

**WEDNESDAY, MARCH 13, 2024**

4:00- 6:00 PM      *Registration*  
 6:00- 7:30 PM      *Opening Reception*

**THURSDAY, MARCH 14, 2024**

7:00 AM                      *Registration and Continental Breakfast*

7:50                              **Welcome and Overview / Pre-test**                              Course Chairs

**SESSION I**

8:00	1AM	<b>Arterial and Venous Development and Embryology</b>	Michihiro Tanaka, MD
8:20	5:20PM	<b>Vascular Anatomy of the Arterial-Capillary and Capillary-Venous Units</b>	Serge Bracard, MD
8:40	5:40PM	<b>AVMs as a Venous Disease</b>	Georges Rodesch, MD
9:00		<b>Genetics and Genomics of AVM Vessels</b>	Ethan Winkler, MD, PhD
9:20		<b>Role of Inflammation in AVM Development and Rupture</b>	Helen Kim, PhD
9:40		<b>Medical Therapies for Intracranial Vascular Lesions</b>	Daniel Cooke, MD
10:00		<i>Coffee Break</i>	

**SESSION II**

10:15	7:20PM	<b>Neurological Effects of Elevated Venous Pressure</b>	Serge Bracard, MD
10:35	7:35PM	<b>Risk for Hemorrhage from an Unruptured and Untreated Brain AVM</b>	Michael Soderman, MD, PhD
10:55	3:55AM	<b>Curative Treatment Approaches for Cerebral AVMs</b>	Michihiro Tanaka, MD
11:15	8:15PM	<b>Clinical Consequences of AVM Rupture</b>	Michael Soderman, MD, PhD
11:35		<b>Palliative Treatments for Incurable AVMs?</b>	Steven Hetts, MD and Dan Cooke, MD
11:47		<b>Panel Discussion and Abstract Presentations:</b> <b>11:47-11:56- Ahmad Chehab</b> <b>12:00-12:08- Keiko Fukuda</b>	
12:20 PM		<i>Adjourn</i> <i>Afternoon free – recreation time</i> <i>Optional Product Theater (Industry-Supported Presentations)</i>	
5:30		<b>Share Your Cases: Faculty and Attendee Case Presentation and Discussion Technological Advances in AVM Embolization – Balloons, Embolic Agents, Approaches with Cases</b>	Luis Savastano MD, PhD Dan Cooke, MD Daniel Raper, MD Kazim Narsinh, MD
7:00 PM		<i>Adjourn</i>	

**FRIDAY, MARCH 15, 2024**7:00 AM *Continental Breakfast***SESSION III**

8:00	5PM	<b>Natural History of Dural Arteriovenous Fistulas</b>	Michael Soderman, MD, PhD
8:20		<b>Identification of Shunting Lesions on Non-invasive Imaging: Signal and Image Processing Techniques and Technology Application</b>	Yi Li, MD
8:40		<b>Advanced Imaging and Applications – 4D Flow and Others</b>	David Saloner, PhD
9:00		<b>Angio-architecture of Dural Arteriovenous Connections</b>	Kazim Narsinh, MD
9:20		<b>Congenital Arteriovenous Shunting Syndromes – Genetic and Phenotypic Aspects</b>	Heather Fullerton, MD and Joseph Shieh, MD, PhD
9:40		<i>Coffee Break</i>	

**SESSION IV**

10:00		<b>Pial AVMs and AVFs from a Surgical Perspective</b>	Adib Abla, MD
10:20	7:20PM	<b>Genetics of AVMs</b>	Georges Rodesch, MD
10:40		<b>Connections Between Cerebral Vasculature and Cerebral Tumorigenesis</b>	David Raleigh, MD, PhD
11:00		<b> radiosurgery for Arteriovenous Shunting Lesions – Efficacy and Imaging Over Time</b>	Nalin Gupta, MD, PhD
11:20		<b>Panel Discussion and Abstracts:</b> 11:20-11:28- Lindsay Park 11:32-11:40- Victoria Vuong	
12:00 PM		<i>Adjourn</i> <i>Afternoon free – recreation time</i> <i>Optional Product Theater (Industry-Supported Presentations)</i>	
5:30		<b>Share Your Cases: Faculty and Attendee Case Presentation and Discussion - Endovascular Approaches to Non-Vascular Pathology (Hydrocephalus, Dementia, Macular Degeneration) with Cases</b>	Luis Savastano MD, PhD Dan Cooke, MD Steven Hetts, MD Kazim Narsinh, MD
7:00 PM		<i>Adjourn</i>	

**SATURDAY, MARCH 16, 2024**7:00 AM *Continental Breakfast***SESSION V**

7:55		<b>Hemodynamics and Physiology of Cerebral Arterial and Venous Blood Flow</b>	Luis Savastano MD, PhD
8:20		<b>Glymphatic, Lymphatic, and Subarachnoid Lymphatic-like Membrane, and Neurovascular Applications</b>	Daniel Raper, MBBS
8:40		<b>Vessel Wall Imaging in AVMs</b>	David Saloner, PhD
9:00		<b>Pediatric Arteriovenous Shunts</b>	Darren Orbach, MD, PhD
9:20		<b>Liquid Embolic Agents – Similarities, Differences, and Application</b>	Kazim Narsinh, MD
9:40		<i>Coffee Break</i>	
10:00		<b>Complications of Embolization of Arteriovenous Shunts and How to Avoid Them</b>	Seon-Kyu Lee, MD, PhD
10:20		<b>Fetal Treatment for Vein of Galen Malformations</b>	Darren Orbach, MD, PhD
10:40		<b>Hereditary Hemorrhagic Telangiectasia: a Genetic Syndrome of Multi-Organ Arteriovenous Shunting and Non-Shunting Lesions</b>	Steven Hetts, MD
11:00		<b>Panel Discussion and Abstracts:</b> 11:00-11:08- Alex Haddad 11:12-11:20- Jeyan Kumar	
11:30		<b>Final Wrap-Up and Course Evaluation / Post-Test</b>	
11:40 AM		<i>Adjourn</i>	