurophysiology

Anthony Kyte - President of Australasia Association for Intraoperative Neuromonitoring (AAIN)

Michael Lang, MD - University of Pittsburgh Department of Neurological Surgery

Bradford Mahon, PhD – Carnegie Mellon University Department of Psychology

Vincent Miele, MD - University of Pittsburgh Department of Neurological Surgery

Andrew Moyer, CNIM – Procirca Center for Clinical Neurophysiology

Varun Shandal, MD - University of Pittsburgh Department of Neurological Surgery

Jeremy Shaw, MD - University of Pittsburgh Department of Orthopedic Surgery

Ibrahim Sultan, MD – University of Pittsburgh Department of Cardiovascular Surgery

R. Joshua Sunderlin, MS, CNIM – Procirca Center for Clinical Neurophysiology

Partha Thirumala, MD - University of Pittsburgh Department of Neurological Surgery

Sedat Ulkatan, MD – Mount Sinai West Hospital

Silvia Mazzali Verst, MD, PhD – Brain Spine Neurofisiologia, Brazil

Shyam Visweswaran, MD, PhD - University of Pittsburgh

Saleh Algarni, MD – Imam University, Saudi Arabia

Bryan Wilent, PhD – SpecialtyCare; President of the ASNM

Marshal Wilkinson, PhD – University of Manitoba Department of Neurosurgery; President of the CANM

Pascal Zinn, Md, PhD – University of Pittsburgh Department of Neurological Surgery

Nathan Zwagerman, MD – Medical College of Wisconsin Department of Neurosurgery

*****REVISED SCHEDULE DUE TO CONVERSION TO FULL VIRTUAL EVENT*****

Day 1 Friday Nov 12

7:30A - 7:45A	Welcome address (Jeff Balzer PhD/ Josh Sunderlin MS, CNIM)
Principles of Intraoperative Neuromonitoring:	
7:45A – 8:15A	IONM: The History and Physiological Basis – Partha Thirumala, MD
8:15A – 8:45A	Principles of EEG Monitoring During Surgery – Katherine Anetakis, MD
8:45A – 9:15A	Principles of SSEP Monitoring During Surgery – Donald Crammond, PhD
9:15A – 9:30A	Break 15min – Please visit Exhibitor area
9:30A – 10:00A	Principles of TcMEP Monitoring During Surgery – Jeffrey Balzer, PhD
10:00A – 10:30A	Principles of BAER Monitoring During Surgery – James Castellano, MD, PhD
10:30A – 11:00A	Principles of EMG Monitoring During Surgery – Varun Shandal, MD
11:00-12:00p	LUNCH BREAK – Please visit Exhibitor area
IONM For Spinal Surgery:	
12:00P – 12:30P	Pediatric Spinal Procedures – Taylor Abel, MD
12:30 - 1:00P	MIS Procedures – Vincent Miele, MD
1:00P – 1:30P	Spinal Fusion Procedures – Jeremy Shaw, MD
1:30P – 1:45P	Break 15min – Please visit Exhibitor area
Supratentorial Mapping:	
1:45P – 2:15P	Craniotomy procedures with mapping – Pascal Zinn, MD, PhD
2:15P – 2:45P	Techniques for Direct cortical and subcortical mapping – Silvia Verst, MD, PhD
2:45P – 3:15P	Functional Speech assessment in awake craniotomy – Bradford Mahon, PhD
Skull base Procedures:	
3:15-3:30P	Break 15min – Please visit Exhibitor area
3:30P – 4:00P	Monitoring of skull base procedures – Ulkatan Sedat, MD
4:00P - 4:45PM	Skull base procedures – Nate Zwagerman, MD
KEYNOTE SPEECH:	
4:45P – 5:45P	**TcMEP for Nerve Root IONM - Bryan Wilent, PhD**
5:45	Adjournment (Day 1)

Day 2 Saturday Nov 13

7:30A – 7:45A	Day 2 Announcements – Jeffrey Balzer PhD/ Josh Sunderlin MS, CNIM
International IONM:	
7:45A – 8:15A	IONM in Australia – Anthony Kyte
8:15A – 8:45A	IONM in Saudi Arabia – Saleh Algarni, MD
8:45A – 9:15A	IONM in Canada – Marshall Wilkinson, PhD
9:15A – 9:30A	Break 15min – Please visit Exhibitor area
IONM for Stroke Prevention:	
9:30A – 10:00A	IONM for stroke prevention – Partha Thirumala, MD
10:00A – 10:30A	IONM for Cardiovascular Procedures – Ibrahim Sultan, MD
10:30A – 11:00A	Neurointerventional Procedures – Michael Lang, MD
11:00A – 12:00P	Lunch – Please visit Exhibitor area
Transcranial Doppler:	
12:00P – 12:30P	Using Transcranial Doppler for Vasospasm detection – Josh Sunderlin, MS, CNIM
Artificial Intelligence:	
12:30P – 1:15P	Artificial Intelligence in IONM – Shyam Visweswaran, MD, PhD
Functional Neurosurgery	
1:15P – 1:45P	Functional Neurosurgery – Jorge Gonzales-Martinez, MD, PhD
1:45P – 2:00P	Break 15min – Please visit Exhibitor area
Interactive Sessions	
2:00P – 3:00P	Demonstrative Session: Placing cranial nerve EMG electrodes - Gregory Adams, CNIM
3:00P – 4:00p	Cerebrovascular Anatomy and Interactive Case Studies – Jeffrey Balzer, PhD / Carly Brog, CNIM
4:00P – 5:00P	Troubleshooting Technical Problems with IONM Equipment – Katherine Anetakis, MD / Andrew Moyer, CNIM
5:00P	Adjournment (Day 2)

Day 3 Sunday Nov 14

7:30A – 7:45A	Day 3 Announcements – Jeffrey Balzer, PhD/ Josh Sunderlin, MS, CNIM

Interactive Case studies

7:45A – 8:45A	Interactive Case studies – Josh Sunderlin, MS, CNIM/ Partha Thirumala, MD

Review submitted Data

8:45A – 9:45A	**Attendees submit data in advance to be reviewed and discussed collaboratively** - Katherine Anetakis, MD; Jeffrey Balzer, PhD; Donald Crammond, PhD; Partha Thirumala, MD
9:45A – 10:00A	Break 15min – Please visit Exhibitor area

Improving IONM Practice:

10:00A – 10:30A	Training Process Improvement – Anthony Gossett, CNIM
10:30A – 11:00A	Teaching Troubleshooting – Josh Sunderlin, MS, CNIM
11:00A – 11:30A	Quality Assurance –Katherine Anetakis, MD, & Mindy Corridoni, CNIM
11:30A – 12:00P	Communication and Documentation (Medico-legal implications) – Jeffrey Balzer, PhD

12:00P Conference Adjournment

Faculty Disclosure

All individuals in a position to control the content of this education activity including members of the planning committee, speakers, presenters, authors, and/or content reviewers have disclosed all relevant financial relationships with any proprietary entity producing, marketing, re-selling, or distributing health care goods or services, used on, or consumed by, patients.

The following relevant financial relationships were disclosed:

Taylor Abel, MD: Consultant/Grant/Research Support – Monteris Medical

James Castellano, MD, PhD: Grant Research Support – NIH NeuroNEXT

Jorge Gonzalez-Martinez: Consultant - Zimmer Biomet

Anthony Kyte: Other (Employer) – Asia Pacific Neurophysiology Services Australia

Bradford Mahon, PhD: Stockholder/Co-founder CSO – MindTrace Technologies

Ibrahim Sultan, MD: Grant Research Support – Medtronic & Atricure

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.

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Physician (CME)

The University of Pittsburgh designates this live activity for a maximum of 21.0 *AMA PRA Category 1 Credits™.* Physicians should claim only the credit commensurate with the extent of their participation in the activity.

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 21 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.

We gratefully acknowledge support from the following for this activity:

Educational Grant:

Microvention, Inc.

Nihon Kohden America, Inc.

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