



SANT PAU
Campus Salut
Barcelona

Masters of Brain Ultrasound in Neurosurgery

Fourth Edition

Barcelona, Spain
18th-19th April, 2024

European CME credits have been requested for this course
European Accreditation Council for Continuing Medical Education (EACCME)

www.ultrasoundneurosurgery.com

Declared of Scientific Interest by:



Societat Catalana de
Neurocirurgia

THE COURSE

There is a growing interest in **intraoperative images in the neurosurgery field**. In Neuro-Oncology this interest becomes a necessity to evaluate the grade of resection and the possibility of residual tumor.

In this aspect, **neuronavigated ultrasound is an excellent tool** because having a very high-quality image, quick acquisition (you do not need to stop the surgery to use it), cost-effectiveness, portability, and reproducibility (as many times as you need).

However, sometimes neurosurgeons do not use ultrasound because there is a learning curve to the spatial orientation and interpretation of images. **The reason for this course, eminently practical, is teaching the necessary skills to use intraoperative ultrasound in Neuro-Oncology.**

The main difference between this course and other ones related to ultrasound is that not only it provides the participants with the theoretical knowledge, but specially highlights the practical side of it.

This is achieved thanks to the expert faculty invited for a maximum number of 20 participants. Moreover, the attendants will have at their disposal a few ultrasound equipments and practical phantoms which will allow them to train image orientation and interpretation.

OBJECTIVES

- Enhance the understanding of the basic principles of ultrasound.
- Apply these principles to the reduction of common artifacts and the improvement of high-quality diagnostic ultrasound images.
- Orientation in neuronavigated ultrasound.
- Differentiation between the most common subtypes of brain tumors.
- Coregistration of images (MRI-US...), tractography and segmentation in neuronavigated ultrasound.
- Evaluation of residual tumor in the operating room.
- Application of ultrasound contrast and elastography in brain tumors.
- Guided puncture with neuronavigated ultrasound (biopsies, ventricular punctures (slid ventricles),...).

GUEST SPEAKERS



Geirmund Unsgård
Neurosurgeon
Norwegian University of
Science and Technology (NTNU)
Trondheim, Norway



Francesco DiMeco
Neurosurgeon
Fondazione I.R.C.C.S.
Istituto Neurologico Carlo Besta
Milan, Italy



Aliasgar Moiyadi
Neurosurgeon
Tata Memorial Centre
Bombai, India



Llewellyn Padayachy
Neurosurgeon
University of Pretoria Steve Biko
Academic Hospital
Pretoria, South Africa



Francesco Prada
Neurosurgeon
Fondazione I.R.C.C.S.
Istituto Neurologico Carlo Besta
Milan, Italy



Alessandro Perin
Neurosurgeon
Fondazione I.R.C.C.S.
Istituto Neurologico Carlo Besta
Milan, Italy



Juan Ángel Aibar Durán
Neurosurgeon
H.U. Santa Creu i Sant Pau
Barcelona, Spain



Brian Nahed
Neurosurgeon
Massachusetts General Hospital
Harvard Medical School
Boston, USA



Berta Freixer
Neurosurgeon
H.U. Santa Creu i Sant Pau
Barcelona, Spain

COURSE DIRECTOR



Cristian de Quintana
Neurosurgeon
H.U. Santa Creu i Sant Pau
Barcelona, Spain

VENUE

Sala Polivalente
H. U. Santa Creu i Sant Pau
Carrer de Sant Quintí 89
08041
Barcelona, Spain



PROGRAM

18th April, 2024

- 16:00 - 16:30 ● Introduction of the course
Dr. De Quintana
- 16:30 - 17:00 ● Mastering IOUS - Skill required - practical guidelines
Dr. Moiyadi
- 17:00 - 17:30 ● 2D ultrasound in resection of brain tumors (image interpretations and anatomical landmarks)
Dr. DiMeco
- 17:30 - 18:00 ● Neuronavigated ultrasound in Neuro-Oncology
Dr. De Quintana
- 18:00 - 18:30 ● Coffee break
- 18:30 - 19:00 ● Experiences from everyday use of navigated 3D ultrasound in brain tumor surgeries (tricks and tips, use in LGG)
Dr. Unsgård
- 19:00 - 19:30 ● Contrast-enhanced ultrasound, elastography
Dr. Prada
- 19:30 - 20:00 ● Ultrasound guidance in hydrocephalus, endoscopy and Chiari I decompression
Dr. Padayachy
- 20:00 - 20:30 ● Advantages for intraoperative ultrasound vs other imaging, other technology? (*online*)
Dr. Nahed
- 21:00 ● Dinner (included)

19th April, 2024

- 10:00 - 10:15 ● Presentation of the case (live surgery)
Dr. Aibar / Dr. Freixer
- 10:15 - 10:45 ● Prediction of histologic tumor in the operating room using iUS and Gliolan (5-ALA)
Dr. Aibar
- 10:45 - 11:15 ● Simulation training in IOUS
Dr. Perin
- 11:15 - 11:30 ● Resection of the tumor (live surgery)
Dr. Aibar / Dr. De Quintana
- 11:45 - 12:15 ● Coffee break
- 12:15 - 14:15 ● Hands-on
 - a) Module 1: Setup ultrasound machine
 - b) Module 2: Special ultrasound skills
 - c) Module 3: Resection control and artifact avoidance
 - d) Module 4: Neuronavigated ultrasound / practical cases
- 14:15 - 14:30 ● Q&A

FEES

Limited places!
Registrations on first come first-served basis

	Until 25 th February, 2024	From 26 th February, 2024
REGISTRATION FEE	725 €	850 €

Please note that 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.

NOTE ON COVID-19

Formedika is continuously monitoring the situation related to COVID-19 in order to avoid the interruption of planned events. However, taking into account the current situation, Formedika cannot exclude the possibility that the scheduled courses or congresses are postponed, canceled or interrupted due to external causes. Formedika strives to duly notify the news that may be in this regard, but recommends that you ensure that the trips and accommodation you reserve are refundable, since it will not be responsible for the expenses incurred by the assistant in case of change, modification or cancellation.

INFORMATION AND REGISTRATION

formedika

dental & medical education
formación médica y dental

T: (+34) 943 468 441

E-mail: info@formedika.com

www.formedika.com

Sponsored by

