



8th

MAPPING COURSE

BELLVITGE 2025

Neurosurgery COURSE:
November **25th-28th 2025**

**NEUROPSYCHOLOGICAL
ASSISTANCE WORKSHOP:**
November **26th-28th 2025**

The scientific and educational
content of this event has been
endorsed by:

> MAPPING FACULTY

COURSE DIRECTOR:

DR. ANDREU GABARRÓS

Chairman
Neurosurgery Department
Brain Mapping Program Director
Hospital Universitari de Bellvitge
Associate Professor of Neurosurgery
Universitat de Barcelona

COURSE CO-DIRECTORS:

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Hospital Universitari de Bellvitge
Professor of Anatomy
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Head of Intraoperative Neurophysiology Unit
Neurology Department
Hospital Universitari de Bellvitge

DR. GERARD PLANS

Brain Mapping Program
Neurosurgery Department
Hospital Universitari de Bellvitge

INVITED SPEAKERS:

DR. HUGUES DUFFAU

Professor and Chairman
Neurosurgery Department
Centre Hospitalier Universitaire de Montpellier, France

DR. EMMANUEL MANDONNET

Neurosurgery Department
Hospital Lariboisière
Paris, France

DR. JUAN MARTINO

Neurosurgery Department
Hospital Mompía, Cantabria, Spain
Professor of Human Anatomy and Embriology, University of Cantabria, Spain

DR. FRANCESCO SALA

Professor and Chair
Section of Neurosurgery,
Department of Neurosciences
Biomedicine and Movement Sciences
University Hospital Verona, Italy

SPEAKERS:

DR. CARLOS ALARCÓN

Neurosurgery Department
Hospital Mútua de Tarrasa

DR. ÀNGELS CAMINS

Neuroradiology Department
IDI Bellvitge
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Hospital Universitari de Bellvitge

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DR. ANTONI RODRÍGUEZ FORNELLS

Neuropsychology
Brain Mapping Program
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IDIBELL

> NEUROPSYCHOLOGY FACULTY

ORGANIZING COMMITTEE:

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Neurology Department
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Clinical Neuropsychology,
Institut Guttmann
Hospital de Neurorehabilitació

DR. MARTA SIMÓ

Neuro-Oncology Unit
ICO
Hospital Universitari de Bellvitge

INVITED SPEAKERS:

DR. NURIA CAYUELA

Neurology Department
Hospital de Sant Joan Despí
Moisés Broggi
Barcelona

DR. VÍCTOR CEPERO

Neuropsychology Unit
Neurology Department
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DR. INMA RICO PONS

Neuropsychology Unit
Neurology Department
Brain Mapping Program
Hospital Universitari de Bellvitge





TUESDAY | November 25th

Location: Dissection room

14:30 - 15:00 Delivery of documentation

15:00 - 15:30 Introduction: How to perform fiber dissection in cadaveric specimens.

Dr. Alejandro Fernández-Coello / Dr. Emmanuel Mandonnet / Dr. Juan Martino

15:30 - 16:00 Introduction: How to perform fiber tractography in the lab.

Dr. Àngels Camins / Dr. Pere Cifre / Dr. Daniel Martí / Dr. Pablo Naval-Baudin / Dr. Aleix Rosselló

16:00 - 17:30 Group 1: Dr. Carlos Alarcón / Dr. Alejandro Fernández- Coello / Dr. Ruth Lau /

Dr. Emmanuel Mandonnet / Dr. Juan Martino

HANDS ON WHITE MATTER FIBER DISSECTION

Each participant will have one hemisphere to dissect.

Group 2: Dr. Àngels Camins / Dr. Pere Cifre / Dr. Daniel Martí / Dr. Pablo Naval-Baudin / Dr. Aleix Rosselló

HANDS ON WHITE MATTER DTI TRACTOGRAPHY

Motor pathway tractography.

17:30 - 18:00 **COFFEE**

18:00 - 19:30 Group 1: Dr. Àngels Camins / Dr. Pere Cifre / Dr. Daniel Martí / Dr. Pablo Naval-Baudin / Dr. Aleix Rosselló

HANDS ON WHITE MATTER DTI TRACTOGRAPHY. Motor pathway tractography.

Group 2: Dr. Carlos Alarcón / Dr. Alejandro Fernández- Coello / Dr. Ruth Lau /

Dr. Emmanuel Mandonnet / Dr. Juan Martino

HANDS ON WHITE MATTER FIBER DISSECTION

Each participant will have one hemisphere to dissect.

> PROGRAM

WEDNESDAY | November 26th

Location: Dissection room

09:00 - 09:30 How to simulate a surgical approach to the main language pathways.

Dr. Alejandro Fernández-Coello / Dr. Emmanuel Mandonnet / Dr. Juan Martino

09:30 - 11:00 Group 1: Dr. Carlos Alarcón / Dr. Alejandro Fernández- Coello / Dr. Ruth Lau /
Dr. Emmanuel Mandonnet / Dr. Juan Martino

HANDS ON SESSION SPECIMEN

Each participant will have one CUSA and one hemisphere to dissect.

Group 2: Dr. Àngels Camins / Dr. Pere Cifre / Dr. Daniel Martí / Dr. Pablo Naval-Baudin / Dr. Aleix Rosselló

HANDS ON SESSION DTI

Language pathways tractography.

11:00 - 11:30 **COFFEE**

11:30 - 13:00 Group 1: Dr. Àngels Camins / Dr. Pere Cifre / Dr. Daniel Martí / Dr. Pablo Naval-Baudin / Dr. Aleix Rosselló
HANDS ON SESSION DTI

Language pathways tractography.

Group 2: Dr. Carlos Alarcón / Dr. Alejandro Fernández- Coello / Dr. Ruth Lau /
Dr. Emmanuel Mandonnet / Dr. Juan Martino

HANDS ON SESSION SPECIMEN

Each participant will have one CUSA and one hemisphere to dissect.

13:00 - 14:00 **LUNCH**

14:00 - 14:30 How to simulate a surgical approach to insular gliomas in the laboratory.

Dr. Emmanuel Mandonnet

14:30 - 16:00 Group 1: Dr. Carlos Alarcón / Dr. Alejandro Fernández- Coello / Dr. Ruth Lau /
Dr. Emmanuel Mandonnet / Dr. Juan Martino

HANDS ON SESSION SPECIMEN

Each participant will have one CUSA and one hemisphere to dissect.

Group 2: Dr. Àngels Camins / Dr. Pere Cifre / Dr. Daniel Martí / Dr. Pablo Naval-Baudin / Dr. Aleix Rosselló

HANDS ON SESSION DTI

Language pathways tractography.

16:00 - 16:30 **COFFEE**

16:30 - 18:00 Group 1: Dr. Àngels Camins / Dr. Pere Cifre / Dr. Daniel Martí / Dr. Pablo Naval-Baudin / Dr. Aleix Rosselló
HANDS ON SESSION DTI

Language pathways tractography.

Group 2: Dr. Carlos Alarcón / Dr. Alejandro Fernández- Coello / Dr. Ruth Lau /
Dr. Emmanuel Mandonnet / Dr. Juan Martino

HANDS ON SESSION SPECIMEN

Each participant will have one CUSA and one hemisphere to dissect.

WEDNESDAY | November 26th

NEUROPSYCHOLOGICAL ASSISTANCE WORKSHOP

Location: Dissection room

- 08:30 - 08:45** Delivery of documentation
- 08:45 - 09:00** Course presentation
- 09:00 - 09:15** Introduction: Intraoperative mapping and monitoring of language and cognition during awake surgery from a neuropsychological standpoint. [Dr. Anna Gasà-Roqué](#)
- 09:15 - 09:30** How to define a candidate for an awake brain surgery? Round table discussion with [Dr. Andreu Gabarrós](#) (Chief of the Neurosurgery Department of the University Hospital of Bellvitge) about the dialogue between neurosurgeons and neuropsychologists in presurgery preparation. Moderators: [Dr. Anna Gasà-Roqué](#) / [Dr. Joanna Sierpowska](#)
- 09:30 - 10:00** Neuropsychological assessment of glioma patients undergoing awake brain surgery in the left-dominant hemisphere: before and after surgery. [Dr. Anna Gasà-Roqué](#)
- 10:00 - 10:30** From design to implementation: validating and adapting intraoperative tasks through “de novo” development and linguistic tailoring to participant profiles. [Dr. Joanna Sierpowska](#)
- 10:30 - 10:45** Crash course in psychometrics: understanding what the results mean for each person given their profile. [Dr. Anna Gasà-Roqué](#) / [Dr. Laura Maldonado-Murciano](#)
- 10:45 - 11:00** **Discussion panel:** Design, assessment, and interpretation of neuropsychological domains before, during, and after the surgery.

11:00 - 11:30 **COFFEE**

- 11:30 - 11:45** Precision medicine: personalized electrical stimulation mapping tasks for tumor resection. [Dr. Víctor Cepero](#) / [Dr. Xim Cerdà-Company](#)
- 11:45 - 12:40** **Workshop 1** Cognitive and language assessment before and after surgery. Neuropsychological battery of tests, scoring and interpretation for patients with tumors located in the left-dominant hemisphere.
[Instructors: Dr. Anna Gasà-Roqué / Dr. Joanna Sierpowska](#)
- 12:40 - 13:00** **Workshop 1 wrap-up and discussion.**

13:00 - 14:30 **LUNCH**

- 14:30 - 16:15** **Workshop 2** Cortical and white matter mapping and intraoperative monitoring by clinical cases - hands-on intraoperative evaluation and scoring based on live surgeries (video material). [Instructors: Dr. Anna Gasà-Roqué / Dr. Joanna Sierpowska](#)
- 16:15 - 16:30** **Workshop 2 wrap-up and discussion.**
- 16:30 - 17:00** **COFFEE**
- 17:00 - 18:00** **Panel of experts:** Beyond the operating room - Multidisciplinary insights into perisurgical journey of patients and their caregivers. [Dr. Nuria Cayuela](#) / [Dr. Pablo Naval-Baudín](#) / [Dr. Rocío Sánchez-Carrión Abascal](#) / [Dr. Joanna Sierpowska](#) / [Dr. Marta Simó](#)
- 18:00 - 18:30** Discussion and closing remarks

> PROGRAM

THURSDAY | November 27th

Location: Bellvitge auditorium

08:15 – 08:45 Delivery of documentation

08:45 – 09:00 Welcome speech

09:00 – 09:20 Introduction: Evolution of Neurosurgery in eloquent brain areas. Dr. Andreu Gabarrós

09:20 – 09:40 Neuroanatomy of the functional cortical brain areas. Dr. Alejandro Fernández-Coello

09:40 – 10:00 Neuroanatomy of the functional subcortical brain areas. Dr. Juan Martino

10:00 – 10:20 Functional magnetic resonance and tractography: Preoperative evaluation of brain function through neuroimaging. Dr. Àngels Camins

10:20 – 10:30 Discussion

10:30 – 11:00 **COFFEE**

11:00 – 11:20 Intraoperative. Neuromonitoring. Dr. Isabel Fernández-Conejero / Dr. Júlia Miró

11:20 – 11:40 Neuroanaesthesia management during eloquent brain surgery. Dr. Laura Pariente

11:40 – 12:00 Mapping of cortical and subcortical functions in the awake patient.

Dr. Alejandro Fernández-Coello / Dr. Andreu Gabarrós

12:00 – 12:20 Mapping and neuromonitoring of motor function in the asleep patient.

Dr. Gerard Plans

12:20 – 12:40 Neuropsychological intraoperative evaluation of language: Tradition, Research.

Dr. Joanna Sierpowska

12:40 – 12:50 Addressing the individuality of cognition in brain tumor patients: from how bilingualism shapes cognition to how surgery impacts it. Case presentation.

Dr. Anna Gasa-Roqué / Dr. Inma Rico Pons

12:50 – 13:00 Discussion

13:00 – 14:30 **LUNCH**

14:30 – 15:00 How I do it: Tips & tricks session with the experts.

Awake brain mapping. Dr. Hugues Duffau

15:00 – 15:30 Asleep motor mapping and neuromonitoring (*ONLINE*). Dr. Francesco Sala

15:30 – 16:00 Discussion

16:00 – 16:15 Mapping and neuromonitoring for extrinsic brain lesions.

Dr. Andreu Gabarrós / Dr. Pablo López-Ojeda / Dr. José Luis Sanmillán

16:15 – 16:35 Intraoperative identification of the SMA in the awake patient.

Dr. Andreu Gabarrós / Dr. Juan Martino

16:35 – 17:00 Mapping and neuromonitoring for insular tumors.

Dr. Alejandro Fernández-Coello / Dr. Andreu Gabarrós

17:00 – 17:30 Discussion and closing remarks.

DINNER (Only for the full course participants)

> PROGRAM

FRIDAY | November 28th

Location: Bellvitge auditorium

2 LIVE SURGERIES

09:15 – 09:30 BrainMapp: a software for automatic mapping registration and task administration. *Dr. Víctor Cepero*

09:30 – 15:00 Operating Room 1 – AWAKE PATIENT. *Dr. Alejandro Fernández-Coello*

Perisylvian tumor resection assisted by neuronavigation and cortical/subcortical language brain mapping in the awake patient

09:30 – 15:00 Operating Room 2 – ASLEEP PATIENT. *Dr. Gerard Plans*

Perirolandic tumor resection assisted by neuronavigation, intraoperative neuro monitoring and cortical/subcortical evoked motor brain mapping in the asleep patient

11:00 – 11:30 *COFFEE / LUNCH DURING SESSION*

15:00 Closing remarks and delivery of certificates



VENUE

The training program will be developed in:

UNIVERSITY HOSPITAL BELLVITGE

Feixa Llarga, s/n
L'Hospitalet de Llobregat
BARCELONA
(Spain)

TECHNICAL SECRETARIAT

FORMEDIKA

Tel.: +34 943 468 441

E-mail: info@formedika.com

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REGISTRATION

The registration will be made through the website of the Technical Secretariat of **FORMEDIKA**:

www.formedika.com

Limited places! Registrations on first come first-served basis.

REGISTRATION OPTIONS AND FEES

Neurosurgery course

Full course Neurosurgery: Dissection, theory and live surgeries (From Tuesday 25 th to Friday 28 th)	2.350€
Theory and live surgeries (Thursday 27 th and Friday 28 th)	590€
Video streaming for theory and live surgeries	90€

Neuropsychological assistance workshop

Full course Neuropsychological on-site workshop (Wednesday 26 th) and on-site theory and live surgeries (Thursday 27 th and Friday 28 th)	990€	*792€	** 594€
Full course Neuropsychological on-site workshop (Wednesday 26 th) and online theory and live surgeries (Thursday 27 th and Friday 28 th)	550€	*440€	** 330€

* Members of: **FANSPE** (Federación de Asociaciones de Neuropsicología Estatales) and **COPC** (Col·legi Oficial de Psicologia de Catalunya).

** Students (from undergraduate to PhD included) will get a 40% discount.

LANGUAGE:

The neurosurgery course and the neuropsychological assistance workshop are entirely taught in English.

COURSE ACCREDITATION:

Neurosurgery course:

An application has been made to the UEMS EACCME® for CME/CPD accreditation of this event.

Neuropsychological assistance workshop:

An application has been made to the UEMS EACCME® for CME/CPD accreditation of this event.

STUDENT AWARD REQUEST FOR NEUROPSYCHOLOGICAL ASSISTANCE WORKSHOP

This year, the **Organizing Committee** of the **8th Mapping Course "Neuropsychological Assistance Workshop"**, has the pleasure to offer **3 students awards for the full 3-days long participation in the course**.

The candidates should register their documentation before **July 31st, 2025**

There are **three modalities of the award**:

- 1. For one national student (Spain)** - free enrolment, courtesy of the Organizing Committee (*no travel or accommodation covered*).
- 2. For one international student from any country in the world** - free enrolment, courtesy of the Organizing Committee (*no travel or accommodation covered*).
- 3. For one European Student from widening* countries** - full travel award (*enrolment, travel and accommodation covered, Grant CEX2021-001159-M founded by MCIN/AEI/10.13039/501100011033/, courtesy of the Institute of Neurosciences of the University of Barcelona and the Organizing Committee*)

For all of them, we will require:

- Student's certificate
- CV
- Motivation letter (max 500 words) explaining why we should choose you as an awardee.

Important note: *the country considered for determining the type of scholarship is the country in which the applicant's university is located.*

The candidates should state the modality of the award they wish to present for and register their documentation before **July 31st, 2025** on the following link: <https://forms.gle/wHVcgukgBAQZyrxP7>

**The list of widening countries is comprised of 15 member states (Bulgaria, Croatia, Cyprus, Czechia, Estonia, Greece, Hungary, Latvia, Lithuania, Malta, Poland, Portugal, Romania, Slovakia and Slovenia) and all outermost regions, as well as all associated countries with equivalent characteristics in terms of R&I performance (Albania, Armenia, Bosnia & Herzegovina, the Faroe Islands, Georgia, Kosovo, Moldova, Montenegro, North Macedonia, Serbia, Tunisia, Turkey, Ukraine, and Morocco).*

GRANT CEX2021-001159-M FUNDED BY



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This course is Compliant with the MedTech Europe Code of Ethical Business Practice