

# **Postdoctoral Fellowships**



Marie Skłodowska-Curie Actions Developing talents, advancing research

#### **CALL FOR APPLICATIONS 2025 – FELLOWS**

Supervisor Jean-Christophe Poncer

Supervisor page <a href="https://institutducerveau.org/collaborateurs/jean-christophe-poncer">https://institutducerveau.org/collaborateurs/jean-christophe-poncer</a>

**Host Institution** National Institute for Health and Medical Research (Inserm)

https://www.inserm.fr/en/home/

Research Lab Paris Brain Institute

https://parisbraininstitute.org/

Research Team Clinical and experimental epilepsy

https://parisbraininstitute.org/paris-brain-institute-research-teams/epic-

clinical-and-experimental-epilepsy

### **Project Title**

Cell-specific determinants of human epileptic networks

#### **Project Description**

We aim to identify the cellular and molecular determinants of epileptogenic networks in mesial temporal lobe epilepsy (mTLE). Using postoperative tissue from mTLE patients, we will combine multielectrode array recordings, patch-seq and spatial transcritomics to correlate single-cell physiological, anatomical, and transcriptomic signatures in ictogenic networks. Our aim is to manipulate specific neuron subgroups with opto- or chemo-genetic actuators to assess their causal role in ictogenesis.

## Keywords

epilepsy, human, transcriptomics

#### **Description of the Host Research Lab**

The scientific and medical strategy of Paris Brain Institute is based on a transdisciplinary and synergistic approach combining basic and translational research, clinical expertise and support of advanced technological platforms. This organization enables it to meet the challenges of understanding the nervous system and its diseases and to benefit from a strong international presence, which is becoming increasingly visible.