Johnson & Johnson INSTITUTE

2019 CERENOVUS Fellows Program

May 16-18, 2019 | Medical Education & Research Institute

44 S Cleveland St, Memphis, TN 38104

CERENOVUS

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Dedicated
Innovative

Our Mission:

Together with health care professionals around the world, we share the same goal: provide patients with the best and most compassionate care. As a trusted and innovative educator, Johnson & Johnson, through its family of companies, offers professional education, development, and advocacy focused on advancing health care delivery and the safe use of our products.

By combining cutting edge science, innovative therapies, and the latest solutions and technologies, we help health care professionals achieve our shared purpose.

2019 CERENOVUS Senior Fellows Program

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Welcome Fellows!

On behalf of the entire CERENOVUS team and program faculty, welcome to our Fellows Program at the Medical Education & Research Institute in Memphis.

CERENOVUS is dedicated to working with healthcare professionals such as yourself to help provide the best service to patients. We have created this course with you in mind.

This program guide introduces you to our esteemed faculty who are committed to your education. We are privileged and honored to collaborate with them on this program. We encourage you to actively engage the faculty to hear and learn their practices.

The next few days promise to provide a valuable educational opportunity designed to focus on clinical practice. We look forward to offering you a stimulating and engaging learning experience through contemporary lectures, peer-to-peer clinical case review, and a robust hands-on practicum. The practical groups are intentionally small to encourage lively discussion and debate with notable faculty, colleagues and CERENOVUS business representatives.

We sincerely hope you find this course to be a valuable educational experience with knowledge to bring back to your own practice!

CERENOVUS Professional Education Team,
Jay, Jenna, and Sally

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Faculty

Course Chairmen

Adam Arthur, MD, MPH

Semmes Murphey Clinic

Dr. Adam Arthur grew up in a small college town in the Shenandoah Valley and was awarded a Virginia Scholarship to attend the University of Virginia. After college he joined the University of Virginia Department of Neurosurgery where he did research on aneurysms and cerebral vasospasm. He continued this research throughout medical school, obtaining his medical degree from the University of Virginia in 1998.

He then did his internship and residency at the University of Utah in Salt Lake City. While there he also completed a Masters in Public Health with a focus on clinical trials methodology, graduating Summa Cum Laude in 2002. After finishing his residency in Neurosurgery he was recruited to Memphis where he joined the Semmes Murphey Clinic and the University of Tennessee Department of Neurosurgery.

During his first two years in Memphis he completed a fellowship in Endovascular and Cerebrovascular Neurosurgery. He is one of a few neurosurgeons in the country to develop a busy practice in both open cerebrovascular surgery and endovascular neurosurgery.

Dr. Arthur has a strong interest in managing neurovascular disease in both healthy and very sick patients. He is actively engaged in several areas of research to improve the treatment of patients with cerebrovascular diseases, such as aneurysms and stroke.

Chris Putman, MD

Inova Fairfax Hospital

Dr. Chris Putman is a neuroradiologist who performs diagnostic and endovascular interventional neuroradiology procedures at Inova Fairfax Hospital in Fairfax, Virginia. Dr. Putman received his Bachelor of Science degree in Chemistry from Southern Methodist University in Dallas, Texas in 1984 graduating Summa Cum Laude. He earned his medical degree in 1988 from Johns Hopkins University School of Medicine.

His postdoctoral training includes completing both his internship and residency in internal medicine at Beth Israel Hospital, Harvard Medical School, in Boston, Massachusetts. He then went on to complete a residency in diagnostic radiology in 1994 along with completing two consecutive fellowship trainings in both neuroradiology and interventional radiology, all from Yale-New Haven.

His academic appointments have included serving as both an Assistant Professor and Lecturer in the Department of Radiology at Harvard Medical School. He also served as an Instructor and Assistant Professor in the Department of Radiology at Yale University School of Medicine.

He has a broad array of research experience and serves on both the Stroke Therapy Scientific Board and Intracranial Stent Advisory Board. He is an active member of the American College of Radiology, AMA, American Society of Neuroradiology, and The Brain Aneurysm Foundation.

Faculty

Course Faculty

Ali Alaraj, MD

University of Illinois at Chicago

Dr. Ali Alaraj is a fellowship-trained neurosurgeon and is dual trained in open vascular and endovascular neurosurgery. He began with his Interventional Neuroradiology Fellowship at Baylor College of Medicine in Houston, Texas followed by serving as Neurosurgery Chief Resident at American University of Beirut in Lebanon. Dr. Alaraj then completed his Cerebrovascular and Endovascular Fellowships at University of Illinois At Chicago.

His medical expertise includes neurocritical care, treating patients with acute stroke, intracranial bleeding, brain aneurysms, arteriovenous malformations, complex dural arteriovenous fistulas, carotid cavernous fistulas, carotid artery and intracranial vessels stenosis.

He has more than 80 published peer-reviewed articles and textbook chapters and serves on the editorial board for Neurosurgery and Neurological Research journals.

His research interests include outcomes of management of brain aneurysms and arteriovenous malformations; quantitative cerebral flow measures; computational quantification of intracranial flows by angiography, in addition to virtual reality simulation in neurosurgical training.

Lucas Elijovich, MD

Semmes Murphey Clinic

Dr. Lucas Elijovich received his undergraduate degree in Biology from Tufts University in Massachusetts and his medical degree from the University of Texas in Galveston. He then completed his Neurology residency at New York University, where he served as Chief Resident.

In order to pursue advanced interests in cerebrovascular disease, neurocritical care, and interventional neuroradiology, Dr. Elijovich went on to complete fellowship training in stroke and neurocritical care at the University of California San Francisco from 2006-2008. He then returned to New York from 2008-2010 to train with Dr. Alejandro Berenstein, one of the pioneers of interventional neuroradiology.

Dr. Elijovich joined Semmes-Murphey Clinic in 2010 and is an Associate Professor in the Departments of Neurology and Neurosurgery at the University of Tennessee Health Sciences Center.

Dr. Elijovich also serves as the Director of Neurocritical and Neurointerventional Surgery for Lebonheur Children's Hospital in the Neurosciences Institute, and as the Co-Director of the Lebonheur Vascular Anomalies Center.

Faculty

Course Faculty

Philippe Gailloud, MD

Johns Hopkins University

Dr. Philippe Gailloud serves as Director of the Division of Interventional Neuroradiology, Director of the Endovascular Surgical Neuroradiology Program and Co-Director of the Johns Hopkins Center for Pediatric Neurovascular Diseases.

Among his main areas of specialization are the development of interventional techniques, the percutaneous treatment of brain, spinal cord and spine lesions, and the anatomy and embryology of the cerebral vasculature. Besides the diagnosis and treatment of cerebrovascular diseases in adult patients, Dr. Gailloud also focuses on the management of neurovascular disorders in children.

Dr. Gailloud received his medical degree from the University of Geneva, Switzerland, in 1991, and completed his residency in diagnostic and interventional radiology at Geneva University Hospital in 1998. He completed a research fellowship in morphology at the University of Geneva in 1994, and clinical fellowships in diagnostic and interventional neuroradiology at Johns Hopkins. He joined the Johns Hopkins faculty in 2000.

Dr. Gailloud has published more than 160 peer-reviewed scientific publications and 20 book chapters on a wide range of topics related to diagnostic and interventional neuroradiology.

Jay Howington, MD

Neurological & Spine Institute

Dr. Jay Howington is a board certified neurosurgeon with fellowship training in endovascular neurosurgery at Neurological & Spine Institute of Savannah. He gained his neurosurgical clinical experience at Charity Hospital, Children's Hospital, as well as the Ochsner Clinic as part of his neurosurgical residency at Louisiana State University in New Orleans.

After serving as Chief Resident at Charity Hospital, Dr. Howington moved to Buffalo, New York for a two-year fellowship in endovascular neurosurgery under Dr. Nick Hopkins. He moved to Savannah in 2004 and now calls it his home.

During his fellowship, Dr. Howington was involved in multiple interventional neurovascular procedures ranging from carotid artery angioplasty and stenting to acute stroke intervention and the embolization of arteriovenous malformations (AVM), aneurysms and tumors. He also gained exposure to the percutaneous embolization of venous angiomas, balloon test occlusion for cerebral perfusion analysis and intracranial angioplasty and stenting. He currently treats over 100 aneurysms a year.

Dr. Howington has also contributed to a number of journal articles and published abstracts as well as 8 book chapters.

Faculty

Course Faculty

Sudhakar Satti, MD

Christiana Care Health System

Dr. Sudhakar Reddy Satti is a Neurointerventional Radiologist currently serving as Associate Director, Neurointerventional Surgery at Christiana Care Health Center. He received his medical degree from Hahnemann University College of Medicine in Philadelphia, PA in 2002. Dr. Satti then completed his diagnostic radiology residency there as well. He followed with his neuroradiology fellowship as well as an interventional radiology/endovascular neurosurgery fellowship at University of Pennsylvania.

Dr. Satti has over 17 years of diverse experience, especially in interventional pain management. He is especially passionate and interested in radial access. Dr. Satti has been performing radial access cerebrovascular procedures since 2010.

Dr. Satti notes, "In my opinion, ultrasound guided single wall micropuncture technique is the fastest, most reliable, safest (regarding vessel wall injury), and least painful approach. Most cardiology literature advocates double wall puncture with palpation, however, this may be related to lack of comfort with continuous real time ultrasound guidance. It is rare that more than one attempt is needed to access the radial artery when ultrasound is used. High first attempt access rates reduce spasm, dissection, delayed occlusion, and patient pain during access."

Sam Zaidat, MD

Mercy Health Toledo

Dr. Zaidat is a stroke and endovascular neurosurgery/neurointerventional clinical specialist, who is certified by the American Board of Neurology, American Board of Spinal Cord Medicine, American Board of Vascular Neurology, and United Council of Neurological Specialties (UCNS) in Neurocritical Care.

He received his medical degree from Jordan University Medical School in Amman, Jordan and completed neurology training at Case Western Reserve University in Cleveland. He also completed a Neurocritical Care and Stroke Fellowship Case Western Reserve University and was a clinical associate and fellow in the Department of Radiology, Neurointerventional Program at Duke University and Medical Center in Durham, NC.

Prior to joining Mercy Health, Dr. Zaidat was a professor of Neurology, Neurosurgery, and Radiology and the Director of Comprehensive Stroke Center and Neurointervention at the Medical College of Wisconsin, Milwaukee, WI.

Dr. Zaidat brings to Toledo and Mercy Health a wealth of experience in the field of stroke, neurointervention and cerebrovascular diseases. He is noted as a world leader in the field of stroke and neurointervention and has written more than 180 peer reviewed articles, participated at the principle investigators in national and international brain aneurysms and ischemic stroke clinical trials, and served as co-leader of the endovascular committee of the National Institutes of Health StrokeNet consortium.

Faculty

Guest Speaker

Matthew Gounis, Ph.D.
University of Massachusetts Medical School

Matt received his BS and MS in Mechanical Engineering at SUNY Buffalo, where he was awarded the AHA New York Affiliate pre-doctoral fellowship. He then moved to Miami to work on his PhD in biomedical engineering, concentrating on new imaging modalities to quantify the functionality of vasculature following pro-angiogenic gene therapy.

After obtaining his PhD in 2004, Matt spent a year as Research Assistant Professor in the Biomedical Engineering and Radiology Departments at the University of Miami. Thereafter, he took a short sojourn from academia and joined Cordis Neurovascular as a Principal Engineer responsible for researching new therapies for cerebrovascular aneurysms.

Matt joined UMMS in 2006 as an Assistant Professor and Director of the newly established New England Center for Stroke Research. He has been the recipient of numerous awards from ASME Bioengineering Division, Sigma Xi, the American Association of Neurological Surgeons, the American Society of Neuroradiology, and Johnson and Johnson. He is an active member of the ASME bioengineering division, having served previously as the Student Paper Competition and Exhibits chairs of the Summer Bioengineering Meeting.

Matt is interested in the design of medical devices for minimally invasive treatment of cerebrovascular pathologies, gene and stem cell therapy for arterial occlusive disease and experimental fluid mechanics for medical device evaluation.

Agenda

Thursday, May 16, 2019

5:30 PM	**Welcome Reception | Guest House at Graceland**
6:00 PM	**Opening Remarks** Jay Harper Senior Manager, Professional Education
6:15 PM	**Clot Science** Paulina Donor Clinical R&D Field Engineer
7:00 PM	**Importance of First Pass (ARISE II Results)** Sam Zaidat, MD
7:45 PM	**Minimalist Approach To Treating AIS** Christopher Putman, MD
8:15 PM	**Extended Discussion** Faculty
8:45 PM	**Extending Thrombectomy into Acute Setting** Lucas Elijovich, MD
9:15 PM	**Adjourn**

Agenda

Friday, May 17, 2019

7:00 AM	**Transportation to MERI**
7:15 AM	**Breakfast**
7:30 AM	**Aneurysm Treatment Choices** Adam Arthur, MD
8:15 AM	**Basic and Advanced Coiling Fundamentals** Christopher Putman, MD
9:15 AM	**Break**
9:30 AM	**Adjunctive Devices When Treating Aneurysms** Jay Howington, MD
10:30 AM	**Problematic Cases: "What I Learned"** Faculty
11:15 AM	**Research in Academic Neurointerventional Surgery** Matthew Gounis, Ph.D
12:00 PM	**Practice Enhancement Over Lunch**
1:00 PM	**Hands-On Lab**
4:00 PM	**Radial Access** Sudhakar Satti, MD
5:00 PM	**Textbook Program** Jay Harper Senior Manager, Professional Education
5:15 PM	**Transportation back to hotel**
7:00 PM	**Transportation to Dinner**
7:15 PM	**Reception | B.B. Kings**
9:15 PM	**Adjourn**

Agenda

Saturday, May 18, 2019

7:30 AM	**Transportaion to MERI**
7:45 AM	**Breakfast / Schedule of Events**
8:00 AM	**Spinal Angiography- Techniques and Pitfalls** Philippe Gailloud, MD
8:30 AM	**Basics of AVM Embolizations** Philippe Gailloud, MD
9:15 AM	**Break**
9:30 AM	**Achieving Optimal AVM results** Ali Alaraj, MD
10:30 AM	**TruFill n-BCA System Mixing Demontration** Ali Alaraj, MD
10:45 AM	**TruFill n-BCA System Hands-On Workshop** Faculty
1:15 AM	**Change and transfer out of lab**
1:30 PM	**Working Lunch: Bailout Strategies**
2:15 PM	**Closing Remarks and Evaluations**
2:30 PM	**Departures**

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Hotel Location

Guest House at Graceland
3600 Elvis Presley Blvd, Memphis, TN 38116

Lab Location

Medical Education & Research Institute
44 S Cleveland St, Memphis, TN 38104

Massachusetts and Vermont HCP Requirements

Under Massachusetts regulations, Medical Device Business Services, Inc. may provide meals or refreshments to Massachusetts licensed HCPs only during non-CME educational activities when educating and informing HCPs about the benefits, risks, and appropriate uses of our medical devices, disease states, or other scientific/health economics information.

Under Vermont regulations, Medical Device Business Services, Inc. may provide meals or refreshments in conjunction with technical product training on the use of medical devices to Vermont-licenses HCPs that regularly practice in the state of Vermont.

Government HCPs

Per company policy, meals and refreshments may not be provided to Federal Government HCPs unless pre-approved by Medical Device Business Services, Inc. Meals and refreshments provided to State and Local Government HCPs are permitted upon verification of allowance by facility policy.

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This course is produced and sponsored by Medical Device Business Services, Inc. and is not approved for CME credit.

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