

# BASIC AND ADVANCED NEUROVASCULAR ANATOMY COURSE (BANANA COURSE)

Monday-Wednesday, April 27-29, 2026

## AGENDA

### MONDAY, APRIL 27, 2026

#### Lectures

7:30 AM EDT	<b>Registration and Breakfast</b>
8:30	<b>Introduction</b> Erez Nossek, MD
8:35	<b>Imaging Techniques</b> Maksim Shapiro, MD
9:00	<b>Removing Boundaries -- Direct Puncture, Transvenous, Combined Open / Endo Access</b> René Chapot, MD
9:30	<b>Practical Embryology</b> Eytan Raz, MD, PhD
10:00	<b>Spinal Arterial Anatomy and Application to Arteriovenous Shunts</b> Maksim Shapiro, MD
10:30	<b>Coffee Break</b>
11:00	<b>Spinal Venous Anatomy / CSF Venous Fistula Applications</b> Eytan Raz, MD, PhD
11:30	<b>AICA / PICA / Lateral Spinal Region</b> Peter K. Nelson, MD
12:00 PM EDT	<b>SCA / Basilar Terminus Perforators in Ischemic and Hemorrhagic Disease</b> Eytan Raz, MD, PhD

12:30	<b>Venous System Overview -- Yun Peng Huang Memorial Lecture</b> Maksim Shapiro, MD
1:00	<b>Lunch Break</b>
<b>Workshops - Track 1 (Round Robin)</b>	
2:00	<b>Flow Diversion Posterior Circulation</b> Edoardo D. Boccardi, MD, Peter K. Nelson, MD
	<b>Maximizing Yield of neuroangio.org -- Content and Navigation</b> Maksim Shapiro, MD
	<b>Spinal Arteriovenous Shunts -- Endovascular and Surgical Approaches</b> Erez Nossek, MD, Eytan Raz, MD, PhD
	<b>Adjourn</b>
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5:00	<b>Reception</b>
6:00 PM EDT	<b>Case Presentations and Panel Discussion*</b> <b>Moderators:</b> Jacob F. Baranoski, MD, Edoardo D. Boccardi, MD, Charlotte Y. Chung, MD, Peter K. Nelson, MD, Erez Nossek, MD, Eytan Raz, MD, PhD, Howard A. Riina, MD, William Rutledge, MD, Maksim Shapiro, MD and Vera Sharashidze, MD

### TUESDAY, APRIL 28, 2026

7:30 AM EDT **Breakfast**

### **Non-Accredited Lectures\***

- 8:00 **Facial / Lingual /STA / IMAX: Implications for Embolization**  
Eytan Raz, MD, PhD
- 8:30 **Ascending Pharyngeal / Occipital System**  
Peter K. Nelson, MD
- 9:00 **Intracranial Extradural ICA -- MHT, ILT: Skull Base Embolization**  
Maksim Shapiro, MD
- 9:30 **Meningeal Arteries and Various Applications**  
Daniel H. Sahlein, MD
- 10:00 **End of Non-Accredited Education**
- 10:00 **Coffee Break**

### **Accredited Education Lectures**

- 10:30 **Ophthalmic and Superior Hypophyseal Arteries**  
Eytan Raz, MD, PhD
- 11:00 **Dural Venous Sinuses and Dural Fistula Applications**  
Maksim Shapiro, MD
- 11:30 **Cavernous Sinus and Dural Fistula Applications**  
Eytan Raz, MD, PhD
- 12:00 PM EDT **Supratentorial Venous Anatomy -- Applications in AVM Analysis and Treatment**  
Maksim Shapiro, MD
- 12:30 **Vascular Considerations and Complications in Skull Base Surgery**  
Paul A. Gardner, MD
- 1:00 **End of Accredited Education**
- 1:00 **Lunch Break**

### **Non-Accredited Workshop\* - Track 1 (Round Robin)**

2:00

### **DYNA / Advanced Image Acquisition and Processing**

Eytan Raz, MD, PhD

### **Dural Fistulas 1 (Cavernous, Ethmoid)**

Daniel H. Sahlein, MD, Maksim Shapiro, MD

### **Dural Fistulas 2 (Sigmoid / Torcular / Convexity)**

Edoardo D. Boccardi, MD, Peter K. Nelson, MD

### **Track 1 & 2 Reconvene**

### **Non-Accredited Workshop\* - Track 2 (Continuous Session)**

2:00

### **Case-Based Anatomy: Foundations and Clinical Applications**

Jacob F. Baranoski, MD, Vera Sharashidze, MD

### **Track 1 & 2 Reconvene**

5:00

### **Adjourn**

5:00

### **Reception**

6:00 PM EDT

### **Case Presentations and Panel Discussion\***

**Moderators:** Jacob F. Baranoski, MD, Edoardo D. Boccardi, MD, Charlotte Y. Chung, MD, Peter K. Nelson, MD, Erez Nosseck, MD, Eytan Raz, MD, PhD, Howard A. Riina, MD, William Rutledge, MD, Maksim Shapiro, MD and Vera Sharashidze, MD

## **WEDNESDAY, APRIL 29, 2026**

### **Lectures**

7:30 AM EDT

### **Breakfast**

8:30

### **Choroidal and Posterior Cerebral Arteries**

Eytan Raz, MD, PhD

9:00

### **Spectrum of Transvenous Access and Transvenous Embolization**

René Chapot, MD

- 9:30 **Anterior Cerebral Artery -- Ischemic and Hemorrhagic Aspects**  
Erez Nossek, MD
- 10:00 **Middle Cerebral Artery and Implications for Thrombectomy**  
Vera Sharashidze, MD
- 10:30 **Coffee Break**
- 11:00 **Surgical Intracranial Anatomy**  
Howard A. Riina, MD
- 11:30 **Principles of Flow Diversion and Arterial Plasticity**  
Peter K. Nelson, MD, Maksim Shapiro, MD
- 12:00 PM EDT **Infratentorial Venous System**  
Maksim Shapiro, MD
- 12:30 **Deep Venous System**  
Michihiro Tanaka, MD, PhD
- 1:00 **Lunch Break**

- 5:00 **Concluding Remarks**  
Eytan Raz, MD, PhD
- 5:15 PM EDT **Adjourn**

\*Presentations for this portion of the activity are not accredited for continuing medical education credits

## Workshops - Track 1 (Round Robin)

Each track workshop runs simultaneously from 2:00–4:55 pm, and all participants will reconvene at 4:55 pm

- 2:00 **Aneurysm / Advanced Flow Diversion**  
Edoardo D. Boccardi, MD, Peter K. Nelson, MD
- Comprehensive AVM Analysis and Management -- Hybrid / Surgical Options**  
Erez Nossek, MD, Maksim Shapiro, MD
- Stroke -- Technical and Anatomical Aspects**  
Jacob F. Baranoski, MD, Eytan Raz, MD, PhD

## Workshops - Track 2 (Continuous Session)

- 2:00 **Case-Based Anatomy: Foundations and Clinical Applications**  
Charlotte Y. Chung, MD, William Rutledge, MD
- Track 1 & 2 Reconvene**  
Linda Warren, NP