

## PhD position in cortical inhibitory microcircuits

We are looking for PhD candidate with a curious mind-set and a strong interest in synaptic physiology and systems neuroscience for a 3-year PhD position at the ICM – Institut du Cerveau | Paris Brain Institute. The student will be co-mentored by Joana Lourenço and Alberto Bacci (team “Cellular Physiology of Cortical Microcircuits”).

### The Project

Our research mainly focuses on the cellular physiology of various elements of cortical microcircuits, the properties and plasticity of their synaptic connections and their contribution to the generation of various cognition-relevant network activities. Through our collaborators, we also study cortical circuit deficits in several animal model of brain disease.

We use a combination multi-disciplinary approach, with strong expertise in cellular synaptic cortical physiology, optical interrogation approaches coupled to mouse genetics and anatomy. For more information, please refer to our recent preprint: doi: <https://doi.org/10.1101/2021.09.06.459113>

### Your Profile

- Successful candidates should have a background in neuroscience, medicine, physics, bioengineering, or bioinformatics, hold (or are expected to complete soon) a Master’s or equivalent degree, and are proficient in spoken and written English
- Experience in slice physiology or in vivo imaging techniques would be highly appreciated but not required
- Experience in general programming language is required
- Strong motivation and committed is required

### What we offer

- Exciting experience in an international neuroscience community
- The student will be enrolled in the Neuroscience doctoral school Ed3C at Sorbonne Université (<http://www.ifd.upmc.fr/fr/le-doctorat-a-l-upmc/les-ecoles-doctorales/cerveau-cognition-comportement-3c-ed-158.html>)
- The laboratory offers a friendly safe environment to express yourself scientifically
- Continuous scientific mentoring by your scientific advisors
- We offer expertise in the field of synaptic physiology of inhibitory cortical microcircuits
- We offer the possibility to participate in graduate training programs of state-of-the-art optical interrogations techniques

### Additional Information

Your application consists in: full CV, letter of motivation (max. 1 page), MSc diploma or transcript of records, and names of 2-3 referees. Please send your application via email as a single pdf document to: [joana.lourenco@icm-institute.org](mailto:joana.lourenco@icm-institute.org) and [alberto.bacci@icm-institute.org](mailto:alberto.bacci@icm-institute.org).

Applications will be reviewed until the position is filled.