



# BRAIN AVMS: UPDATES ON THE NATURAL COURSE, CURRENT CONCEPTS AND MANAGEMENT 28<sup>th</sup> November 2020

*Latest updates on Brain AVMs by  
world's leading experts!*



**Timo Krings**  
Canada



**Michael Lawton**  
USA



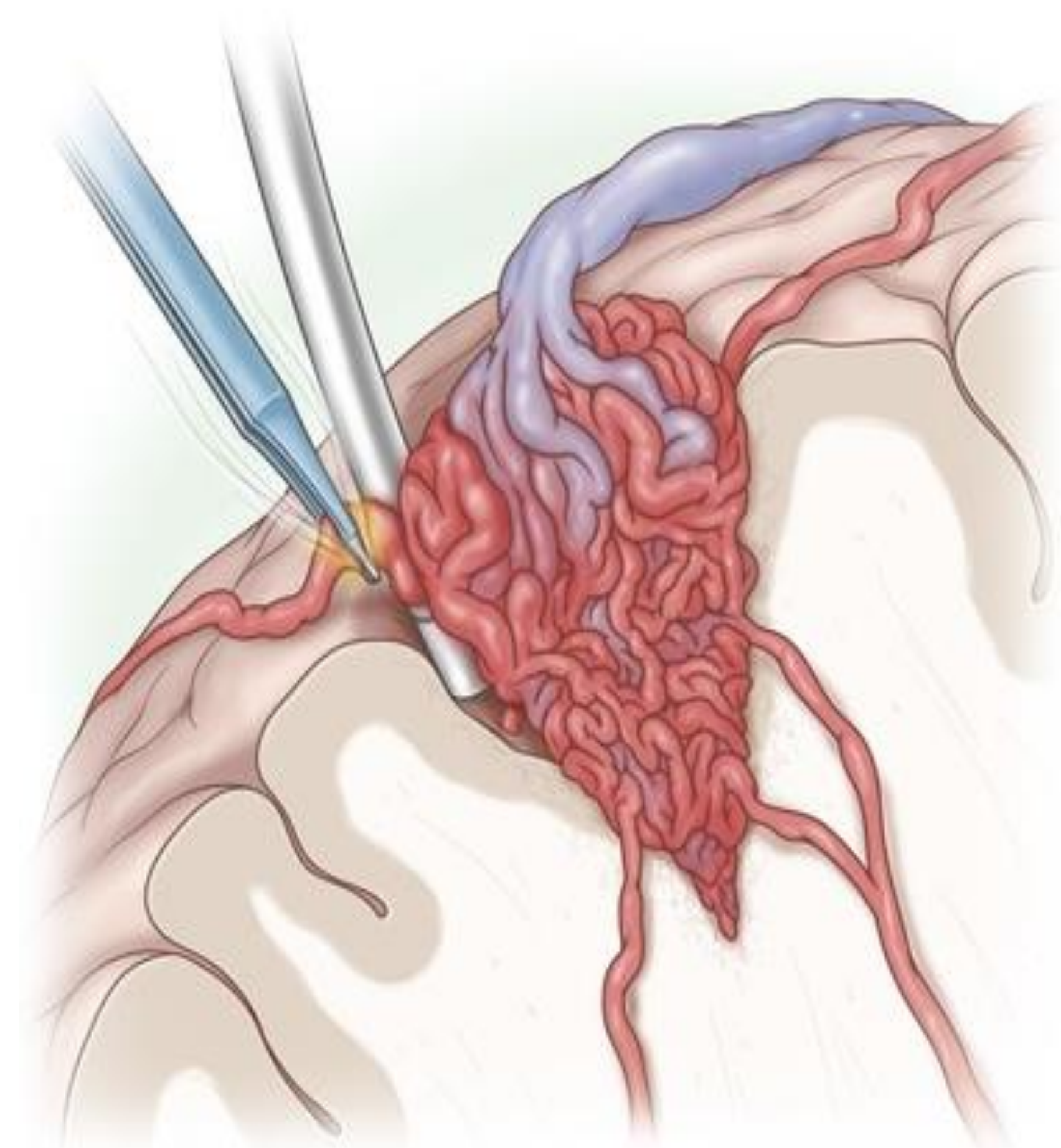
**Aaron Cohen**  
USA



**Peter Dirks**  
Canada



**Rene Chapot**  
Germany



**Bengt Karlsson**  
Singapore



**Chao Bao Luo**  
Taiwan



**Ramez Kirolos**  
Singapore



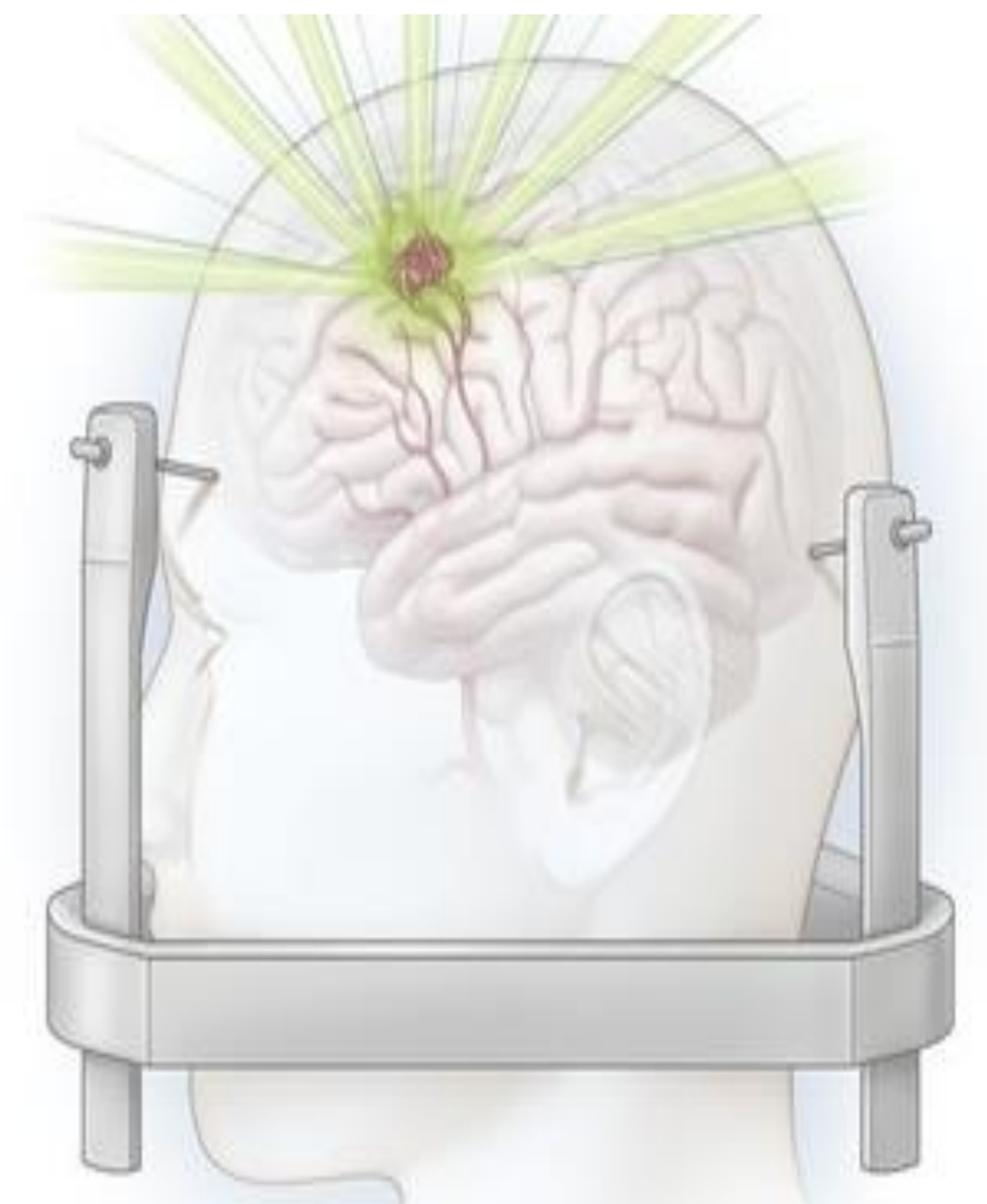
**Ivan Ng**  
Singapore



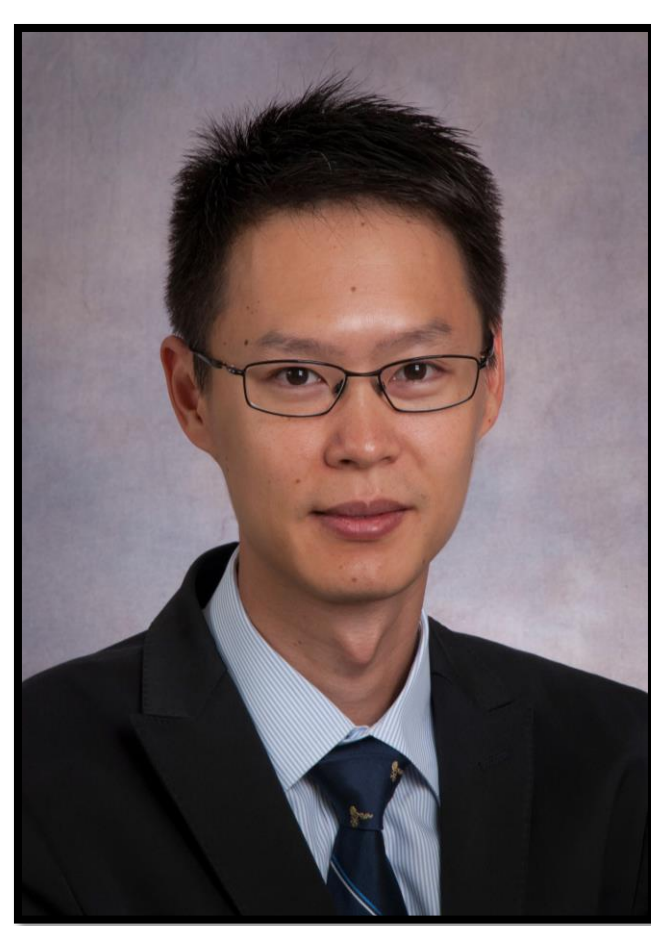
**Azman Raffiq**  
Malaysia



**Eka Wahjoepramono**  
Indonesia



## Chairpersons



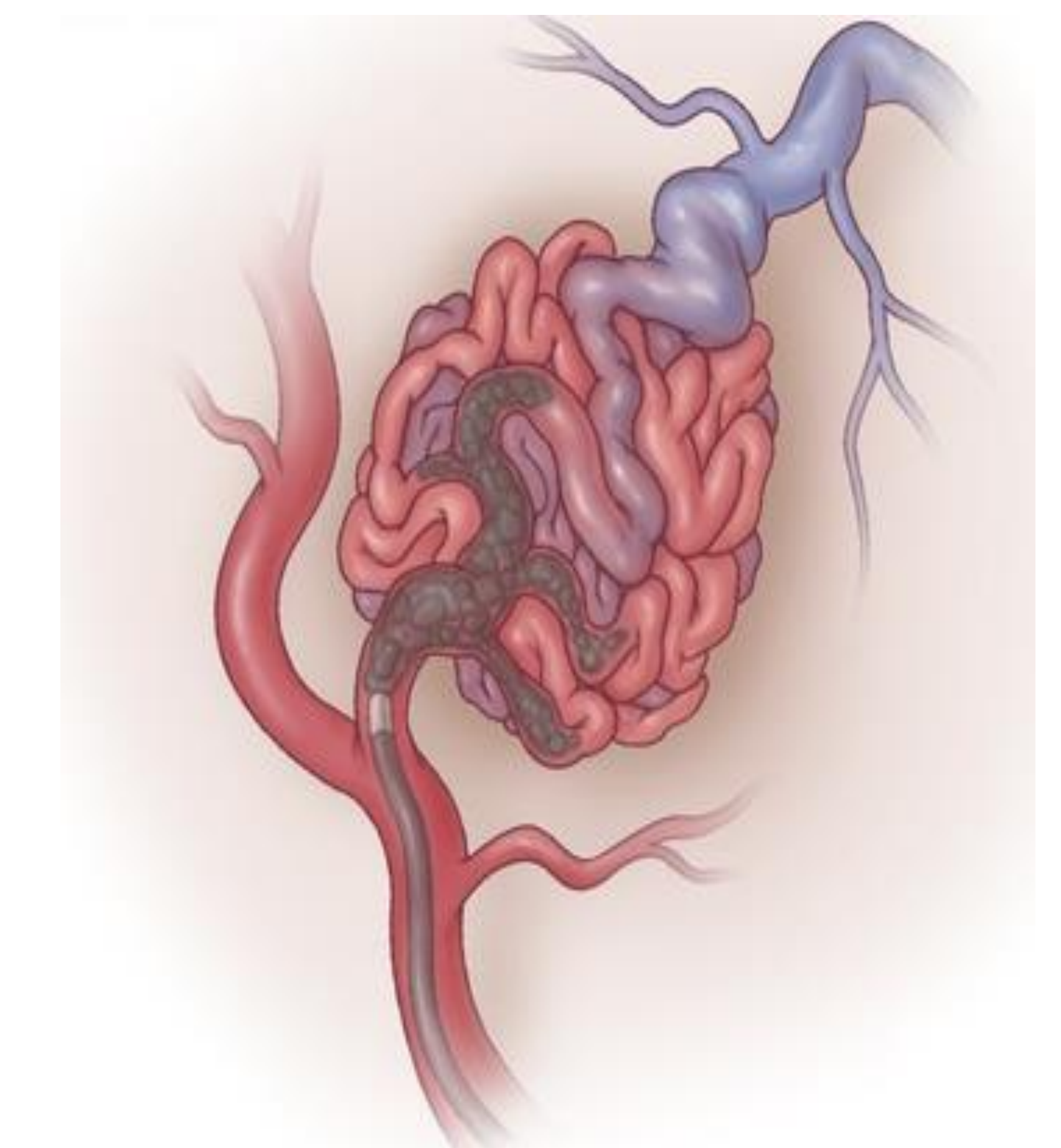
**Vincent Nga**  
Singapore



**Anil Gopinathan**  
Singapore



**Bengt Karlsson**  
Singapore



**Contact Lecile Foo : [lecile\\_foo@nuhs.edu.sg](mailto:lecile_foo@nuhs.edu.sg)**

**Physical Location**  
Advanced Surgery Training Centre (ASTC)  
Department of Surgery  
National University of Singapore  
Level 2, Kent Ridge Wing  
National University Hospital, 5 Lower Kent Ridge Road,  
Singapore 119074

**Virtual Location TBC**

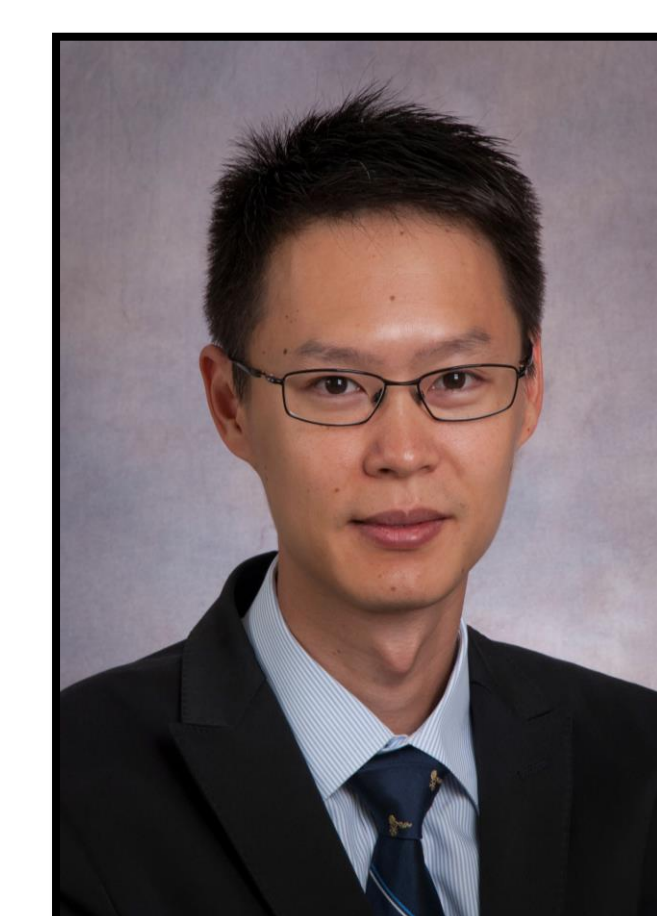




# BRAIN AVMS: UPDATES ON THE NATURAL COURSE, CURRENT CONCEPTS AND MANAGEMENT

| Timing                                                                                   | Topic                                                                                                                  | Speaker                   |
|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|---------------------------|
| 7:30 – 8:30                                                                              | Registration and Breakfast                                                                                             |                           |
| <b>Moderators: Vincent Nga and Anil Gopinathan</b>                                       |                                                                                                                        |                           |
| 8:30 – 8:35                                                                              | Opening remarks                                                                                                        |                           |
| 8:35 – 9:20                                                                              | Angiogenesis and Vasculogenesis : Current concepts and their application to Paediatric Brain Vascular Malformation     | Timo Krings, Canada       |
| 9:20 – 9:50                                                                              | Paediatric AVM Management – Special Considerations                                                                     | Peter Dirks, Canada       |
| 9:50 – 10:20                                                                             | Paediatric Brain AVMs – From Imaging to Endovascular Management                                                        | Timo Krings, Canada       |
| 10:20 – 10:35                                                                            | Tea Break                                                                                                              |                           |
| <b>Moderators: Tseng Tsai Yeo and Vincent Ng</b>                                         |                                                                                                                        |                           |
| 10:35 – 11:10                                                                            | Personal Reflections in AVM Surgery                                                                                    | Aaron Cohen, USA          |
| 11:10 – 11:55                                                                            | Surgical Management of Brain AVMs                                                                                      | Michael Lawton, USA       |
| 11:55 – 12:30                                                                            | Overcoming Difficulties in Surgery for AVM                                                                             | Ramez Kirolos, Singapore  |
| 12:30 – 13:30                                                                            | Lunch                                                                                                                  |                           |
| <b>Moderators: Francis Hui and Tseng Tsai Yeo</b>                                        |                                                                                                                        |                           |
| 13:30 – 14:15                                                                            | Natural Course of Brain AVMs, clinical outcomes following AVM haemorrhage, and is Pregnancy a Risk Factor for Rupture? | Bengt Karlsson, Singapore |
| 14:15 – 14:45                                                                            | Case Selection for Curative Embolization and How I Achieve It                                                          | Rene Chapot, Germany      |
| 14:45 – 15:05                                                                            | Technical Nuances and Practical Strategies for Brain AVM Surgery                                                       | Ivan Ng, Singapore        |
| 15:05 – 15:20                                                                            | Tea Break                                                                                                              |                           |
| <b>Moderators: Ramez Kirolos and Wickly Lee</b>                                          |                                                                                                                        |                           |
| 15:20 – 15:40                                                                            | Embolization as Adjunct to Surgery and Radiosurgery                                                                    | Chao Bao Luo, Taiwan      |
| 15:40 – 16:20                                                                            | Gamma Knife Surgery for Brain AVMs                                                                                     | Bengt Karlsson, Singapore |
| <b>Case Presentation – The Most Challenging AVM Case and What I have Learnt from it?</b> |                                                                                                                        |                           |
| 16:20 – 16:35                                                                            | Azman Raffiq, Malaysia                                                                                                 |                           |
| 16:35 – 16:50                                                                            | Eka Wahjoepramono, Indonesia                                                                                           |                           |
| 16:50 – 16:55                                                                            | Closing Remarks                                                                                                        |                           |

## Moderators



Vincent Nga



Anil Gopinathan



Tseng Tsai Yeo



Vincent Ng



Francis Hui



Wickly Lee



Ramez Kirolos

