

# **PLANET COURSE 2019**

## **Session 1: March 24 – March 29, 2019**

### **Danang, Vietnam**

## **ANATOMY OF THE NEUROVASCULAR SYSTEM**

*Each presentation will include 25% of time allotted for questions and answers with the audience*

### **1<sup>ST</sup> DAY Sunday March 24 2019**

- 08:00-08:30; Welcome and introduction (Sirintara Pongpech, faculty)  
08:30-09.30; Vasculogenesis, Angiogenesis ; *T Krings*  
09:30-10:00; arteries and veins of the brain evolution in different species, general remarks; *P.Mercier*
- 10:00-10:30; Morning break  
10.30-11.15; Development of the aortic arch and its brachiocephalic vessels; *IS Choi*  
11.15-12.00; Segmentation and Embryonic vessels; *I.S. Choi*
- 12:00-13:00; Lunch  
13.00-13.30; Oph. Arteries and orbital supply, angioanatomy ; *IS Choi*  
13.30-14.00: surgical anatomy of the orbit. *P.Mercier*  
14:00-14.30,Cavernous sinus arterial anatomy and variations: *I.S. Choi*  
14.30-15.00; Cavernous sinus surgical anatomy; *P. Mercier*
- 15:00-15:30; Afternoon break  
15.30-16.30; case presentation participants, panel discussions  
16:30-18:00; workshop 1 angio-anatomy brachiocephalic and orbital region (*KTB, AT*)  
; workshop 2 angio-anatomy cavernous sinus region (*TK, ISC, SP*)

### **2<sup>ND</sup> DAY Monday March 25 2019**

- 08.00-08.30; VB junction, hypoglossal, pro-atlantal; *S.Pongpech*  
08.30-09.00; PICA origins; *S.Pongpech*  
09.00-09.30; Anatomy cranio-cervical- area; *P. Mercier*  
09.30-10.00; limbic circle and PCA; *K ter Brugge*
- 10.00-10.30; morning break  
10.30-11.00; anterior choroidal artery; *A Taylor*  
11.00-11.30; surgical anatomy anterior choroidal artery; *P. Mercier*  
11.30-12.00; angio-anatomy circle of Willis; *K ter Brugge*
- 12.00-13.00; Lunch

13.00-13.30; surgical anatomy circle of Willis; *P Mercier*  
13.30-14.00; variations ACA and MCA territories; *A Taylor*  
14.00-14.30; surgical anatomy A1 and M1 segments; *P. Mercier*  
14.30-15.00; noninvasive imaging of arterial variations; *K ter Brugge*

15.00-15.30; afternoon break  
15.30-16.30; case presentation participants, panel discussions  
16.30-18.00; workshop (1): VB junction, PICA (*TK, ISC, SP*) *pER*  
workshop (2): Circle of Willis, A1, M1 (*AT, KTB, PM*)

**Very Rare case presentation: Absent ICA & Persistent of Trigeminal artery and direct fistula to cavernous sinus: Tran Chi Cuong**

### **3<sup>RD</sup> DAY Tuesday MARCH 26 2019**

08.00-08.30 upper basilar artery variations; *K ter Brugge*  
08.30-09.00; upper basilar surgical anatomy; *P. Mercier*  
09.00-10.00; external carotid artery, transcranial anastomoses, cranial nerve supply; *I.S. Choi*

10.00-10.30; morning break  
10.30-11.00; cranial nerve supply, surgical anatomy; *P Mercier*  
11.00-12.00; cerebral venous system including dural sinuses; *K ter Brugge*

12.00-13.00; Lunch  
13.00-13.45; DVA and sinus pericranii; *K ter Brugge*  
13.45-14.15; intracranial veins surgical anatomy; *P Mercier*  
14.15-14.45; case presentation participants, discussions

14.45-15.15; afternoon break  
15.15-16.15; case presentation participants, panel discussions  
16.15-17.45; workshop 1; upper basilar, ext carot (*TK, ISC*)  
; Workshop 2; ic veins, DVA (*SP, AT, KTB*)

### **4<sup>TH</sup> DAY Wednesday March 27 2019**

08.00-08.30; classification, clinical presentation and natural history of adult DAVSs; *K ter Brugge*  
08.30- 09.00 Imaging characteristics of DAVS; *T Krings*  
09.00- 09.30 transarterial treatment with liquid embolic agents of DAVSs, indications, complications;  
*T Krings*  
09.30-10.00; transvenous treatment of DAVSs, indications, complications *I S Choi*

10.00-10.30; morning break  
10.30-11.00; surgical treatment DAVSs, indications, complications; *A Taylor*  
11.00-11.30; VVF and Ext C shunts; *S. Pongpech*

11 30- 12 00, epistaxis, angioprotocols and complication *IS Choi*

Afternoon off

### **5<sup>TH</sup> DAY Thursday March 28 2019**

08.00-08.45; vascular anatomy spine and spinal cord; *T Krings*

08.45-09.15; vascular anatomy spinal cord; *P. Mercier*

09.15-10.00; classification, imaging of spinal vascular lesions; *S. Pongpech*

10.00-10.30; morning break

10.30-11.00; paraspinal AV shunts; *K ter Brugge*

11.00-11.30; spinal dural AVS imaging and clinical presentation; *K ter Brugge*

11.30-12.00; spinal dural AVSs, endovascular and surgical management; *A Taylor*

12.00-13.00; Lunch

13.00-13.45; SCAVM presentation, natural history and management *T Krings*

13.45-14.15; spinal cord vascular tumors; *K ter Brugge*

14.15-14.45; spinal column vascular neoplasms, pitfalls and complications; *I.S. Choi*

14.30-15.00; afternoon break

15.00-16.00; case presentation participants, discussions

16.00-17.30 workshop (1): spine anatomy, para and DAVS, spinal tumors (*SP, ISC, KTB*)

Workshop (2): IC DAVS, SC AVS, (*AT, TK*)

### **6<sup>TH</sup> DAY Friday March 29 2019**

08.00-08.45; classification Maxillofacial Vascular lesions; *K ter Brugge*

08.45-09.00 ; childhood hemangiomas ; *K ter Brugge*

09.00-09.30; PHACE and CAMS; *S. Pongpech*

09.15-09.45; MF AVMs management; *K ter Brugge*

09.45-10.15; venous vascular malformations; *S Ponpech*

10.15-10.45 ; Morning break

10.45-11.45; oral examinations

12 00- 13.00, written examination

13.00-13.30 Audience feedback, adjourn

Optional

workshop (1): HN vascular tumors (*SP, AT, TK*)

workshop (2): HN Vascular malformations (*ISC, KTB*)