

**PUCCIO laboratory** Institut Neuromyogène - INMG University of Lyon, France



## AtaxiaXplorer Common pathways underlying Purkinje neuron degeneration in Cerebellar Ataxias

## A 3-year funded postdoctoral position is available in the Puccio Laboratory at the Institut Neuromyogène in Lyon (France).

Our group focuses on hereditary cerebellar ataxias, rare neurodegenerative disorders that affect the cerebellum and/or the spinal cord. Our group is interested in unraveling the pathophysiological mechanisms implicated in cerebellar ataxias, with a particular focus on cerebellar ataxias linked to mitochondrial dysfunction. Furthermore, we aim at developing therapeutic approaches to cure these devastating diseases. We address these fundamental and medical questions by combining human genetics, mouse genetics, biochemistry, molecular and cell biology, pharmacology and AAV-based gene therapy. Cerebellar ataxias represent a heterogeneous group of genetically inherited neurodegenerative diseases that is most often caused by Purkinje neuron dysfunction. Despite different genetic mutations causing cerebellar ataxia, the current research landscape points out toward substantial overlap of disease pathways. However, there is yet no comprehensive molecular analysis of degenerative mechanisms, and in particular in Purkinje neurons, that could prioritize molecular targets for therapeutic development. The overall objective of the research project is to identify common pathways underlying cerebellar cell-type vulnerability across cerebellar ataxias, with a major focus on Purkinje Neurons. The project is supported by the Fondation pour la Recherche Médicale (FRM). More information on the team can be found on the <u>Puccio Lab Web site</u>.

**Profile:** 3-year position for 1 postdoctoral researcher. Candidates must be highly motivated and have a PhD in biological science or neuroscience. Hands-on experience with molecular and cellular biology techniques applied to mouse brain characterization is required. Prior experience with RNA sequencing (single cell or bulk), other -omics technologies and bioinformatics would be an asset. Experimental animal certification level 1 or equivalent would be an asset. French speaking is NOT a requirement. Ability to work independently and within a team environment, computer literacy and good communication skills are required.

**When/how to apply:** Starting date September 2021, but due to the pandemic restrictions, we will accommodate the selected candidates. Deadline for submission is fixed to May 31st 2021. Please send your application in a single pdf (3 pages max), including your CV, summary of your previous research experiences, and contact information of 2-3 references to: <u>helene.puccio@inserm.fr</u>

**About us:** The Puccio group is provided with a fully equipped molecular and biochemistry laboratory, and is embedded in a highly collaborative and multidisciplinary environment at the Institut NeuroMyoGène, in the highly dynamic and international city of Lyon, France. The project is in close collaboration with the group of Yvon Trottier (IGBMC, Illkirch). The candidate will benefit from an excellent work environment, including various state-of-the art research facilities in the Lyon-Est campus. Lyon is considered as one of the most attractive metropoles in Europe, with a strong signature in biological science, architecture, & gastronomy





