# **Transcranial approaches**

#### 1-2-3 FEBRUARY 2019

### Course Director: Prof. Bernardo Antonio MD

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## Day 1

## Pterional approach

- Welcome and introduction
- Surgical anatomy of the pterional region, from skin to dura: superficial temporal artery, facial nerve, temporal muscle, sphenoid and temporal bones.
- Imaging: the expert interpretation.
- Basic instruments in skull base surgery
- The evolution of the pterional approach
- How I do it (technical notes): the interfascial dissection of the temporal muscle, temporal muscle mobilization, craniotomy, reconstruction.

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- Cadaver hands-on

2 hours

### Day 2

### **Orbito-zygomatic and transcavernous approaches**

#### Part 1

#### Extradural section

- Surgical anatomy of the fronto-orbito-zygomatic approach: orbit and temporal fossa
- Imaging: the expert interpretation.
- How I do it (technical notes): clinoidectomy, unroofing optic canal, one-piece vs two-piece orbitozygomatic craniotomy, fronto-orbital craniotomy, supraorbital craniotomy, zygomatic osteotomy, reconstruction.

2 hours

- Cadaver hands-on

2 hours

#### Part 2

#### Extra -intradural section

- Surgical anatomy of the cavernous sinus, petroclival ligaments, overview to intradural anatomy.
- How I do it (technical notes): specific approach to single triangles (Dolenc triangle, Hakuba triangle, Parkinson triangle) and transcavernous approach to intradural space.
- Case discussion. Indications & limitation: fronto-basal, tubercle, clinoid meningiomas / CCA, CCP, carotido-ophtalmic aneurysms / temporo-mesial gliomas /adenomas, craniopharingiomas

2 hours

- Cadaver hands-on

2 hours

### Day 3

### **Anterior petrosectomy**

- Surgical anatomy of the middle fossa and landmarks, middle and inner ears, extradural and intradural vasculo-nervous structures (petrous carotid and 4th-8th cranial nerves).
- Imaging: the expert interpretation.
- How I do it (technical note): flap and temporal craniotomy, extradural exposure, anterior petrosectomy and internal acoustic canal unroofing, dural opening (division of the superior petrous sinus and tentorial fold, mobilization of the 5th cranial nerve), overview to intradural structures and reconstruction.
- Case discussion. Indications & limitations: trigeminal neurinoma, tentorial and Meckel cave meningiomas, vascular pathology.

3 hours

- Cadaver hands-on

3 hours