



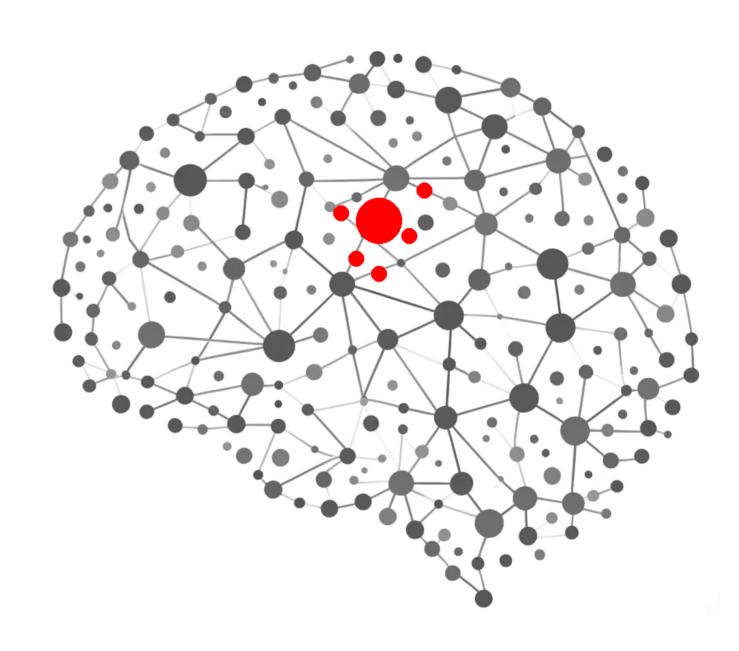
# Online course on the Pathogenesis of epilepsy

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## Motivation

- Increased knowledge of the mechanisms of
  - Epilepsies
  - Seizures
  - Comorbidities
- Modern concepts and approaches in epilepsy
- Building epileptological community
- Interdisciplinarity
  - Scientists x clinicians
  - Academia x industry
- Regional and global impact



# Faculty and education principles

- Internationally recognized experts
- Experimental and clinical epileptology

#### Faculty members



## Faculty and education principles

- Internationally recognized experts
- Experimental and clinical epileptology
- Involvement of organizations
  - Patients'
  - Professional
  - Endorsement









#### Faculty members

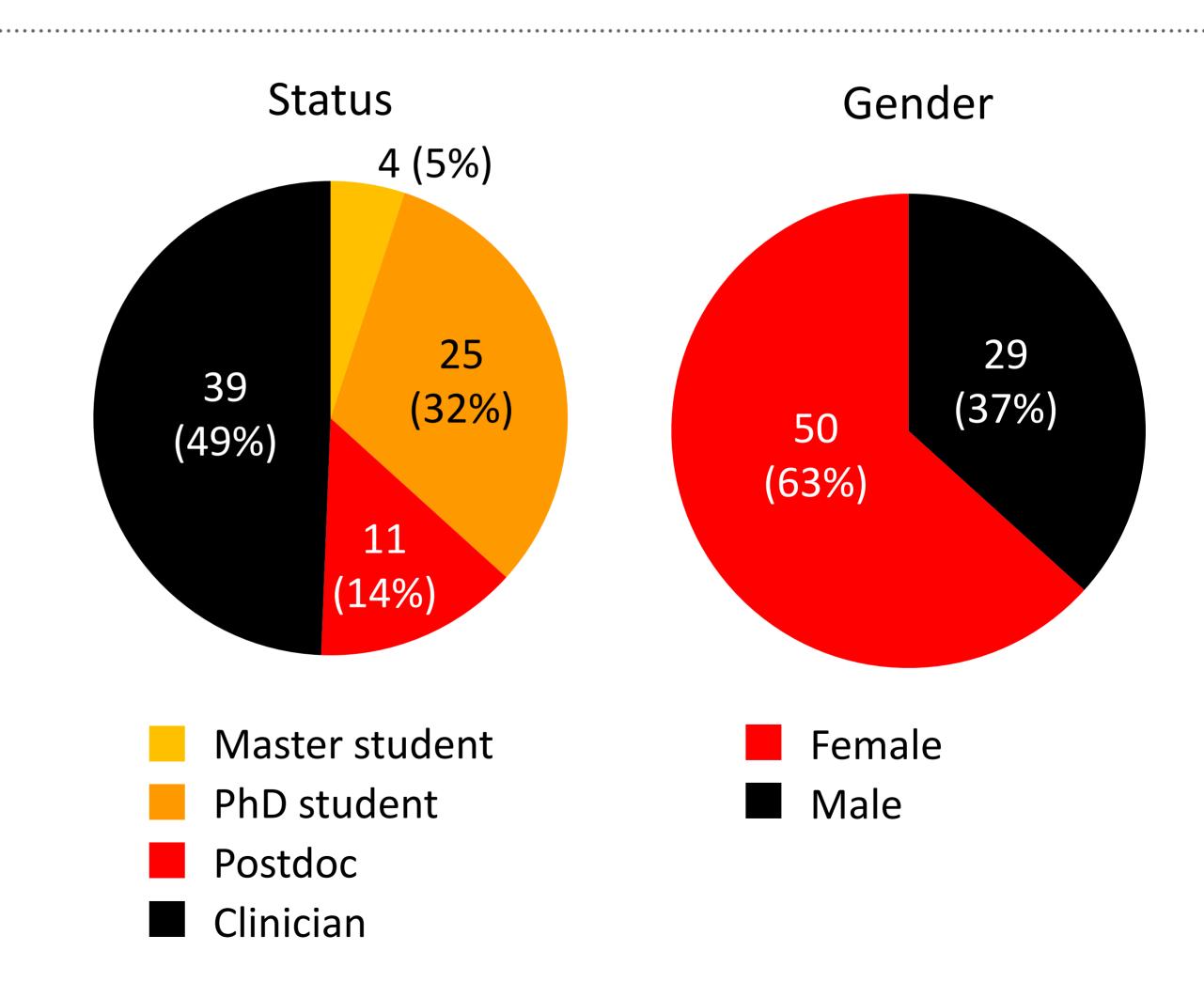


## Participants – demographic data

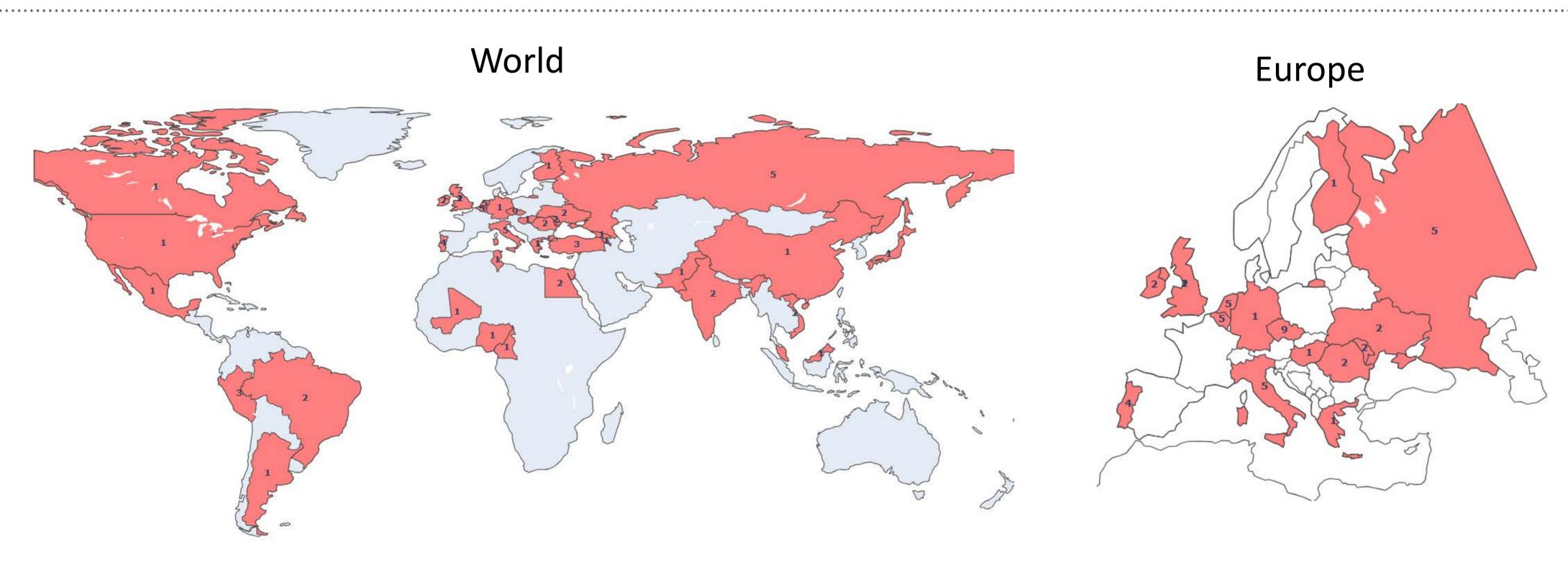
- o 285 applications
- o 79 participants (28%)
- 4EU+ students
  - Undergraduate students
  - 10 University of Milano
  - 5 Charles University

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# Participants – geographic distribution



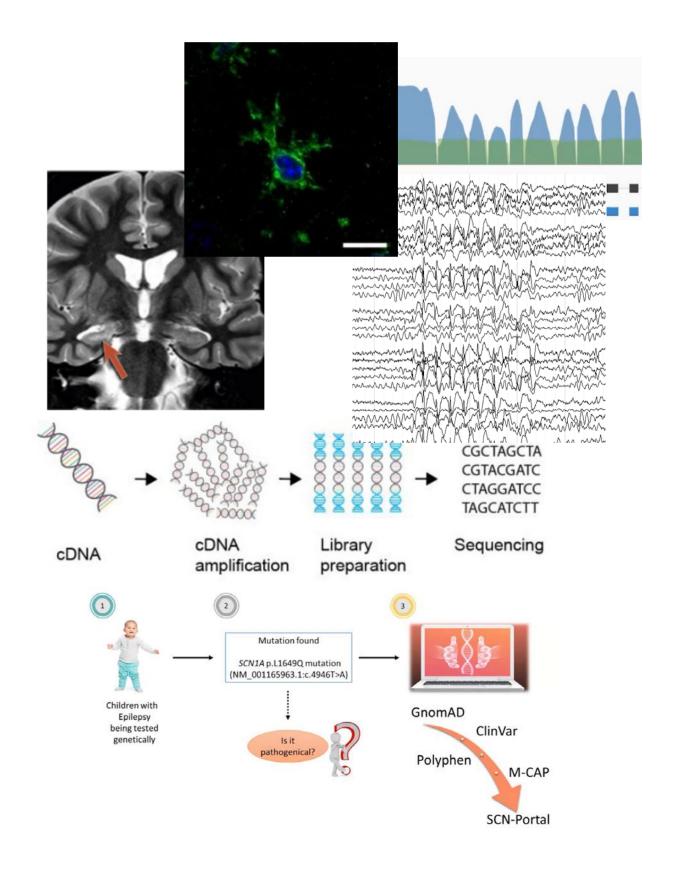
- o 39 countries
- o 5 continents

o 52/79 from Europe

## Course structure

- Duration of 14 weeks
- o Assignment to 5 groups
  - Heterogeneity within groups
  - Tutors' supervision
  - WhatsApp communication
- Structure
  - Lectures (2 hours)
  - Interactive sessions (2 hours)
  - Cameos
  - Homework
  - Group projects

#### Practical sessions

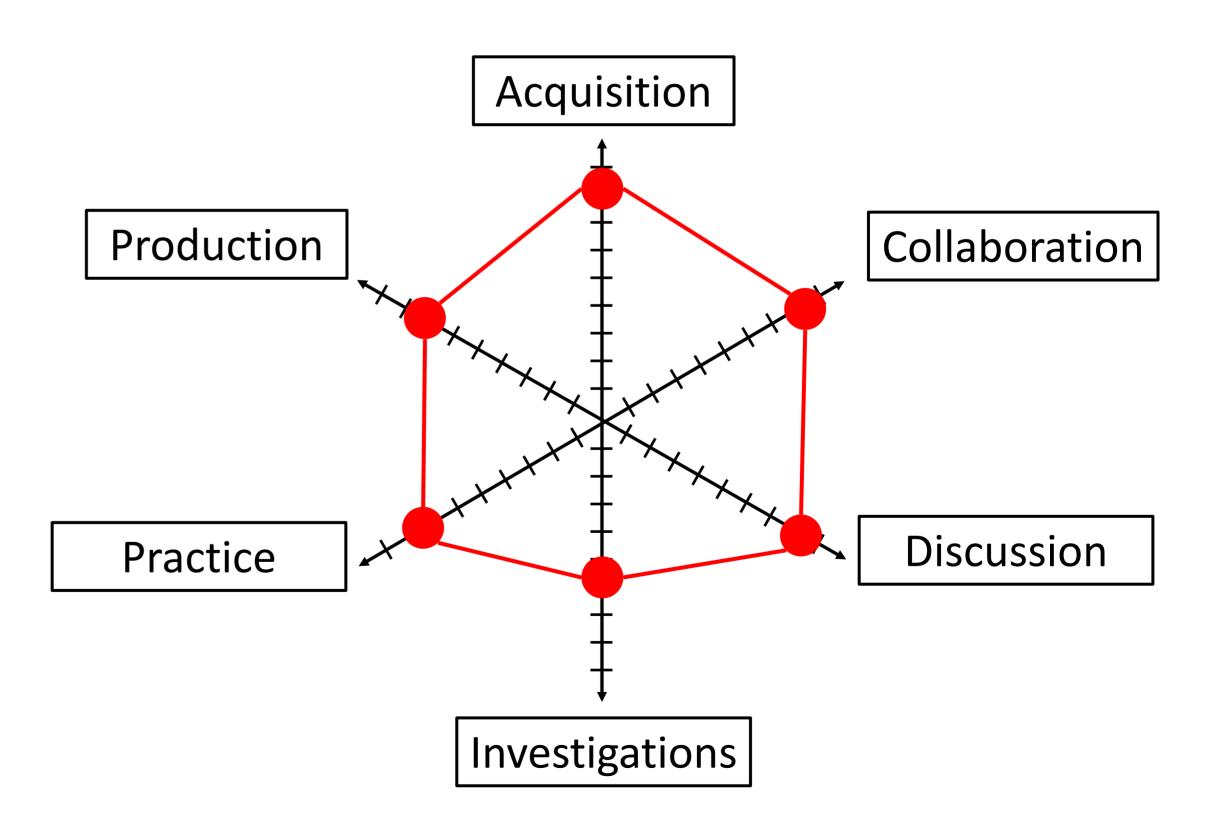


# Course principles

Active learning

- ABC course design
- Flipped classrooms
- Group projects
- Online teaching techniques
- o Moodle
  - Study materials
  - Attendance
  - Testing
- Exposure to patient's needs

#### Learning types activities graph



## Hurdles

- Administratively demanding
  - Administrative support
  - Technical support
- Complex registration process
  - University information system
  - Participants outside Charles University
  - Access to Moodle
- o Cost
  - 10,000 Euro
  - Registration fees



## Primary outcomes

Increased knowledge and training

- Course demanding
- Fast learning
- Low-income countries
- High level of satisfaction
- Microcertificates
- Community building
  - Clinicians and scientists
  - Senior and junior
  - Friendships

"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."

"In just a few weeks, I gained insights that took my PhD peers four years to achieve."

" It is a great networking opportunity and a way to make you think out of the box."

## Secondary outcomes

- European epilepsy consortium
  - MSCA Consortium of research and training in epilepsy: A doctoral training network for the next generation of translational epilepsy researchers
  - SEED4EU+ The role of neuron-glia interactions in the pathogenesis of brain diseases
  - COST Advancing epilepsy therapy by targeting epilepsy-related brain microenvironment
  - Horizon, ERC, etc.
- Joint research collaborations
- Educative activities





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## **Future**

- Future course rounds
- Micro-credential course
  - Pathogenesis of epilepsy
  - Clinical epilepsy for non-clinicians
- Increased involvement of companies
- Joint course with ILAE Academy





Co-funded by the Erasmus+ Programme of the European Union

Supported by educative and research 4EU+ mini-grants awarded by Charles University and 4EU+ Alliance