

L'Institut du Cerveau (ICM), recrute
Postdoctoral fellow (H/F) – Basic to translational neurogenetics
Poste à pourvoir 01/09/2022
CDD 3 ans
A Paris 13^{ème}

L'Institut du Cerveau est une Fondation privée reconnue d'utilité publique dont l'objet est la recherche fondamentale et clinique sur le système nerveux. Sur un même lieu, 700 chercheurs, ingénieurs et médecins couvrent l'ensemble des disciplines de la neurologie, dans le but d'accélérer les découvertes sur le fonctionnement du cerveau et les développements de traitements sur les maladies comme : Alzheimer, Parkinson, Sclérose en plaques, épilepsie, dépression, paraplégies, tétraplégies, etc.

POSTE

A 3-year postdoctoral position is open in the team directed by Alexandra Durr (Basic to translational neurogenetics). This team composed of clinicians and researchers focuses on hereditary spastic paraplegias, a group of genetically-encoded neurodegenerative diseases characterized by spasticity or rigidity in the lower limbs. This group of diseases is genetically highly heterogeneous, with more than 60 genes associated with HSP so far. However, even within single genetic entity, there may be high phenotypic variability that is still unexplained (Darios et al, 2022). The SPG4 form of HSP, due to mutations in the SPAST gene, is responsible for the most frequent form of autosomal dominant HSP (Solowska & Baas, 2015). SPG4 is characterized by extreme variability of age at onset despite a shared causal genetic variant (Parodi et al, 2018; Solowska & Baas, 2015). Modifying factors, genetic or environmental, could explain part of the variability and be the target for future therapeutic intervention. The team recently identified a genetic modifier associated with age at onset in SPG4 patients.

MISSIONS PRINCIPALES

The objective of the project is to investigate the mechanisms of action of this modifier gene. Based on the knowledge gained from these mechanisms we aim to develop new therapeutic strategy for SPG4 patients. The project will use induced pluripotent stem cells and drosophila model, coupled to imaging methods to investigate how SPG4 mutation or the modifier gene may affect neuronal function. The host institute allows researchers to have access to 20 platforms dedicated to *in vivo* functional exploration in humans and animals, as well as cellular and molecular explorations.

PROFIL

SAVOIR-FAIRE

- experienced researchers with a doctoral degree related to biological sciences
- experience with induced pluripotent stem cells or neuronal models in vitro

SAVOIR

- expertise in microscopy/live imaging and image analysis
- knowledge in (human) genetics
- knowledge in biochemistry or molecular biology will be an asset

SAVOIR-ETRE

- We are seeking a highly motivated, enthusiastic and autonomous fellow with strong organization skills and a high degree of independence.
- Strong team spirit

CV à envoyer à : recrutement@icm-institute.org en indiquant Poste « *Postdoctoral fellow (H/F) – Basic to translational neurogenetics* »