Transcranial Doppler for Cerebrovascular Disease
AGENDA: June 24-26, 2024

Monday, June 24, 2024

7:00 a.m.	**Check-in**
7:30 a.m.	**Welcome and Introduction** Emily L. Ho, M.D., Ph.D. Aaron Stayman, M.D.
7:40 a.m.	**Neuroanatomy** Aaron Stayman, M.D.
8:40 a.m.	**Basic Physics and Instrumentation** Leni N. Karr, CPC, RVT, NVS
9:50 a.m.	**Break**
10:05 a.m.	**TCD Non-Imaging Technique** Brenda Rinsky, RVT, RDMS, NVS
10:45 a.m.	**Transcranial Doppler Imaging Technique** Krislynn Barnhart, BS, RVT, NVS
11:30 p.m.	**Lunch** (provided)
12:00 p.m.	**Hemodynamics and Waveform Interpretation** Krislynn Barnhart, BS, RVT, NVS Leni N. Karr, CPC, RVT, NVS
1:00 p.m.	**Extracranial Arterial Effects on Intracranial Hemodynamics: Collateral Flow** Emily L. Ho, M.D., Ph.D.
1:45 p.m.	**Break**
	Track 1 Physician Interpretation
2:00 p.m.	**Case Studies & Interpretation for Physicians** Aaron Stayman, M.D. Emily L. Ho, M.D., Ph.D.
	Track 2 Guided Hands-On Scanning
2:00 p.m.	**Guided Hands-on Scanning** Vascular Technologists
5:00 p.m.	**Adjourn**

Tuesday, June 25, 2024

7:30 a.m.	**Recognizing Cerebral Emboli** Renée Borowski, RVT, NVS
8:00 a.m.	**Clinical Applications of TCD Emboli Monitoring** Aaron N. Stayman, M.D.
8:40 a.m.	**Break**
8:55 a.m.	**Endovascular Carotid Revascularization** Yince Loh, M.D.
9:55 a.m.	**TCD Case Studies: Transcranial Doppler in Endovascular Carotid Revascularization** Aaron N. Stayman, M.D.
10:30 a.m.	**Break**
10:45 a.m.	**Subclavian Steal** Bonnie Brown, RVT, NVS
11:15 a.m.	**Extrinsic Compression of the Vertebral Arteries with Head Rotation** Bonnie Brown, RVT, NVS
11:45 a.m.	**Lunch** *(provided)*
12:15 p.m.	**TCD Bubble Study for Patent Foramen Ovale: Protocol & Interpretation Criteria** Ahmad Siyar, RVT, NVS
12:45 p.m.	**Patent Foramen Ovale: Anatomy, Pathology, Diagnosis, and Treatment Strategy** Paul P. Huang, MD, MSC, FACC, FSCAI
1:30 p.m.	**Break**
1:45 p.m.	**Track 1 Physician Interpretation** **Case Studies & Interpretation for Physicians** Emily L. Ho, M.D., Ph.D. Aaron N. Stayman, M.D. Alan J. Velander II, M.D.
1:45 p.m.	**Track 2 Guided Hands-On Scanning** **Part 1 & 2: Guided Hands-on Scanning** Vascular Technologists
1:45 p.m.	**Track 3 Demonstration & Guided Hands-On Scanning**
1:45 p.m.	**Part 1: PFO Bubble Study Demonstration** Ahmad Siyar, RVT, NVS
2:30 p.m.	**Part 2: Guided Hands-on Scanning** Vascular Technologists
4:45 p.m.	**Adjourn**

Wednesday, June 26, 2024

7:30 a.m.	**Subarachnoid Hemorrhage and Vasospasm: Physiology and Pathophysiology** Kory Herrick, M.D.
8:05 a.m.	**TCD in Trauma vs. Spontaneous Subarachnoid Hemorrhage** Alan J. Velander II, M.D.
8:35 a.m.	**Extracranial Arterial Effects on Intracranial Hemodynamics: Vasomotor Reserve** Emily L. Ho, M.D., Ph.D.
9:10 a.m.	**Break**
9:25 a.m.	**Sickle Cell Disease** Michael Bender, M.D., Ph.D.
10:10 a.m.	**Sickle Cell TCD Protocol & Criteria** Brenda Rinsky, RVT, RDMS, NVS
10:40 a.m.	**Building a Neurovascular Lab** Brenda Rinsky, RVT, RDMS, NVS
11:00 a.m.	**Intracranial Stenosis and Occlusion** Aaron N. Stayman, M.D.
11:45 a.m.	**LUNCH** *(provided)*
12:15 a.m.	**TCD in Raised Intracranial Pressure and Cerebral Circulatory Arrest** Arthur Lam, M.D., FRCP, FNCS
12:45 p.m.	**TCD with Trauma Patients** Emily L. Ho, M.D., Ph.D. Alan J. Velander II, M.D.
1:15 p.m.	**Break**
1:30 p.m.	**Track 1 Physician Interpretation** **Case Studies & Interpretation for Physicians** Emily L. Ho, M.D., Ph.D. Arthur Lam, M.D., FRCP, FNCS Aaron N. Stayman, M.D. Alan J. Velander II, M.D

1:30 p.m.	**Track 2 Guided Hands-On Scanning**
	Part 1 & 2: Guided Hands-on Scanning Vascular Technologists
1:30 p.m.	**Track 3 Demonstration & Guided Hands-On Scanning**
1:30 p.m.	**Part 1: CO_2 Challenge for Vasomotor Reactivity Demonstration & Hands-on Scanning** Brenda Rinsky, RVT, RDMS, NVS
2:15 p.m.	**Part 2: Guided Hands-on Scanning** Vascular Technologists
4:30 p.m.	**Adjourn**

Course Objectives

By attending this course, the participant will provide better patient care through an increased ability to:

- Identify basic principles of intracranial vascular anatomy, physiology and pathophysiology
- Demonstrate the proper techniques for the performance of TCD and TCD Imaging
- Describe clinical applications of TCD
- Recognize normal and abnormal intracranial Doppler spectral waveforms
- Describe the clinical usefulness and limitations of TCD and TCD Imaging techniques
- Apply basic TCD and TCD Imaging interpretation to real cases

Accreditation with Commendation

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of Swedish Medical Center and Pacific Vascular, Inc. Swedish Medical Center is accredited by the ACCME to provide continuing medical education for physicians.

AMA PRA Category 1 Credits™

Swedish Medical Center designates this live activity for a maximum of 24.5 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

For Nurses

American Nurses Credentialing Center (ANCC) accepts *AMA PRA Category 1 Credit™* from organizations accredited by the ACCME.

Other Specialties

Many other specialties can apply *AMA PRA Category 1 Credit™* towards CEUs. Check with your credentialing provider for details.