



Scientific Dialog

## Oporto Ultrasound In Neurosurgery Course

Department of Clinical Neurosciences and Mental Health, Faculty of Medicine of the University of Porto

4<sup>th</sup> and 5<sup>h</sup> September 2025

Intraoperative Ultrasound represents an added value technique in the neurosurgical armamentarium, improving the precision and intraoperative localization of various brain and spinal pathologies.

In addition to the preferential use in the field of neuro-oncology, intraoperative ultrasound has been used as an auxiliary method in, craniocervical decompression in Chiari malformations, precise drainage/aspiration of infectious collections of the central nervous system, treatment of hydrocephalus and in vascular and spine pathology.

In order to be able to fully take advantage on the IoUS technology an international team of distinguished surgeons offers fellow neurosurgeons their insight and expertise in the use of IoUS in their daily practice through lectures, simulation, live surgery and hands-on models.

### REGISTRATION

[Register here!](#)



### COURSE FEE

**Early Bird (Until 15/08/2025)**

600€ (10% discount for EANS members) \*

**After 16/08/2025)**

700€ (10% discount for EANS members) \*

### SCIENTIFIC SPONSORS (pending approval)



## EVENT INFORMATION

### HONORED DIRECTOR

Rui Vaz, MD, PhD

*Clinical Director CUF Porto Hospital*

*Former Director Neurosurgery Department*

*Academic Hospital Centre São João, Portugal*

*Department of Clinical Neurosciences and Mental Health*

*Faculty of Medicine, University of Porto*

Paulo Pereira, MD, PhD

Head of Neurosurgery Department

*Neurosurgery Department*

*Academic Hospital Centre São João, Portugal*

*Department of Clinical Neurosciences and Mental Health*

*Faculty of Medicine, University of Porto*

### VENUE

CIM – Faculty of Medicine of the University  
of Porto

Rua Dr. Plácido da Costa 4200-450 Porto

### MEETING DIRECTOR

Bruno Carvalho, MD, PhD

*Neurosurgery Department*

*Academic Hospital Centre São João, Portugal*

*Department of Clinical Neurosciences and Mental Health*

*Faculty of Medicine, University of Porto*

### HONORED GUESTS AND SPEAKERS



A. Perin MD

Milan, Italy

*Honored Guest*



G. Unsgård MD PhD

Trondheim, Norway

*Honored Guest*



A. Moiyadi MD

Mumbai, India

*Honored Guest*

*(online Session)*



F. DiMeco MD

Milan, Italy

*Honored Guest*



F. Prada MD

Milan, Italy

*Honored Guest*

*(Online session)*



L. Padayachy MD

Pretoria, South Africa

*Honored Guest*

*(online session)*



B. Carvalho MD

PhD

Porto, Portugal



M. Cunha MD

Porto, Portugal



P. Silva MD

Porto, Portugal

### LOCAL FACULTY

Bruno Carvalho (CHUSJ)

Marisa Cunha (CHUSJ)

Rui Tuna (CHUSJ)

Ana Ferreira (CHUSJ)

Manuel Pinto (CHUSJ)

Pedro dos Santos Silva (CHUSJ)

Vasco Carvalho (CHUSJ)

Paulo Linhares (CHUSJ)

### SCIENTIFIC COMMITTEE

Bruno Carvalho (CHUSJ)

Pedro Alberto Silva (CHUSJ)

António Vilarinho (CHUSJ)

Rui Vaz (CHUSJ)

Paulo Linhares (CHUSJ)

Paulo Pereira (CHUSJ)

## AGENDA

Day 1, Sep 04<sup>th</sup> – Main Auditorium and rooms 3.P1.EP

### Basics and Hands-On

02:00 p.m.	<b>Welcome and introduction to the course</b> G. Unsgard/B.Carvalho/P.Ruivo/R.Vaz/P. Pereira
02:05 p.m.	<b>Pre-course Simulation session – Neurostream</b> (gauging knowlegde level) A. Perin (Milan, Italy)
02:30 p.m.	<b>Basics and "Knobology" of Ultrasound</b> (best settings and applications for the patient) G. Unsgård (Trondheim, Norway)
03:00 p.m.	<b>Hands-on the machines</b> (Basic Sonographic Skills: getting in touch with US machines; settings and probes) Industry - TBA
03:45 p.m.	<b>Mastering ioUS – Skill required – practical guidelines.</b> A. Moiyadi (Mumbai, India)
04:15 p.m.	<b>2D Ultrasound in resection of brain tumors</b> (image interpretations, anatomical landmarks) F. DiMeco (Milan, Italy)
04:45 p.m.	<b>Coffee break</b>
05:00 p.m.	<b>Ultrasound in spinal pathology</b> Pedro dos Santos Silva (Porto, Portugal)
05:30 p.m.	<b>Hands-on Session:</b> Scanning on brain and spinal phantoms <b>Hands-on Session:</b> Biopsy guides <b>Hands-on Session:</b> Navigated ultrasound
08:30 p.m.	<b>Dinner</b>

Day 2, Sep 05<sup>th</sup> – Main Auditorium and rooms 03.P1.EP

Advanced, Live Surgery and Hands-On

09:00 a.m.	<b>Neuronavigated ultrasound in Neuro-Oncology</b> B. Carvalho (Porto, Portugal)
09:30 a.m.	<b>Experiences from everyday use of navigated 3D US in brain tumor surgeries (tricks and tips, use in LGG)</b> G. Unsgård (Trondheim, Norway)
10:00 a.m.	<b>Multiparametric ultrasound</b> F. Prada (Milan, Italy)
10:30 a.m.	<b>Surgery Video (EVD/Shunt)</b>
10:45 a.m.	<b>Coffee Break</b>
11:00 a.m.	<b>Live Surgery (tumor resection)</b>
12:00 p.m.	<b>IOUS – Expanded and Pediatric applications</b> L. Padayachy (Pretoria, South Africa)
12:30 p.m.	<b>Surgical experience of intra-operative ultrasound in Chiari I decompression.</b> M.Cunha (Porto, Portugal)
12:45 p.m.	<b>Surgery Video (Chiari)</b>
01:15 p.m.	<b>Lunch</b>
02:00 p.m.	<b>Hands-on with phantoms and animal models (6 workstations)</b> Animal Brain tumor module – Ultrasound and resection Phantom Ultrasound guided EVD / Shunt insertion
05:00 p.m.	<b>Post-course simulation session – Neurostream (course learning effect)</b> A. Perin (Milan, Italy)

**NB:** It is necessary to register in advance on the online simulation platform NeuroStream Academy in order to participate and fully enjoy the simulation session on IOUS.

This is the link: <https://neurostream.academy/auth/register>

It is also necessary to bring your own laptop and smartphone in order to simulate IOUS during the course.