

Charles University

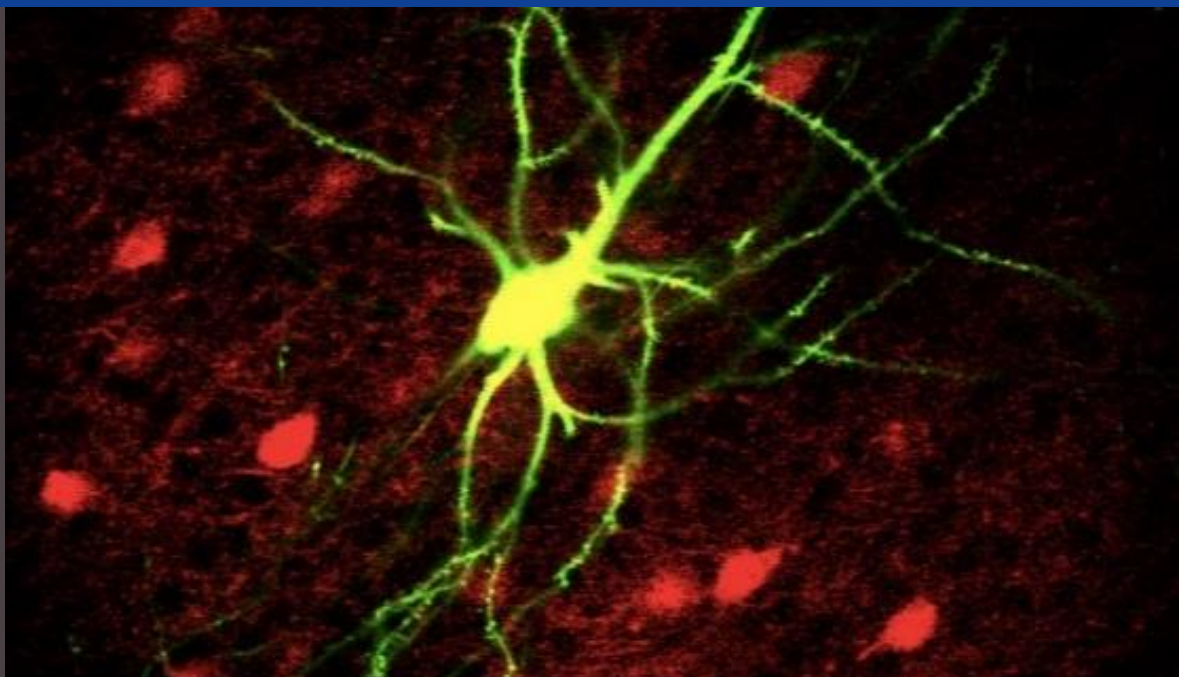
Università degli Studi di Milano

University of Warsaw

4eu+

# Pathogenesis of Epilepsy

14 Week Online Course



CHARLES  
UNIVERSITY



UNIVERSITÀ  
DEGLI STUDI  
DI MILANO



UNIVERSITY  
OF WARSAW

## **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.

## 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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EUROPEAN  
UNIVERSITY  
ALLIANCE

**4EU+** consists of large, comprehensive, public European research universities that are strongly embedded in their local territories and share European values and a global outlook. The first responsibility of 4EU+ is to form the **next generations of citizens to face and solve global challenges.**

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

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

The deadline for applications is December 15<sup>th</sup> 2021.

The course begins February 24<sup>th</sup> 2022.

For details on program, the application process please visit:

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

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