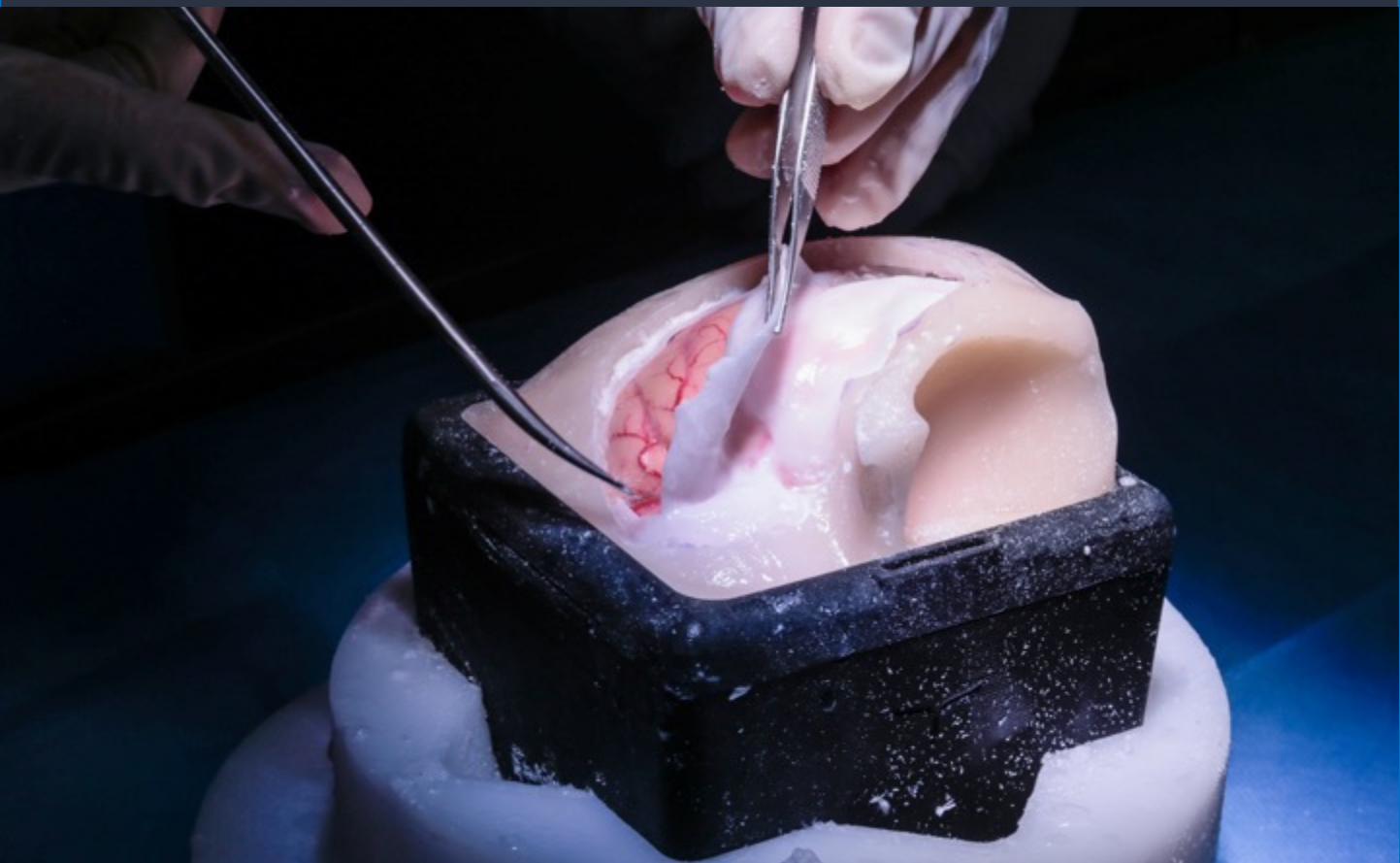


Neurocranial Approaches

Craniotomies and surgical explorations of basic approaches



Milan, Italy

Online Session

Monday, 10th July 2023 - From 2.00 pm to 4.15 pm

Hands-on Session

Tuesday, 11th July 2023 - From 9.00 am to 6.00 pm

Mikros International School of Microsurgery, Sesto San Giovanni, Milan, Italy

Sponsored by

Neurocranial Approaches

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Milan
10-11 July
2023



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Course Coordinator



Cesare Zoia
Gravedona

Format Creators



Federico Nicolosi
Milano



Giannantonio Spena
Pavia

Special Guests



Alfredo Quinones-Hinojosa
Mayo Clinic
Jacksonville, Florida



Brian Nahed
Massachusetts General Hospital & Harvard Medical School
Boston, Massachusetts



Joao Paulo Almeida
Mayo Clinic
Jacksonville, Florida

Local Faculty



Daniele Bongetta
Milano



Giorgio Giovanni Carrabba
Milano



Andrea Di Cristofori
Roma



Diego Garbossa
Torino



Antonino Germanò
Messina



Federico Nicolosi
Milano



Zefferino Rossini
Milano



Simone Sangiorgi
Como



Giannantonio Spena
Pavia

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Day 1

Theoretical session (2:00 PM – 4:10 PM CET)

UpSurgeOn Psychomotor Skill Training Technology

Fronto-temporal approaches

Retrosigmoid approach

Endoscopic transnasal approaches

Day 2

Hands-on session (9:00 AM – 6:00 PM CET)

Virtual Reality Session | Mental Training

Multiplayer virtual rooms for 3D neuroanatomy explorations (with Oculus 2 and 3)

Hands-on Session | Manual Training

Practice on craniotomies and anatomical explorations on the following approaches:

Pterional

Temporal

Retrosigmoid

Interhemispheric

Suboccipital

TNS approaches

Detailed Program

Online theoretical session

Monday 10th July 2023

- 2:00 - 2:05 pm:** Introduction
Cesare Zoia
- 2:05 - 2:25 pm:** Surgical approaches to tumors of the 4th ventricle
Brian Nahed
Q&A | 3 min.
- 2:25 - 2:45 pm:** Fronto-temporal approaches
Giannantonio Spena
Q&A | 3 min.
- 2:45 - 3:05 pm:** Retrosigmoid Approach
Antonino Germanò
Q&A | 3 min.
- 3:05 - 3:25 pm:** Surgical Approaches to The Cavernous Sinus: The Role Endoscopic Skull Base Surgery
Joao Paulo Almeida
Q&A | 3 min.
- 3:25 - 3:45 pm:** Awake brain mapping and the benefit of simulators to maximize patient outcomes
Alfredo Quinones-Hinojosa
Q&A | 3 min.
- 3:45 - 4:05 pm:** Endoscopic transnasal Approaches
Giorgio Giovanni Carrabba
Q&A | 3 min.
- 4:05 - 4:15 pm:** Final Remarks
Cesare Zoia

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Detailed Program

Hands-on session

Tuesday 11th July 2023

9:00 am – 1:00 pm: Hands-on training on UpSurgeOn Simulators

1:00 pm - 2:00 pm: Lunch Break

2:00 pm - 5.30 pm: Hands-on training on UpSurgeOn Simulators

5:30 pm – 6:00 pm: Final Remarks – **Cesare Zoia**

Course structure

The course aims to strongly reinforce the learning of basic approaches in neurosurgery. For this purpose, the learning process starts before the course: pdf material (articles, book chapters etc.) will be sent as a hint for studying the topics covered in the course and the learners will have to download the Apps (Neurosurgery App & HeadAtlas App) in order to familiarise themselves with their use.

During the course, delegates from UpSurgeOn will be present to help lecturers and learners in the use of Apps and Boxes.

Thanks to the use of these Apps the learner can start a phase of "Mental Training" i.e. understand, study and deepen each approach in a "Virtual" way. During the course, each module will be preceded by short lectures.

The trainees will perform craniotomies with perforators, craniotomes and drills. They will then open the dura and suspend it by drilling suspension holes at the edges of the craniotomy.

At this point they will have tabletop microscopes to move on to the brain manipulation phase and explore the deep targets.

During this phase it is important that the trainees are aware of:
correct use of the instruments, from how to hold them to how they are used (e.g. correct use of the bur or use of bayonet and aspirator to manipulate the brain)
correct position and ergonomics of the operator (relationship between the position of the head, shoulders, arms and spine).

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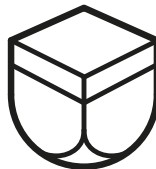
UpSurgeOn | Cadaver-free Training System



Mental Training
Apps & VR



Hybrid Training
Augmented Reality



Manual Training
Simulators

Neurocranial Approaches

Craniotomies and surgical explorations of basic approaches

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For **Mental Training**, download the "Neurosurgery" app from Google Play or Apple Store.

In the "**Craniotomies**" module you will find the approaches:

- Pterional
- Retrosigmoid
- Temporal
- Suboccipital

For the Mental part of the **AneurysmBox** (Box for the treatment of brain aneurysms), use the "Aneurysm" module.

For the Mental part of the **TNS approach**, use the "TNS" module.

To use augmented reality (**Hybrid Training**) on simulators, you can use the '**ARBox**' module in the case of the following approaches:

- Pterional
- Retrosigmoid
- Temporal
- Suboccipital

For **AneurysmBox** and **TNSBox**, use the dedicated **augmented reality** modules.

