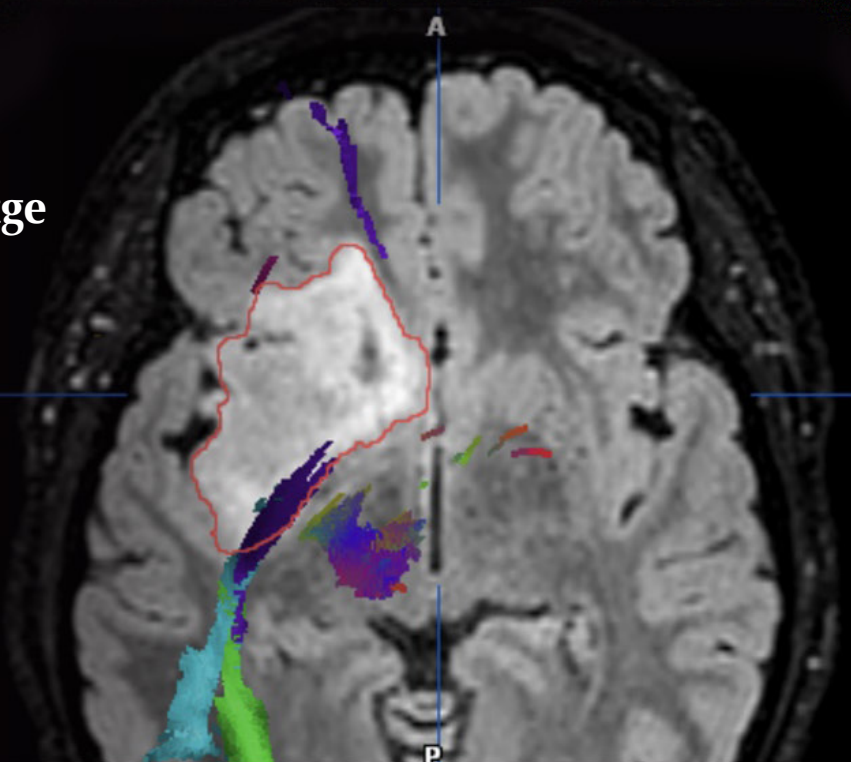


# 5<sup>th</sup> MAPPING COURSE BELLVITGE 2022

November **15<sup>th</sup>-18<sup>th</sup>**  
2022

**University Hospital of Bellvitge**  
Feixa Llarga, s/n  
L'Hospitalet de Llobregat,  
Barcelona (Spain)



## COURSE DIRECTOR:

### DR. ANDREU GABARRÓS

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

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## COURSE CO-DIRECTORS:

### DR. ALEJANDRO FERNÁNDEZ-COELLO

Brain Mapping Program  
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Associate Professor of Anatomy  
Universitat de Barcelona

### DR. ISABEL FERNÁNDEZ-CONEJERO

Head of Intraoperative  
Neurophysiology Unit  
Neurology Department  
Hospital Universitari de Bellvitge

### DR. GERARD PLANS

Brain Mapping Program  
Neurosurgery Department  
Hospital Universitari de Bellvitge

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## 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

Professor  
Neurosurgery Department  
Hospital Universitario Marqués  
de Valdecilla, Santander, Spain

### DR. FRANCESCO SALA

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

## SCIENTIFIC COMMITTEE:

### DR. CARLOS ALARCÓN

Neurosurgery Department  
Hospital Mútua de Tarrasa

### DR. ÀNGELS CAMINS

Neuroradiology Department  
IDI Bellvitge  
Brain Mapping Program  
Hospital Universitari de Bellvitge

### DR. LAURA CONTRERAS

Neuroanesthesia Coordinator  
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### DR. ALBA GÓMEZ-ANDRÉS

Neuropsychology  
Brain Mapping Program  
Cognition and Brain Plasticity Unit  
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### DR. IMMA RICO

Neuropsychology Unit  
Neurology Department  
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### DR. JOSÉ LUIS SANMILLÁN

Neurosurgery Department  
Hospital Universitari de Bellvitge

### DR. JOANNA SIERPOWSKA

Donders Institute for Brain  
Cognition and Behaviour  
Radboud University Medical Center  
Nijmegen, The Netherlands

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## COLLABORATORS:

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Hospital Universitari de Bellvitge

### DR. IRENE BERMELL

Anesthesia Department  
Hospital Universitari de Bellvitge

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Hospital Universitari de Bellvitge

### DR. GEMMA ELGUEZÁBAL

Anesthesia Department  
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### CARLOS GIL

Application Consultant  
IGS (Image Guided Surgery)  
Brainlab

### DR. PABLO LÓPEZ-OJEDA

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Department  
Hospital Universitari de Bellvitge  
Universitat de Barcelona

### DR. ALEIX ROSSELLÓ

Neurosurgery Department  
Hospital Universitari de Bellvitge

### DR. EVA VÁZQUEZ LACASA

Anesthesia Department  
Hospital Universitari de Bellvitge

### DR. ANDERSON VERGARA

Anesthesia Department  
Hospital Universitari de Bellvitge





**TUESDAY | November 15<sup>TH</sup>**

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. Alejandro Fernández-Coello**

> **15:30 - 16:00** Introduction: How to perform fiber tractography in the lab  
**Dra. Àngels Camins / Dr. Pablo Naval / Dr. Aleix Roselló**

> **16:00 - 17:30** **Group 1**  
HANDS-ON WHITE MATTER FIBER DISSECTION:  
Each participant will have one hemisphere to dissect

**Group 2**  
HANDS ON WHITE MATTER DTI TRACTOGRAPHY:  
Motor pathway tractography

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

> **18:00 - 19:30** **Group 1**  
HANDS ON WHITE MATTER DTI TRACTOGRAPHY:  
Motor pathway tractography

**Group 2**  
HANDS-ON WHITE MATTER FIBER DISSECTION:  
Each participant will have one hemisphere to dissect

WEDNESDAY | November 16<sup>TH</sup>

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**  
HANDS ON SESSION SPECIMEN  
Each participant will have one CUSA and one hemisphere to dissect

**Group 2**  
HANDS ON SESSION DTI  
Language pathways tractography

**11:00 – 11:30** **COFFEE**

> **11:30 – 13:00** **Group 1**  
HANDS ON SESSION DTI  
Language pathways tractography

**Group 2**  
HANDS ON SESSION SPECIMEN  
Each participant will have one CUSA and one hemisphere to dissect

**13:00 – 14:30** **LUNCH**

> **14:30 – 15:00** How to simulate a surgical approach to insular gliomas in the laboratory  
**Dr. Emmanuel Mandonnet**

> **15:00 – 16:30** **Group 1**  
HANDS ON SESSION SPECIMEN  
Each participant will have one CUSA and one hemisphere to dissect

**Group 2**  
HANDS ON SESSION DTI  
Language pathways tractography

**16:30 – 17:00** **COFFEE**

> **17:00 – 18:30** **Group 1**  
HANDS ON SESSION DTI  
Language pathways tractography

**Group 2**  
HANDS ON SESSION SPECIMEN  
Each participant will have one CUSA and one hemisphere to dissect

**THURSDAY | November 17<sup>TH</sup>**

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  
**Dra. Àngels Camins**
- 10:20 – 10:30** *Discussion*

**10:30 – 11:00** **COFFEE**

- > **11:00 – 11:20** Intraoperative. Neuromonitoring  
**Dra. Isabel Fernández-Conejero**
- 11:20 – 11:40** Neuroanaesthesia management during eloquent brain surgery  
**Dra. Laura Pariente**
- 11:40 – 12:00** Neuropsychological intraoperative evaluation of language: Tradition & research  
**Dra. Joanna Sierpowska**
- 12:00 – 12:20** Mapping of cortical and subcortical functions in the awake patient  
**Dr. Andreu Gabarrós / Dr. Alejandro Fernández-Coello**
- 12:20 – 12:40** Mapping and neuromonitoring of motor function in the asleep patient  
**Dr. Gerard Plans**
- 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 (*ONLINE*)  
**Dr. Francesco Sala**
- 15:30 – 16:00** *Discussion*

**16:00 – 16:30** **COFFEE**

- > **16:30 – 16:50** Intraoperative identification of the SMA in the awake patient  
**Dr. Andreu Gabarrós / Dr. Juan Martino**
- 16:50 – 17:10** Mapping and neuromonitoring for extrinsic brain lesions  
**Dr. Pablo López-Ojeda / Dr. José Luis Sanmillán / Dr. Andreu Gabarrós**
- 17:10 – 17:30** Mapping and neuromonitoring for insular tumors  
**Dr. Andreu Gabarrós / Dr. Alejandro Fernández-Coello**
- 17:30 – 17:50** *Discussion and closing remarks*

**DINNER** (*Only for the full course participants*)



FRIDAY | November 18<sup>TH</sup>

Location: Bellvitge auditorium

## 2 LIVE SURGERIES

### > 08:30 – 15:00 Operating Room 1 – AWAKE PATIENT

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

**Dr. Andreu Gabarrós / Dr. Alejandro Fernández-Coello / Dr. Aleix Rosselló / Dra. Imma Rico / Dra. Alba Gómez-Andrés / Dra. Irene Bermell**

### > 08:30 – 15:00 Operating Room 2 – ASLEEP PATIENT

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

**Dr. Gerard Plans / Dra. Eva Vázquez Lacasa / Dra. Julia Miró / Dr. Alexandre De Vilalta**

**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

Paseo Urumea, 3 - bajo  
20014 San Sebastián (Spain)  
Tel.: +34 943 468 441  
E-mail: [info@formedika.com](mailto:info@formedika.com)



## REGISTRATION

The registration will be made through the website of the Technical Secretariat of **FORMEDIKA**:  
[www.formedika.com](http://www.formedika.com)

## COURSE ACCREDITATION

The course will be accredited by the EACCME and it will be divided in two sections: Mapping Course - Dissection and Mapping Course - Theory.  
Therefore, in case the participant attended the full course, he/she would have two diplomas.

## FEES

Full course	1.950 €
Theory and live surgeries (Thursday and Friday)	590 €
Video streaming for theory and live surgeries	90 €

## > ADVANCED FIBER DISSECTION COURSE

The present course is intimately linked with the **“Third Annual 3D Advanced Fiber Dissection Course: Acquiring the mental imagery necessary to operate the brain”** that takes place in Santander (3-5 October, 2019) and that is organized by Dr. Juan Martino. The Santander’s course delves in subcortical anatomical study, and simulation of surgical approaches in the cadaver. On the other hand, Bellvitge’s course is more focused in intraoperative mapping techniques, neurophysiologic intraoperative monitoring and live broadcast surgeries. Therefore, in order to have a broader perspective of mapping techniques for resection of brain tumors within eloquent areas, we strongly recommend the participants to assist to both courses in a consecutive order.

*Dr. Juan Martino and Dr. Andreu Gabarrós.*

Below you can see a link with more information about this course:  
<http://www.aforocongresos.com/3dadvanced2019>

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