

A PhD fellowship position is available in the Dr Raoul team at The Institute for Neurosciences of (Motoneuron team, sclerosis lateral amyotrophy, ionic channels group (Dr F. Scamps). <http://www.inmfrance.com/inmfrance-j3/index.php/fr/motoneurone-fr>). Starting date October 2022, duration 36 months.

Functional analysis of specific molecular markers of ALS vulnerable motoneurons

Amyotrophic lateral sclerosis is a complex multifactorial disease leading to progressive muscle exhaustion and degeneration of upper and lower motoneurons. The loss of motoneurons begins with the population involved in intense muscular effort. Several studies, including our own, have pointed to the role of electrical activity in disease progression. This led us to perform RNA sequencing on motoneurons electrically identified as being vulnerable or resistant to the disease (Patch-seq). The sequencing results led us to identify several markers of these populations. The project aims to analyze the role of the most pertinent candidates in ALS pathogenesis.

The laboratory uses electrophysiological (e.g. patch-clamp), imaging techniques, genetic mouse ALS models, biochemical, and molecular approaches to investigate the cellular aspect of ALS disease.

Required Qualifications: Electrophysiology-immunofluorescence-in vivo siRNAtransfection-mice locomotor behavior.

Application Special Instructions:

To apply, send a CV, a cover letter stating research interests and qualifications, and references to cedric.raoul@inserm.fr and frederique.scamps@inserm.fr