

Charles University

Università degli Studi di Milano

University of Warsaw

Université de Genève

Istituto Neurologico Carlo Besta

4eu+

# 3<sup>rd</sup> International Online Course Pathogenesis of Epilepsy



**Supported by**

International League Against Epilepsy

International Bureau for Epilepsy

EpiCARE

## **Why this course?**

Epilepsy affects 40 million people worldwide. One third of people with epilepsy doesn't respond to available anti-seizure therapy. The development of innovative therapies is the priority of contemporary epilepsy research.

To achieve this goal, the professionals working in epilepsy research need to understand the mechanism that underlie the pathogenesis of epilepsy and seizures combined with understanding of the emerging technologies to study and treat epilepsy.

In response to this need, we have brought together a faculty of epilepsy specialists to develop and deliver an international course. The course aims to be highly didactic and promoting the close interaction between participants and tutors.

## **Feedback from the participants**

*"The course has truly broadened my horizon and I am sure I would not ever be able to study so many topics in epilepsy research."*

*"This is one of the best courses I have ever followed".*

*"I enjoyed the course a lot! It was great to interact with people from different disciplines within the epilepsy field. It is a great networking opportunity and a way to make you think out of the box."*

## Who this course is for

The course is international and explores the neurobiology of epilepsy from basic and clinical perspectives. The main objectives of this course are to:

- deepen your knowledge on the pathophysiology of epilepsy and seizure
- introduce you modern research tools that are used in epilepsy research
- identify the current challenges and complex issues in epilepsy and understand the patients' needs

The course will appeal to the following professional and students

- Undergraduate and Ph.D. students of various disciplines who are interested in epilepsy research
- Researchers from academia or industry seeking to upskill in the area of epilepsy research and e therapy development

- Clinicians seeking to appraise insights into the basic mechanisms of epilepsy

## Syllabus

### **Introduction to epilepsy**

6 hours

### **The role of neurons and glia in pathogenesis of epilepsy**

8 hours

### **Research tools to study epilepsy**

8 hours

### **Seizure genesis and epileptogenesis**

8 hours

### **Mechanisms of epilepsies and epileptic syndromes**

12 hours

### **Animal models of epilepsies**

4 hours

### **Treatment of epilepsy**

8 hours

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Weeks

**14**

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Delivery mode

**Part-time  
Online**

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ECTS credit

**3**

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4EU+ aims to create a **truly integrated European University System by 2025.**

### **Find out more and Apply.**

The deadline for applications is November 31<sup>st</sup>, 2024

The course begins on February 27<sup>th</sup>, 2025

For details on the program, registration fees, and the application process, please visit:

**<https://4euepilepsy.lf2.cuni.cz/>**

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