

Postdoctoral Position at the Paris Brain Institute (ICM), Paris, France

A Postdoctoral position is available at the ICM – Paris Brain Institute in the group of Alberto Bacci. The ICM is in the heart of Paris, France, part of the Pitié-Salpêtrière Hospital, and has a vibrant, multidisciplinary, and internationally recognized neuroscience community.

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 activities¹. Through our collaborators, we also study cortical circuit deficits in several animal model of brain disease.

The lab uses a combination of single and multiple-cell electrophysiology, 2-photon imaging and electrophysiology *in vivo*, pharmacology, anatomy, immunocytochemistry, optical manipulations of specific neuron types and computational approaches (through established collaborations). Check our lab website for details and publications: <http://baccilab.org/>

The successful candidate will work on inhibitory circuits of the prefrontal cortex of mice. In particular, s/he will study the properties and plasticity of synapses connecting a rich diversity of prefrontal cortical neuron subtypes. The successful candidate will also perform and analyze electrophysiological recordings *in vivo*, using high-density Neuropixels probes. This project is funded by an ERA-Net NEURON international consortium and is focused on the rich diversity of GABAergic interneurons and how they affect the functional states of prefrontal cortical networks in healthy and diseased states.

Your Profile:

- Applicants must have a background in neuroscience. They must hold (or are expected to complete soon) a Ph.D. or equivalent degree in biology, medicine, physics or bioengineering.
- Excellent verbal and written communication skills in English are required.
- Experience with *in vivo* electrophysiology, imaging and/or computational neuroscience is appreciated but not required.
- Coding knowledge is appreciated.

Applications must consist of a single pdf file and must be sent to alberto.bacci@icm-institute.org (subject line must be: Postdoc Application Bacci; DS)

Please include:

- Curriculum Vitae (CV)
- 1 page summary of previous research
- Brief statement of current research interest
- Contact information of at least two referees

Highly motivated candidates are encouraged to apply. Applications will be reviewed until the position is filled.

Contact Information:

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¹Donato C, et al., *J. Neurosci.* 2023 43(1):14-27; Koukouli F*, Montmerle M* et al. *Cell Reports* 40(8):111202 (2022); Lourenço J et al. *Cortex* 132:258-280 (2020); Lourenço, J. et al. *Cell Rep.* 30, 630-641 (2020); Zorrilla de San Martín, J. et al. *eLife* (2020); Deleuze, C. et al. *PLoS Biol.* 17, e3000419 (2019); Faini, G. et al. *eLife.* 7, (2018); Marinelli, S., *Nat. Neurosci.* 12, 1488-1490 (2009); Bacci, A. & Huguenard, J.R. *Neuron* 49, 119-130 (2006); Bacci, A., et al., *Nature* 431, 312-316 (2004).