



4th Course on Surgical Anatomy and Extended Approaches to the Skull Base

3-5 of July, 2025.

Department of Neurosurgery, Academic Hospital Centre São João
Department of Anatomy, Faculty of Medicine, University of Oporto



Course Director

Paulo Pereira, MD PhD

Local Faculty

António Vilarinho, MD

Pedro Alberto Silva, MD PhD FEBNS

Patrícia Polónia, MD

Bruno Carvalho, MD PhD

Ana Ferreira, MD FEBNS

Vasco Carvalho, MD

Invited Speakers

Florian Ebner

Alfried Krup Hospital, Essen Germany

Pierre-Olivier Champagne

Enfant-Jésus Hospital, Québec Canadá

Registration Fee:

Early Bird, until May 15th: 650€*

After May 16th: 750€*

*Included: Food & Beverage and Course Dinner

Registrations [Here](#)

For any questions

formacaoneurocirurgiachusj@gmail.com

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Preliminary Programme

Day 1, Thursday.

Thursday, July 3rd: Augmented Reality and Surgical Planning in Neurosurgery

15h00: Reception and Registration

Theoretical Session

15h15: From Neuroanatomy and Image Processing to Neurosurgical Planning and Training

Practical Session

15h45: Training in diverse image processing systems:

- processing in common planning stations
- the example of free personal software: "bring your own computer"
- augmented reality and simulators

17h45: Pause

Clinical Cases Session

18h00: Open and Welcoming Discussion – From Image to Surgery.

- participants are encouraged to bring their own cases, with or without prior resolution

19h00: End of work

Some of our history



Preliminary Programme

Day 2, Friday.

Friday, July 4th: Around The Sphenoid Wing

Endoscopy will be available for surgical exploration.

8H15 – Opening session at the Anatomy Lab and Master Station

Module 1: The Pterional and Orbitozygomatic Craniotomies

Theoretical Sessions:

8h30: The frontotemporal (pterional) approach, variants and the keyhole and endoscopic-assisted concepts

9h00: The crano-orbito-zygomatic approach: technique, variants, and indications

9h30: Pause

9h40: "Hands-on" Cadaveric Dissection

- positioning in anterolateral approaches
- skin flap and preservation of the superficial temporal artery
- inter/subfascial dissection of the temporal muscle
- frontotemporoorbitozygomatic craniotomy
- dural opening and exploration of the cisternal anatomy, anterior circulation, and nervous structures in relation to the central base of the skull

12h30: Lunch and Invited Speaker Session

Module 2: Extensions and onto the Cavernous Sinus

Theoretical Sessions

13h45: Anatomy of the Cranial Nerves and Cavernous Sinus

14h15: Anterolateral extensions: opening of the optic canal and anterior clinoidectomy, exposure of the orbital fissure and cavernous sinus

14h45: Pause

15h00: "Hands-on" Cadaveric Dissection

- opening of the optic canal
- anterior clinoidectomy
- exposure of the superior orbital fissure, foramen rotundum and the infratemporal fossa
- peeling of the middle fossa and exploration of the cavernous sinus
- communication with the middle fossa

Optional (*conditional to time*):

- Supraorbital approach "eyebrow"
- Exploring the intraorbital anatomy

18h00: End of work

Course Dinner and Honored Guest Session

Preliminary Programme

Day 3, Saturday

Saturday, July 5th: Around the Petrous Bone

Endoscopy will be available for surgical exploration.

Module 3: The Retrosigmoid and Presigmoid Corridors

Theoretical Sessions

8h15: Anatomical landmarks and exposure areas in the subtemporal and retrosigmoid approaches

8h45: The pre-sigmoid and combined approaches

9h15: Pause

9h30: "Hands-on" Cadaveric Dissection

- surgical positioning
- skin flap and mastoid exposure
- temporo-occipital craniotomy
- retromastoid suboccipital craniotomy
- transverse sinus exposure
- mastoidectomy and exposure of the pre-sigmoid corridor

12h30: Lunch and Invited Speaker Session

Module 4: The Middle Fossa Approach and the Anterior Petrosectomy

Theoretical Sessions

13h45: Anatomy of the petrous bone

14h15: The middle fossa approach, its surface anatomy and the anterior petrosectomy

14h45: Pause

15h00: "Hands-on" Cadaveric Dissection

- extradural dissection of the middle fossa
- identification of anatomical landmarks
- retrograde dural peeling
- identification of the rhomboid fossa
- the *Kawase Step*.
- exploration of the enlarged anatomy of the posterior fossa

Optional (*conditional to time*):

- Complete mastoidectomy
- Translabyrinthine surgery

18h00: End of work