

## Postdoc position in Neuroscience Ecole Normale Supérieure (Paris)

**Team: “Glutamate Receptors and Excitatory Synapses”** (<http://www.biologie.ens.fr/neuronr/>)

**Head : Pierre PAOLETTI**

**Location: Institut de Biologie de l’Ecole Normale Supérieure (IBENS), Paris, France**

**Start date: Early 2018**

We seek to hire one highly motivated postdoctoral scientist to investigate the **mechanisms and role of unconventional GluN3-containing NMDA receptors (GluN3-NMDARs) in brain function**. While much is known about ‘classical’ GluN2-NMDARs, incomparably less is known regarding NMDARs incorporating the glycine-binding GluN3 subunits. This project aims to fill this gap by combining various advanced methodologies including light-controllable receptors to explore receptor function *ex vivo* and *in vivo* using **optogenetic pharmacology**.

The candidate should have a solid expertise in **cellular electrophysiology** and strong interest in cellular neuroscience with special focus on **synaptic transmission and plasticity**. A background in molecular biology and receptor pharmacology and signalling would be a plus.

The project is part of recently awarded **ANR collaborative grant** involving three well-established labs from the Paris neuroscience community. It is to be developed in the team of Pierre Paoletti at the Institut de Biologie de l’Ecole Normale Supérieure (IBENS) in Paris. This team has international recognition for its work on the structure and function of glutamate receptors and the regulation of excitatory synapses. It has been awarded an **ERC Advanced Grant** in 2016. The position has 2 years of initial funding, with the possibility for extension.

IBENS is a leading biology institute in Europe that gathers several world-class researchers from diverse fields including genetics and genomics, developmental biology, systems biology and neuroscience. IBENS is located **in the center of Paris** (Latin Quarter) in a highly stimulating and dynamic environment, close to several other top research institutions (Institut Curie, Collège de France, ESPCI Paris Tech...).

Candidates should send a CV and a brief statement of research experience to Pierre Paoletti: [pierre.paoletti@ens.fr](mailto:pierre.paoletti@ens.fr)

Selection of publications from the host team:

- Gielen et al. (2009) **Nature**, 459, 703-707.
- Nozaki et al. (2011) **Nature Neuroscience**, 14, 1017-1022.
- Mony et al. (2011) **EMBO Journal**, 30, 3134-3146.
- Zhu et al. (2013) **Nature Structural & Molecular Biology**, 20(4), 477-485
- Paoletti et al. (2013) **Nature Reviews Neuroscience**, 14(6), 383-400.
- Zhu et al. (2014) **PNAS (USA)**, 111, 6081-6086.
- Stroebel et al. (2014) **Journal of Neuroscience**, 34(50), 16630-36
- Vergnano et al. (2014) **Neuron**, 82(5), 1101-1114.
- Zhu & Paoletti (2015) **Current Opinion in Pharmacology**, 20, 14-23.
- Hackos et al. (2016) **Neuron**, 89(5), 983-99.
- Klippenstein et al. (2017) **eLife**, 6: e25808