



Postdoctoral Position in Microglia - Synapse interactions at Ecole normale supérieure, Paris France

We are seeking a motivated postdoctoral fellow for a two-year position in an ERC-Synergy funded project studying “Microglia control of physiological brain states” at the Institute of Biology of the Ecole normale supérieure in Paris France.

Microglial cells dynamically survey the brain parenchyma. In the healthy brain, microglia have active housekeeping functions and are now acknowledged as genuine regulators of neuronal functions. The project will study the bidirectional microglia-neuron interaction with a focus on synapse plasticity, building on our previous results^{1,2}.

The post-doc will develop and apply advanced imaging techniques combined with high-standard cell-biology and in-vivo approaches to investigate the dynamic and reciprocal functional interactions between synapses and microglia.

The Triller lab, offers a stimulating and rigorous setting for scientific growth and the development of independent research careers.

The Institute of Biology of ENS is a leading biology institute in Europe that gathers world-class researchers from fields including Genetics & Genomics, Cell & Developmental biology, Evolution, and Neuroscience. Located in the heart of Paris, the institute is near other prestigious research institutions, providing opportunities for collaboration. (Institut Curie, Collège de France, ESPCI...)

1. Pinto, M. J. *et al.* Microglial TNF α controls daily changes in synaptic GABA_ARs and sleep slow waves. *J. Cell Biol.* **223**, e202401041 (2024).
2. Maynard, S. A., Ranft, J. & Triller, A. Quantifying postsynaptic receptor dynamics: insights into synaptic function. *Nat. Rev. Neurosci.* **24**, 4–22 (2023).

Requirements:

- PhD or MD/PhD with a background in cell biology, immunology, neuroscience or biophysics.
- Significant technical expertise in imaging and basic biophysics.
- Programming skills are welcome.
- Excellent organizational skills, self-motivation, and creativity.
- Excellent verbal and written communication skills in English

Please send a cover letter explaining your relevant work experience and interests, a CV, and the contact information with three references to Dr Triller antoine.triller@ens.psl.eu and Dr Bessis alain.bessis@bio.ens.psl.eu.