



7th
MAPPING
BELLVITGE
Barcelona

7th

MAPPING COURSE

BELLVITGE 2024

Neurosurgery COURSE:
November **26th-29th** 2024

NEUROPSYCHOLOGICAL
ASSISTANCE WORKSHOP:
November **27th-29th** 2024

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

> MAPPING FACULTY

COURSE DIRECTOR:

DR. ANDREU GABARRÓS

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Brain Mapping Program Director
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DR. GERARD PLANS

Brain Mapping Program
Neurosurgery Department
Hospital Universitari de Bellvitge

INVITED SPEAKERS:

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Centre Hospitalier Universitaire
de Montpellier, France

DR. EMMANUEL MANDONNET

Neurosurgery Department
Hospital Lariboisière
Paris, France

DR. JUAN MARTINO

Professor
Neurosurgery Department
Hospital Universitario Marqués
de Valdecilla, Santander, 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

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Catalan Institute of Oncology

DR. MARTA SIMÓ

Neuro-Oncology Unit
ICO
Hospital Universitari de Bellvitge





TUESDAY | November 26th

Location: Dissection room

14:30 - 15:00 Delivery of documentation

15:00 - 15:30 Introduction: How to perform fiber dissection in cadaveric specimens
Dr. Juan Martino / Dr. Emmanuel Mandonnet / Dr. Alejandro Fernández-Coello

15:30 - 16:00 Introduction: How to perform fiber tractography in the lab
Dr. Àngels Camins / Dr. Pere Cifre / Dr. Pablo Naval-Baudin / Dr. Aleix Rosselló

16:00 - 17:30 **Group 1: Dr. Juan Martino / Dr. Emmanuel Mandonnet / Dr. Alejandro Fernández-Coello / Dr. Carlos Alarcón**

HANDS ON WHITE MATTER FIBER DISSECTION.
Each participant will have one hemisphere to dissect

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

HANDS ON WHITE MATTER DTI TRACTOGRAPHY. Motor pathway tractography

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

HANDS ON WHITE MATTER FIBER DISSECTION.
Each participant will have one hemisphere to dissect

> PROGRAM

WEDNESDAY | November 27th

Location: Dissection room

09:00 - 09:30 How to simulate a surgical approach to the main language pathways
Dr. Juan Martino / Dr. Emmanuel Mandonnet / Dr. Alejandro Fernández-Coello

09:30 - 11:00 **Group 1: Dr. Juan Martino / Dr. Emmanuel Mandonnet / Dr. Alejandro Fernández-Coello / Dr. Carlos Alarcón**
HANDS ON SESSION SPECIMEN.
Each participant will have one CUSA and one hemisphere to dissect

Group 2: Dr. Àngels Camins / Dr. Pere Cifre / 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. Pablo Naval-Baudin / Dr. Aleix Rosselló**
HANDS ON SESSION DTI.
Language pathways tractography

Group 2: Dr. Juan Martino / Dr. Emmanuel Mandonnet / Dr. Alejandro Fernández-Coello / Dr. Carlos Alarcón
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. Juan Martino / Dr. Emmanuel Mandonnet / Dr. Alejandro Fernández-Coello / Dr. Carlos Alarcón**
HANDS ON SESSION SPECIMEN.
Each participant will have one CUSA and one hemisphere to dissect

Group 2: Dr. Àngels Camins / Dr. Pere Cifre / 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. Pablo Naval-Baudin / Dr. Aleix Rosselló**
HANDS ON SESSION DTI.
Language pathways tractography

Group 2: Dr. Juan Martino / Dr. Emmanuel Mandonnet / Dr. Alejandro Fernández-Coello / Dr. Carlos Alarcón
HANDS ON SESSION SPECIMEN.
Each participant will have one CUSA and one hemisphere to dissect

> PROGRAM

WEDNESDAY | November 27th

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 Gasa-Roqué**

09:15 - 09:30 How to define a candidate for an awake brain surgery? Round table discussion with **Dr. Andreu Gabarrós**, about the dialogue between neurosurgeons and neuropsychologists in presurgery preparation.
Moderators: Dr. Anna Gasa-Roqué / Dr. Inma Rico Pons

09:30 - 10:00 Neuropsychological assessment of glioma patients undergoing awake brain surgery in the left-dominant hemisphere: before and after surgery. **Dr. Inma Rico Pons**

10:00 - 10:15 Design and validation of intraoperative tasks. **Dr. Anna Gasa-Roqué**

10:15 - 10:30 Precision medicine: personalized electrical stimulation mapping tasks for tumor resection. **Dr. Xim Cerdà-Company / Dr. Víctor Cepero**

10:30 - 10:45 Crash course in psychometrics: understanding what the results mean for each person given their profile. **Dr. Anna Gasa-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 - 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 Gasa Roqué / Dr. Inma Rico Pons

12:40 - 13:00 ***Workshop 1 wrap-up and discussion.*** **Dr. Anna Gasa Roqué / Dr. Inma Rico Pons**

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

14:00 - 15:45 ***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 Gasa Roqué / Dr. Inma Rico Pons**

15:45 - 16:00 ***Workshop 2 wrap-up and discussion.*** **Dr. Anna Gasa Roqué / Dr. Inma Rico Pons**

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

16:30 - 17:30 ***Panel of experts: Successful surgery and then what? Perspectives from post-surgical follow-ups - flash-talks.*** **Dr. María Serra-Blasco / Dr. Marta Simó / Dr. Rocío Sánchez-Carrión Abascal / Dr. Pablo Naval-Baudín**

17:30 - 18:00 *Discussion and closing remarks*

> PROGRAM

THURSDAY | November 28th

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**

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. Andreu Gabarrós / Dr. Alejandro Fernández-Coello

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

12:20 – 12:40 Intraoperative identification of the SMA in the awake patient
Dr. Andreu Gabarrós / Dr. Juan Martino

12:40 – 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. **Dr. Francesco Sala**

15:30 – 16:00 *Discussion*

16:00 – 16:20 Neuropsychological intraoperative evaluation of language:
Tradition, Research. **Dr. Anna Gasa-Roqué**

16:20 – 16:30 How do language and cognition change after brain tumor surgery? - From
whole sample to individualized approach. Case presentation. **Dr. Inma Rico Pons**

16:30 – 16:45 Mapping and neuromonitoring for extrinsic brain lesions
Dr. Pablo López-Ojeda / Dr. Andreu Gabarrós / Dr. José Luis Sanmillán

16:45 – 17:00 Mapping and neuromonitoring for insular tumors
Dr. Andreu Gabarrós / Dr. Alejandro Fernández-Coello

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

DINNER (Only for the full course participants)

> PROGRAM

FRIDAY | November 29th

Location: Bellvitge auditorium

2 LIVE SURGERIES

08:30 – 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

08:30 – 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
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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 26 th to Friday 29 th)	2.350€
Theory and live surgeries (Thursday 28 th and Friday 29 th)	590€
Video streaming for theory and live surgeries	90€

Neuropsychological assistance workshop

Full course Neuropsychological on-site workshop (Wednesday 27 th) and on-site theory and live surgeries (Thursday 28 th and Friday 29 th)	990€	*792€	** 594€
Full course Neuropsychological on-site workshop (Wednesday 27 th) and online theory and live surgeries (Thursday 28 th and Friday 29 th)	550€	*440€	** 330€

* Members of: **FANSPE** (Federación de Asociaciones de Neuropsicología Estatales), **COPC** (Col·legi Oficial de Psicologia de Catalunya) and **COPAO** (Il·lustre Colegio Oficial de Psicología de Andalucía Oriental) will get a 20% discount.

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

COURSE ACCREDITATION:

The 7th Mapping Course has been accredited by the European Accreditation Council for Continuing Medical Education (EACCME®). In case the participant attended the full on-site course, he/she would have two diplomas.

The course will be divided in three sections: Mapping Course Dissection/Mapping Course - Neuropsychology/Mapping Course - Theory and live surgeries.

The Neuropsychological Assistance Workshop has been accredited by the European Accreditation Council for Continuing Medical Education (EACCME®). In case the participant attended the full on-site course, he/she would have two diplomas.

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