



# 9<sup>th</sup> MAPPING COURSE BELLVITGE 2026

**Neurosurgery COURSE:**  
November 17<sup>th</sup>-20<sup>th</sup> 2026

**NEUROPSYCHOLOGICAL  
ASSISTANCE WORKSHOP:**  
November 18<sup>th</sup>-20<sup>th</sup> 2026

## > 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:**

#### **DR. ALEJANDRO FERNÁNDEZ- COELLO**

Brain Mapping Program  
Neurosurgery Department  
Hospital Universitari de Bellvitge  
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

### **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. ÀNGELS CAMINS**

Neuroradiology Department  
IDI Bellvitge  
Brain Mapping Program  
Hospital Universitari de Bellvitge

#### **VÍCTOR CEPERO**

Neuropsychology Unit  
Neurology Department  
Brain Mapping Program  
Hospital Universitari de Bellvitge

#### **DR. PERE CIFRE**

Neurosurgery Department  
Hospital Universitari de Bellvitge

#### **ANNA GASA-ROQUÉ**

Cognition and Brain Plasticity Unit &  
Institute of Neurosciences -  
Universitat de Barcelona

#### **DR. RUTH LAU**

Neurosurgery Department  
Hospital Universitari Joan XXIII  
Tarragona

#### **DR. PABLO LÓPEZ- OJEDA**

Neurosurgery Department  
Hospital Universitari de Bellvitge

#### **DR. DANIEL MARTÍ**

Neurosurgery Department  
Hospital Universitari de Bellvitge

#### **DR. JÚLIA MIRÓ**

Intraoperative Neurophysiology  
Neurology Department  
Hospital Universitari de Bellvitge

#### **DR. PABLO NAVAL-BAUDIN**

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IDI Bellvitge  
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#### **DR. LAURA PARIENTE**

Anesthesia Department  
Hospital Universitari de Bellvitge

#### **DR. ALEIX ROSSELLÓ**

Neurosurgery Department  
Hospital Universitari de Bellvitge

#### **DR. JOSÉ LUIS SANMILLÁN**

Neurosurgery Department  
Hospital Universitari de Bellvitge

#### **DR. JOANNA SIERPOWSKA**

Cognition and Brain Plasticity Unit &  
Institute of Neurosciences (UBneuro)  
Dept. of Cognition, Development and  
Educational Psychology  
Universitat de Barcelona

### **COLLABORATORS:**

#### **DR. LAURA CONTRERAS**

Neuroanesthesia Coordinator  
Anesthesia Department  
Hospital Universitari de Bellvitge

#### **INMA RICO PONS**

Neuropsychology Unit  
Neurology Department  
Brain Mapping Program  
Hospital Universitari de Bellvitge

#### **DR. ANTONI RODRÍGUEZ FORNELLS**

Neuropsychology  
Brain Mapping Program  
Cognition and Brain Plasticity Unit  
IDIBELL

# > NEUROPSYCHOLOGY FACULTY

## ORGANIZING COMMITTEE:

### ANNA GASA-ROQUÉ

Cognition and Brain Plasticity Unit & Institute of Neurosciences - Universitat de Barcelona

### DR. JOANNA SIERPOWSKA

Cognition and Brain Plasticity Unit & Institute of Neurosciences (UBneuro) Dept. of Cognition, Development and Educational Psychology Universitat de Barcelona

## KEYNOTE SPEAKER:

### DR. GUILLAUME HERBET

Associate Professor of Cognitive Neuroscience & Clinical Neuropsychology at the University of Montpellier, France

## INVITED SPEAKERS:

### DEVA ÁLVAREZ

Cognition and Brain Plasticity Unit, Dept. of Cognition, Development and Educational Psychology, Universitat de Barcelona, Universidad del País Vasco (UPV / EHU)

### VÍCTOR CEPERO

Neuropsychology Unit Neurology Department Brain Mapping Program Hospital Universitari de Bellvitge

### DR. XIM CERDÁ-COMPANY

Universitat Autònoma de Barcelona Cognition and Brain Plasticity Unit, IDIBELL Dept. Of Cognition, Development, and Educational Psychology Universitat de Barcelona

## DR. LAURA

### MALDONADO-MURCIANO

Serra Hùnter Tenure-Track Lecturer at the Social Psychology and Quantitative Psychology Department, Barcelona

## INMA RICO PONS

Neuropsychology Unit Neurology Department Brain Mapping Program Hospital Universitari de Bellvitge





**TUESDAY | November 17<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. 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. 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. 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 18<sup>th</sup>

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. 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. 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. 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. 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.

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

# > PROGRAM

WEDNESDAY | November 18<sup>th</sup>

## NEUROPSYCHOLOGICAL ASSISTANCE WORKSHOP

Location: Dissection room

- 08:30 - 08:45** Delivery of documentation
- 08:45 - 09:00** Course presentation
- 09:00 - 09:30** Theoretical framework behind awake brain surgery: from historical to contemporary models. Anna Gasa-Roqué / Dr. Joanna Sierpowska
- 09:30 - 09:45** How to define a candidate for an awake brain surgery? Rapid fire Q & A session 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: Anna Gasa-Roqué / Dr. Joanna Sierpowska
- 09:45 - 10:05** Neuropsychological assessment of glioma patients undergoing awake brain surgery in the left-dominant hemisphere: before and after surgery. Anna Gasa-Roqué
- 10:05 - 10:30** From design to implementation: validating and adapting intraoperative tasks through “de novo” development and linguistic tailoring to participant profiles. Deva Álvarez / Dr. Joanna Sierpowska /
- 10:30 - 10:45** Crash course in psychometrics: understanding what the results mean for each person given their profile. 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 - 11:45** Precision medicine: personalized electrical stimulation mapping tasks for tumor resection. 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. Joanna Sierpowska / Anna Gasa-Roqué
- 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: Anna Gasa-Roqué / Dr. Joanna Sierpowska
- 16:15 - 16:30** **Workshop 2 wrap-up and discussion.**
- 16:30 - 17:00** **COFFEE**
- 17:00 - 18:00** **Keynote Speaker:** Mapping right hemisphere functions with direct electrostimulation: current practice and future directions. Dr. Guillaume Herbet
- 18:00 - 18:30** Discussion and closing remarks.

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

# > PROGRAM

**THURSDAY | November 19<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. *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. 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.

*Anna Gasa-Roqué / 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. Pablo López-Ojeda / Dr. Andreu Gabarrós / Dr. José Luis Sanmillán*

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

*Dr. Pere Cifre / Dr. Andreu Gabarrós / Dr. Juan Martino*

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

*Dr. Andreu Gabarrós / Dr. Alejandro Fernández-Coello*

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

# > PROGRAM

FRIDAY | November 20<sup>th</sup>

Location: Bellvitge auditorium

## 2 LIVE SURGERIES

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

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

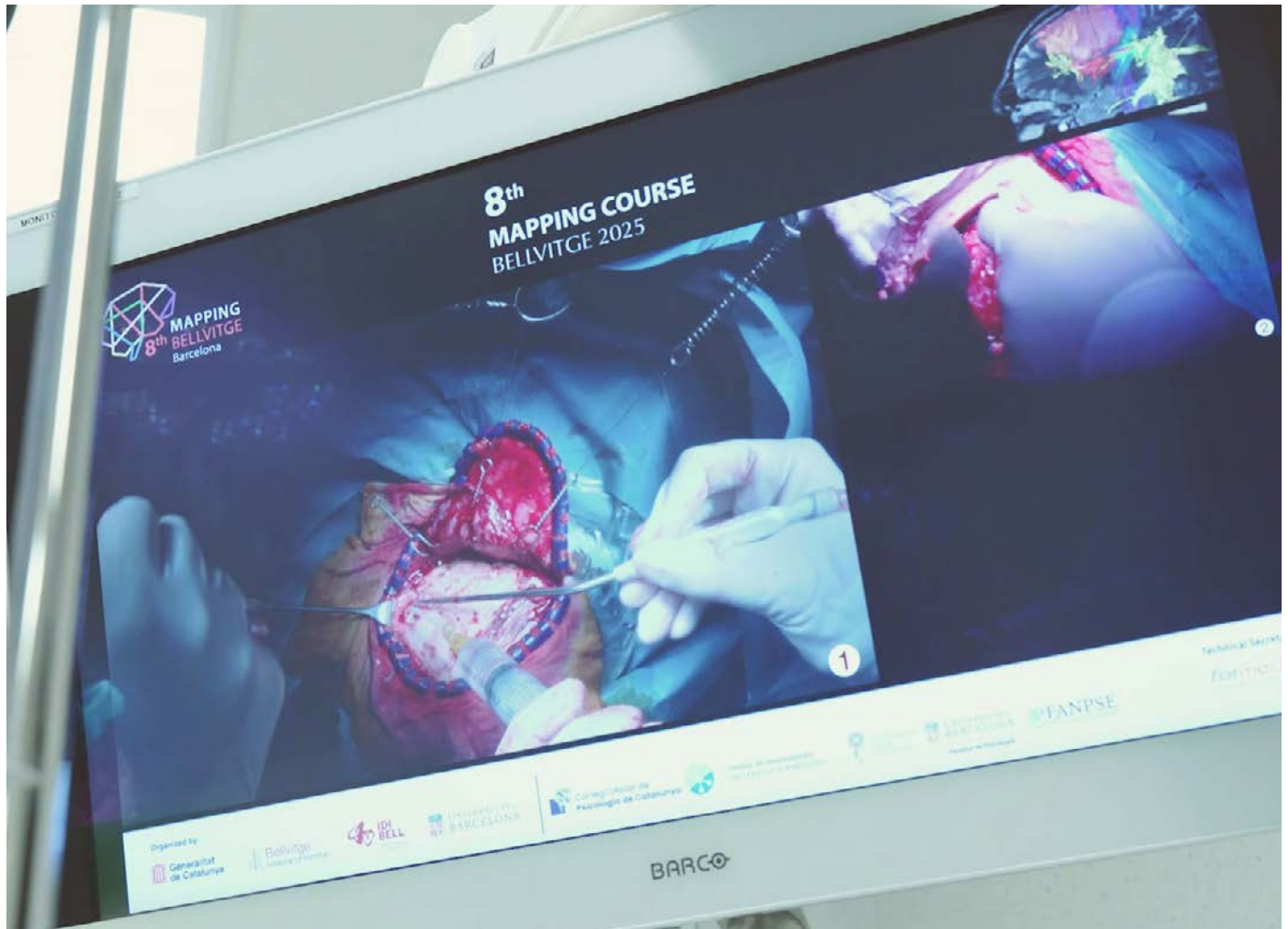
Perisylvian tumor resection assisted by neuronavigation and cortical/subcortical language brain mapping in the awake patient

**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)

## REGISTRATION

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

[www.formedika.com](http://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 17 <sup>th</sup> to Friday 20 <sup>th</sup> )	2.350 €
Theory and live surgeries (Thursday 19 <sup>th</sup> and Friday 20 <sup>th</sup> )	590 €
Video streaming for theory and live surgeries	120 €

[Registration here](#)

### Neuropsychological assistance workshop

Full course Neuropsychological <b>on-site</b> workshop (Wednesday 18 <sup>th</sup> ) and <b>on-site</b> theory and live surgeries (Thursday 19 <sup>th</sup> and Friday 20 <sup>th</sup> )	990 €	*792 €	** 594 €
Full course Neuropsychological <b>on-site</b> workshop (Wednesday 18 <sup>th</sup> ) and <b>online</b> theory and live surgeries (Thursday 19 <sup>th</sup> and Friday 20 <sup>th</sup> )	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.

[Registration here](#)

## 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.

*Formedika reserves the right to modify the content of this document.*

## TECHNICAL SECRETARIAT

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# STUDENT AWARD REQUEST FOR NEUROPSYCHOLOGICAL ASSISTANCE WORKSHOP

Once again, the *Organizing Committee* of the **9<sup>th</sup> 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 31<sup>st</sup>, 2026**

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 31<sup>st</sup>, 2026** on the following link: <https://forms.gle/HWDgXU6oS4jbEJY39>

*\*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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