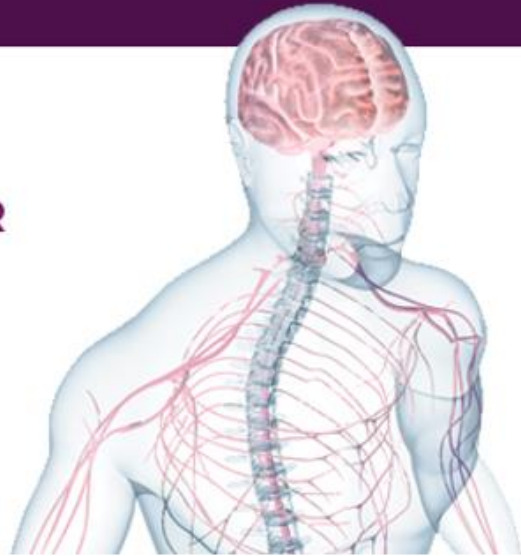


INTRAOPERATIVE NEUROMONITORING FOR CARDIOVASCULAR PROCEDURES

March 26, 2022

Virtual one-day course



This program is presented by Procirca in conjunction with the University of Pittsburgh Department of Neurological Surgery and The Center for Clinical Neurophysiology. *It is endorsed by the Society of Thoracic Surgeons (STS).*



University of
Pittsburgh



The Society
of Thoracic
Surgeons



Hosted Online Via “Zoom”

EVENT: Intraoperative Neuromonitoring for Cardiovascular Procedures

Time: Mar 26, 2022, 07:00 AM Eastern Time

Join Zoom Meeting

<https://us02web.zoom.us/j/81989583275?pwd=UjEvM0lWREVjZTlTaytxOUZoYU1OZz09>

Meeting ID: 819 8958 3275

Passcode: 386034

Overview and Learning Objectives

Intraoperative Neuromonitoring (IONM) is not currently considered a standard of care for cardiovascular surgery. This course will demonstrate compelling evidence that patients who are at elevated risk for stroke can benefit from IONM during cardiovascular procedures.

Implementing IONM for at-risk patients requires collaboration and communication between multiple healthcare professionals including (but not limited to) the surgical team, anesthesiologists, perfusionists, neurologists, stroke interventionalists, intensivists, and PM&R physicians. Systems need to be put in place for identifying at-risk patients, developing techniques to avoid intraoperative stroke, identifying intraoperative stroke, planning for treatment of intraoperative stroke, and postoperatively managing patients who have experienced intraoperative stroke.

Who Should Attend

This course is designed primarily for cardiac surgeons and other medical professionals who provide care for patients undergoing or recovering from cardiovascular surgery including cardiologists, family medicine practitioners, and PM&R physicians. It is also geared towards advanced professionals performing or involved in intraoperative neuromonitoring including, but not limited to, neurologists, anesthesiologists, board-certified neurophysiologists, and senior neurophysiology technologists.



Ibrahim Sultan, MD

Course Co-Director
Associate Professor of Cardiothoracic Surgery
Director, Center for Thoracic Aortic Disease
Surgical Director, Center for Heart Valve Disease

"Stroke is one of the most devastating complications associated with cardiac surgery. This course explores utilization of intraoperative neuromonitoring technology to mitigate risk of undetected intraoperative stroke. A multidisciplinary team approach to integrating neuromonitoring into day-to-day cardiac surgery is critical. We are eager to join our colleagues from around the globe to conduct a deep dive into this important and timely topic."



Partha Thirumala, MD

Course Co-Director
Professor, Department of Neurological Surgery and Neurology
Medical Director, UPMC Center for Clinical Neurophysiology

"This unique one-day course will demonstrate the efficacy of IONM for early detection of stroke in cardiovascular procedures. It will also highlight the critical importance of timely intervention."

FACULTY:

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

George Arnaoutakis, MD – University of Florida Department of Cardiovascular Surgery

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

Elissa Castor, PA-C – UPMC Heart and Vascular Institute

Vaughn Cooper, PhD - University of Pittsburgh Department of Microbiology

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

Joshua Grimm, MD – Pennsylvania University Department of Cardiothoracic Surgery

Bradley Gross, MD - University of Pittsburgh Department of Neurological Surgery

Arminster Jassar, MD – Massachusetts General Hospital Department of Cardiothoracic Surgery

David J. Kaczorowski, MD - University of Pittsburgh Department of Cardiothoracic Surgery

Dustin Kliner, MD - University of Pittsburgh Department of Cardiothoracic Surgery

Bradley Molyneaux, MD, PhD – Brigham and Women’s Hospital Department of Neurology

Sandra Narayanan, MD - University of Pittsburgh Department of Neurology and Neurological Surgery

Brett Reece, MD – University of Colorado Department of Cardiothoracic Surgery

AnneMarie Scekeres, MSN, RN, CPHQ – UPMC Heart and Vascular Institute

Katie Scollon, PA-C – UPMC Heart and Vascular Institute

Derek Serna-Gallegos, MD - University of Pittsburgh Department of Cardiothoracic Surgery

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

Joe Squire, MSN, RN - UPMC Heart and Vascular Institute

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

Erin Sullivan, MD - University of Pittsburgh Department of Anesthesiology

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

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

Sarah Yousef, MD - University of Pittsburgh Department of Cardiothoracic Surgery

SATURDAY, MARCH 26, 2022

7:15 - 7:30am: Welcome Address
Ibrahim Sultan, MD; Partha Thirumala, MD

Section I:

7:30—7:50am: Last electrically well: physiological basis for IONM
Katherine Anetakis, MD

7:50—8:10am: Cerebral perfusion and IONM alerts
Jeffrey Balzer, PhD

8:10—8:30am: Anesthetic management in cardiac procedures with IONM
Erin Sullivan, MD

8:30—8:50am: Monitoring during open aortic arch procedures
Brett Reece, MD

8:50—9:05am: *Panel Discussion (15 min) – Jeffrey Balzer, PhD*

9:05—9:20am: Break/Exhibits

Section II:

9:20—9:40am: Modern neuromonitoring – your ally against intraoperative stroke
R. Joshua Sunderlin, MS, CNIM

9:40—10:00am: Cerebral protection devices in transcatheter aortic valve replacement: what is the evidence?
Dustin Kliner, MD

10:00—10:20am: IONM during endovascular cardio-aortic procedures
George Arnaoutakis, MD

10:20—10:40am: Your patient has abnormal IONM: intraoperative maneuvers
Arminster Jassar, MD

10:40—10:55am: *Panel Discussion (15 min) – Ibrahim Sultan, MD*

10:55—11:10am: Break/Exhibits

11:10—11:40am: How viruses evolve
Vaughn Cooper, PhD

11:40am—12:40pm: Lunch/Exhibits

Section III:

- 12:40—1:00pm: Monitoring during coronary and valvular surgery
Joshua Grimm, MD
- 1:00—1:20pm: IONM during short-term and long-term mechanical circulatory support
David J. Kaczorowski, MD
- 1:20—1:40pm: Perioperative stroke: Overview of etiology and diagnosis
Sandra Narayanan, MD
- 1:40—2:00pm: Endovascular management of postoperative stroke
Bradley Gross, MD
- 2:00—2:20pm: Neurocritical Care: Communication is the key
Bradley Molyneux, MD
- 2:20—2:55pm: *Panel Discussion (35 min) – Partha Thirumala, MD*
- 2:55—3:10pm: Break/Exhibits**

Section IV:

- 3:10—3:30pm: STS risk stratification of post-operative stroke during cardiac surgery: Current and future state.
Joe Squire, MSN, RN and AnneMarie Scekeres, MSN, RN, CPQH
- 3:30—4:00pm: Perioperative stroke risk: Building a plan for who gets IONM at an institutional level
Partha Thirumala, MD
- 4:00—4:20pm: Developing a partnership between cardiothoracic surgery and clinical neurophysiology
Derek Serna-Gallegos, MD & Jeffrey Balzer, PhD
- 4:20—5:00pm: Complex Case Presentations:
Jeffrey Balzer, PhD
Partha Thirumala, MD
Varun Shandal, MD
Katherine Anetakis, MD
Donald Crammond, PhD
Sarah Yousef, MD
Katie Scollon, PA-C
Elissa Castor, PA-C
- 5:00pm: Course 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:

George Arnaoutakis, MD: Consultant – Terumo Aortic

Vaughn Cooper, PhD: Founder and Equity Holder – Microbial Genome Sequencing Center, LLC

Joshua Grimm, MD: Consultant – Ethicon

Bradley Gross, MD: Consultant – Medtronic & Microvention

David Kaczorowski, MD: Consultant – Abiomed & Medtronic. CE Speaker's Bureau – Abiomed

Bradley Molyneaux, MD: Grant/Research Support - Biogen

Ibrahim Sultan, MD: Grant Research Support – Abbott, Atricure, Artivion, Boston Scientific, Medtronic, Z Medica

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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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 8.0 *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 8.0 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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