

Three-year fully funded PhD at the University of Strasbourg (France) in Neuroendocrinology and ALS

Description:

We are seeking a highly motivated PhD candidate to join our research team in the field of Neuroscience, to investigate the **central hypothalamic control of metabolism in Amyotrophic Lateral Sclerosis (ALS)**. The disease affects the motor neurons and causes motor symptoms, but there is evidence of metabolic changes before the onset of motor symptoms. Our research has shown that a hypermetabolism is present in ALS patients and animal models and has an impact on the clinical onset of the disease. The goal of this PhD opportunity is to investigate the central mechanisms involved in correcting metabolism in ALS using rodent models and especially investigating the role of MCH in the disease. Chemogenetic stimulation of hypothalamic neurons and metabolic challenges in ALS models will allow studying the **transcriptome, metabolome and general metabolism**. The successful candidate will be part of a dynamic and interdisciplinary research group (mixing clinicians, bioinformaticians, physiologists and cellular & molecular biologists) and will have the opportunity to develop and implement innovative research projects in the field of ALS in a new institute. The research will involve *in vivo* experiments, as well as the use of cutting-edge technologies and computational approaches. Previous experiences will be highly regarded.

Requirements:

- A Master degree in Neuroscience or a related field
- Experience working with animal models and indirect calorimetry
- Strong interest in neuroanatomy
- A passion for research and a desire to contribute to a clinical subject
- Strong laboratory skills and experience in physiology
- Experience in analysing metabolic data and complex data (Python, R, etc.)
- Excellent written and oral communication skills
- Strong motivation to pursue a PhD and a passion for research in Neuroscience

This is a three-year fully funded PhD program within an English-speaking INSERM unit at the University of Strasbourg, located in the newly built CRBS institute on the Medical Faculty campus. The successful candidate will have the chance to work in a dynamic and supportive research environment, with access to cutting-edge facilities and technology.

Strasbourg is an international city, capital of the European Union, close to Germany and Switzerland.

To apply, please send a cover letter, CV, and the names of two referees (as a single pdf) as soon as possible to Dr Matei Bolborea (mbolborea@unistra.fr) & Dr Luc Dupuis (luc.dupuis@inserm.fr) before the 30th of June 2023. Starting day: autumn 2023.