The Paris Brain Institute (ICM) is recruiting
<u>**Postdoctoral Fellow #2 in genetic engineering and mouse modeling**</u>
3 years (funded by ERANET Neuron)

The Paris Brain Institute is a private foundation recognized as being of public utility whose purpose is fundamental and clinical research on the nervous system. On a single site, 650 researchers, engineers and physicians cover all the disciplines of neurology with the aim of accelerating discoveries in brain function and developing new treatments for neurological and psychiatric disorders.

POSITION

You are passionate about neurodevelopmental genetic disorders, and you want to contribute to major discoveries impacting patients' health and care all in a state-of-the-art research environment? The Baulac lab at the ICM is the place for you!

A fully-funded 36-months postdoc position is opening starting in April 2022. This collaborative project funded by **ERANET Neuron** gathers a consortium of 3 renowned European groups (Baulac lab in Paris, Jabaudon lab in Geneva, Bonev lab in Munich). We are looking for a highly qualified and motivated postdoctoral fellow with expertise in **mouse modeling and genetic engineering** to complete our team and develop new disease models to better understand the biological mechanism underlying mosaic cortical malformations.

MAIN MISSIONS

Our laboratory investigates the genetic etiology and the pathomechanisms underlying **developmental epilepsies**, with a special focus on **brain somatic mosaicism** in cortical malformations, notably focal cortical dysplasia (FCD). To do so, we employ a multi-disciplinary approach integrating genetic/genomic studies in human brain tissues and disease modeling *in vitro* and *in vivo*. For more information on our team and research check our website at: http://www.baulacleguernepilepsy.com.

The main aim of the project is to **understand the molecular and cellular bases of focal cortical dysplasia and epileptogenesis**. To achieve this, FCD somatic mutations will be introduced in the developing mouse brain to reproduce the disease phenotype, and study the underlying cellular and molecular mechanisms. The successful candidate should be able to use multiple techniques such as genetic engineering and Crispr-editing, *in utero* electroporation, high-throughput *in vivo* screening, imaging and single-cell omics.

PROFILE

KNOWLEDGE

   - Ph.D. in Neuroscience/Molecular Biology, and have a strong publication record including at least one first-author paper;
   - Knowledge of cell and molecular biology, genetics and molecular genetics, and neuroscience/neurodevelopment.
   - Strong experience in **mouse experimentation, transgenic mice generation** and **genome editing**

SKILLS

   - We are looking for an open and collaborative person who likes teamwork and enjoy sharing knowledge
   - Organizational skills, efficient planning, autonomy and ability to conceptualize new ideas are required
   - Fluency in English is required, fluency in French is not required to work in our team/institute, even if learning French is encouraged

   Please send a CV and a motivation letter to <u>stephanie.baulac@icm-institute.org</u>