

Postdoctoral Position in neurodegenerative diseases at Ecole Normale Supérieure

The Triller lab together with the Strick lab at the Institute of Biology at Ecole Normale Supérieure (IBENS) is seeking a postdoctoral scientist for a joint project focused on studying “New pathological mechanisms involved in Alzheimer’s disease: toward innovative therapeutic approaches.” Research in Antoine Triller’s lab is focused on membrane molecules which regulate the function of synapses by using cell and molecular biology together with single molecule imaging (sptPALM). Research in Terence Strick’s lab uses physical methods involving magnetic tweezers together with single-molecule imaging (NanoCOSM) to follow molecular interactions in real-time at the single molecule level. For more information visit (<http://www.ibens.ens.fr/spip.php?rubrique22&lang=en>) for Triller and (<http://www.ibens.ens.fr/spip.php?rubrique91>) Strick labs.

A-beta and Tau assemblies, the hallmarks of Alzheimer’s disease, amplify by recruiting their constituents and propagating from cell-to-cell within the CNS. The binding and docking of these assemblies to the neuronal membrane contributes to the progressiveness of the disease. This induces redistribution and/or changes in the stability and turnover of target proteins such as NaK ATPase, AMPAR and mGluRs. Our multi-disciplinary approach will yield a rationale for strategies aimed at interfering with A-beta and Tau assemblies binding to neurons thus preventing their propagation and subsequent cellular invasion and intracellular amplification.

The Triller and Strick labs within the Ecole Normale Supérieure provide a stimulating and scientifically rigorous environment for scientific growth and fostering the independent careers of postdoctoral trainees. Our research is published in leading journals including Neuron, , Nature, Nature Nanotechnology, PNAS, Nature Structural & Molecular Biology, EMBO J, Physical Review

This position, funded for, 3 years, is ideal for a postdoc interested in studying basic mechanisms in neurodegenerative disease with therapeutic outcome objectives.

Requirements:

- PhD or MD/PhD with a background in cell biology and neuroscience.
- Significant technical expertise in imaging and basic biophysics.
- Experience studying neurodegenerative disease is welcome but not required.
- Evidence of productivity from publications in peer-reviewed journals originating from Ph.D. or postdoctoral work.
- Excellent verbal and written communication skills in English
- Excellent organizational skills, self-motivation, and creativity.

Please send a cover letter explaining your relevant work experience and interests, a CV, and the contact information of three references to Dr Triller antoine.triller@ens.psl.eu and Prof. Strick.terence.strick@ens.psl.eu