



European Research Council  
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## Two ERC-funded postdoctoral positions in Neurosciences Charrier lab - Ecole Normale Supérieure, Paris, France.

### Project

The synapse is a nanoscale machine, which transfers, integrates and stores information in brain circuits. Its function relies on multimolecular networks of interactions whose composition and dynamics shape synaptic transmission. Small changes in the molecular organization of synapses can lead to profound modifications of behavioral and cognitive abilities, as frequently observed in neurodevelopmental and psychiatric disorders. Small changes also appeared during human evolution. Although poorly characterized, they underlie distinctive developmental and physiological properties of human neurons that are at the core of what makes us humans. The projects will investigate the regulation of synaptic development and plasticity by human-specific genes and molecular pathways linked to human evolution. They will employ a multidisciplinary approach based on sparse in vivo manipulations in intact brain circuits, high-resolution microscopy, electrophysiology and proteomics in mouse and human models. The goal is to characterize fundamental mechanisms that are common to all mammals and uncover regulations that are specific to humans.

### About the lab

We are located at the Biology Institute of the Ecole Normale Supérieure in Paris (IBENS, Inserm 1024 - CNRS 8197, <http://www.ibens.ens.fr>). The institute provides an exceptional scientific environment and a vibrant international community for students and post-docs in the center of Paris.

### Profile

We are seeking highly motivated, independent, critical and creative individuals to join the team. The candidates should have a PhD in neurosciences, cellular/developmental biology or in a related field, and a strong interest in neuron cell biology and synapses. Background in molecular and cellular biology, electrophysiology, microscopy or stem cell biology will be appreciated. The candidates must have good communication and teamwork skills in an international environment. The positions are available from November 2019. Financial support for at least 2 years (ERC grant).

### Application

Please contact Cécile Charrier at [cecile.charrier@ens.fr](mailto:cecile.charrier@ens.fr) with your CV, a cover letter explaining your motivations and previous work, and three references for recommendation.