NYU Langone Health

Continuing Medical Education

Basic and Advanced Neuroendovascular ANAtomy Course (BANANA Course)

Monday, October 31 – Wednesday, November 2, 2022
NYU Langone Health, Alumni Hall

nyulmc.org/bananacme

COURSE DIRECTOR

Maksim Shapiro, MD
Clinical Associate Professor of Radiology
Clinical Associate Professor of Neurology
NYU Grossman School of Medicine

CONTENT PLANNERS

Mattia Gilmartin, RN, PhD, FAAN
Olga J. Laszczych, RT
Mariya Naumoff, NP
Peter K. Nelson, MD
Erez Nossek, MD
Eytan Raz, MD, PhD
Howard A.Riina, MD, MPHI
Caleb Rutledge, MD
Vera Sharashidze, MD
Kittipong Srivatanakul, MD, MSc
Safia F. Syed, MAS, RT
Linda Warren, NP

GUEST SPEAKERS

Daniel H. Sahlein, MD
Clinical Assistant Professor of Osteopathic Medicine
Goodman Campbell Brain & Spine
Carmel, IN

Kittipong Srivatanakul, MD, MSc
Junior Associate Professor of Medicine
Tokai University
Isehara, Kanagawa

TARGET AUDIENCE

Neurovascular fellows and junior attendings specializing in Radiology, Neurology, Neurosurgery, Cardiology, and Vascular Surgery

LOCATION

NYU Langone Health, Alumni Hall
550 First Avenue, New York, NY 10016

COURSE DESCRIPTION

In the Autumn of 2022, the NYU Langone Health Center for Stroke and Neurovascular Diseases will host a 3-day course dedicated to the teaching of advanced neurovascular anatomy. Continued advances in minimally invasive neuroendovascular techniques such as treatment of stroke, cerebral aneurysms, brain and spine fistulas, arteriovenous malformations, tumors, and other pathology place increasing emphasis on the availability of advanced vascular anatomy training. The course is designed for neuroendovascular trainees, faculty, nurses, advanced practice providers, technologists, and other catheterization lab staff. Multimodality instruction will include angiography (including volumetric and stereoscopic imaging), MR, CT, graphic design, and advanced visualization materials. A mixture of lectures, interactive workshops, and online material, delivered by world-class neurovascular anatomy faculty, will be directed towards the goal of maximizing accurate diagnostic and successful procedural outcomes through knowledge of essential clinically-relevant anatomy.

EDUCATIONAL OBJECTIVES

After participating in this activity, clinicians should be able to:

- Define major features of spinal arterial and venous anatomy and identify vascular pathoanatomy
- Identify the intracranial and extracranial arterial vascular disease
- Identify major arterial variants and their significance in performance of diagnostic and therapeutic procedures
- Identify intracranial and extracranial venous abnormalities and their significance in performance of diagnostic and therapeutic procedures

FEES

Full: $599
Reduced*: $449
Fellows: $449
Residents: $299

** Reduced fee applies advanced practice providers and all other non-physician healthcare professionals.*

Please note: This course is eligible for NYU School of Medicine Alumni discount.

REGISTRATION

nyulmc.org/bananacme

COURSE APP

Course materials will be distributed electronically via an app. Emails regarding the app will be sent beginning two weeks prior to the course. You will be able to download the app and view the course materials in advance, as well as on the day of the course. The app can also be viewed on a desktop or laptop. The course presentations will be available for view/download/print the week of the course.

REFUND POLICY

To request a refund, please email cme@nyulangone.org

COURSE CANCELLATION POLICY

If a course is cancelled due to inclement weather, insufficient enrollment, or any other reason, NYU Grossman School of Medicine will refund registration fees in full. NYU Grossman School of Medicine will provide at least two weeks' advance notice if cancelling due to insufficient enrollment and as soon as possible in all other circumstances. NYU Grossman School of Medicine is not responsible for any non-cancellable costs incurred by the registrant.

CONTACT INFORMATION

NYU Grossman School of Medicine
212-263-5295 • cme@nyulangone.org

CME ACCREDITATION STATEMENT

The NYU Grossman School of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

CREDIT DESIGNATION STATEMENT

The NYU Grossman School of Medicine designates this live activity for a maximum of 20.75 *AMA PRA Category 1 Credits*™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

CONTINUING NURSING EDUCATION CONTACT HOURS

This program will provide 20.75 continuing nursing education contact hours. Participants must complete a course evaluation to claim contact hours for this learning activity. The Rory NYU Meyers College of Nursing Center for Continuing Education in Nursing is accredited as a provider of continuing nursing professional development by the American Nurses' Credentialing Center's Commission on Accreditation.

PROVIDED BY

NYU Grossman School of Medicine

AGENDA

MONDAY, OCTOBER 31, 2022

8:00am **Registration and Continental Breakfast**

8:30 **Introductions & Imaging Techniques**
Maksim Shapiro, MD

9:00 **Practical Embryology**
Eytan Raz, MD, PhD

9:30 **Spinal Arterial Anatomy 1**
Peter K. Nelson, MD

10:00 **Spinal Arterial Anatomy 2 and Venous Anatomy**
Maksim Shapiro, MD

10:30 **Coffee Break**

11:00 **PICA/Lateral Spinal Region**
Kittipong Srivatanakul, MD, MSc

11:30 **AICA/SCA/Basilar Terminus Perforators**
Eytan Raz, MD, PhD

12:00pm **Venous System Overview - The Big Picture**
Maksim Shapiro, MD

12:30 **Brainstem/Cerebellar Venous Anatomy - Yun Peng Huang Tribute Lecture**
Kittipong Srivatanakul, MD, MSc

1:00 **Lunch Break (Provided)**

Track 1 Workshops

2:00 **DYNA / Advanced Image Acquisition and Processing**
Eytan Raz, MD, PhD

Flow Diversion Posterior Fossa
Peter K. Nelson, MD,
Daniel H. Sahlein, MD

Spinal Dural Fistula - Endovascular and Surgical Approaches
Erez Nossek, MD,
Maksim Shapiro, MD

Track 2 Workshop

2:00 **Neurovascular Anatomy Primer for Licensed Independent Practitioners, IR Technologists, and Nursing Staff**
Caleb Rutledge, MD, Vera Sharashidze, MD
Panelists: Olga J. Laszczych, RT, Mariya Naumoff, Safia F. Syed, Linda Warren, NP

5:00 **Adjourn and Light Refreshments**

6:00pm **Reception, Case Presentations, and Panel Discussion***

TUESDAY, NOVEMBER 1, 2022

8:15am **Registration and Continental Breakfast**

8:30 **Arch and Radial Anatomy**
Maksim Shapiro, MD

9:00 **Facial/Lingual/STA/IMAX**
Eytan Raz, MD, PhD

9:30 **Ascending Pharyngeal/Occipital System**
Kittipong Srivatanakul, MD, MSc

10:00 **Intracranial Extradural ICA - Mandibulovidian, MHT, ILT**
Maksim Shapiro, MD

10:30 **Coffee Break**

11:00 **Meningeal Arteries**
Daniel H. Sahlein, MD

11:30 **Ophthalmic Artery**
Eytan Raz, MD, PhD

12:00pm **Dural Venous Sinuses**
Kittipong Srivatanakul, MD, MSc

12:30 **Cavernous Sinus**
Eytan Raz, MD, PhD

1:00 **Lunch Break (Provided)**

Track 1 Workshops

2:00 **Dural Fistulas 1 (Cavernous, Ethmoid)**
Erez Nossek, MD,
Eytan Raz, MD, PhD

Dural Fistulas 2 (Sigmoid/Torcular/Convexity)
Maksim Shapiro, MD, Kittipong Srivatanakul, MD, MSc

Embolization - Tumor, MMA
Daniel H. Sahlein, MD

Track 2 Workshop

2:00 **Neurovascular Anatomy Primer for Licensed Independent Practitioners, IR Technologists, and Nursing Staff**
Caleb Rutledge, MD, Vera Sharashidze, MD
Panelists: Olga J. Laszczych, RT, Mariya Naumoff, Safia F. Syed, Linda Warren, NP

5:00 **Adjourn and Light Refreshments**

6:00pm **Reception, Case Presentations, and Panel Discussion***

WEDNESDAY, NOVEMBER 2, 2022

8:15am **Registration and Continental Breakfast**

8:30 **Choroidal and Posterior Cerebral Arteries**
Kittipong Srivatanakul, MD, MSc

9:00 **Anterior Cerebral Artery**
Peter K. Nelson, MD

9:30 **Middle Cerebral Artery**
Erez Nossek, MD

10:00 **Surgical Intracranial Anatomy**
Howard A. Riina, MD, MPHI

10:30 **Coffee Break**

11:00 **Arterial Plasticity and Flow Modification (Flow Diversion/ Bypass)**
Erez Nossek, MD, Eytan Raz, MD, PhD

11:30 **Superficial Venous System**
Maksim Shapiro, MD

12:00pm **Deep Venous System**
Kittipong Srivatanakul, MD, MSc

12:30 **Lunch Break (Provided)**

Track 1 Workshops

1:30 **Aneurysm/Advanced Flow Diversion**
Erez Nossek, MD,
Daniel H. Sahlein, MD

Stroke - Technical and Anatomical Aspects
Eytan Raz, MD, PhD

Venous Steno-Occlusive Disease/Pulsatile Tinnitus
Maksim Shapiro, MD

4:30 **Concluding Remarks**
Moderator: Maksim Shapiro, MD

4:45pm **Adjourn**

**Not for CME credit*

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