

Open PhD position at the Saints-Pères Paris Institute for Neurosciences (Université de Paris)

A PhD position, under the supervision of Daniel Zytnicki, is available in the "Motor Neurons and neuromuscular Junctions" team. The position is funded by the Agence Nationale de la Recherche (ANR) for 3 years ("Contrat Doctoral" according to the french legislation). The project entitled **"Restoration of excitation/inhibition balance to modulate motor neuron degeneration in Amyotrophic Lateral Sclerosis (ALS)"** deals with synaptic mechanisms leading to excess or insufficient excitation as the factor driving motor neuron vulnerability in ALS. We will exploit state-of-the-art electrophysiological methods for in vivo intracellular recordings in spinal motor neurons of ALS mouse models, advanced viral vectors, chemogenetics and cutting-edge nanobodies. The project will be carried out in close collaboration with the Roselli laboratory at Ulm University (Germany) under the prestigious ANR-DFG funding scheme. The Roselli Lab will prepare all the AAV vectors, chemogenetic tools and nanobodies to be used in Paris.

The PhD candidate will be trained to perform in vivo electrophysiological experiments in anaesthetized mice (intracellular recordings of spinal motor neurons). Previous experience in electrophysiology or in spinal cord physiology is a plus. The candidate should be motivated, hard worker and rigorous.

The laboratory is located in the Saints-Pères campus of the Université de Paris in the nice area of Saint-Germain des Prés (in the center of Paris, nearby the Louvres Museum and the Orsay Museum). The scientific environment is international and outstanding with word-leading scientists in electrophysiology, cellular imaging, neurophysiology, molecular and cellular biology.

Applications and inquiries should be sent to Dr. Daniel Zytnicki (Daniel.Zytnicki@parisdescartes.fr). Applications must include a CV, a motivation letter, academic records, and two reference letters.

<https://www.sppin.fr/the-teams/team-3-motor-neurons-neuromuscular-junctions-nm-nmj/>