

# Postdoctoral Researcher

## Develop innovative high-resolution mass spectrometry techniques related to the project

The laboratory LEMM (Drug Metabolism Research Laboratory) at CEA, in collaboration with the Institute of Memory and Alzheimer's Disease, the neuropathology department, and the Department of Metabolic Biochemistry at University Hospital Pitié-Salpêtrière (Paris), invites application for a position of Postdoctoral Researcher.

### **Position's description :**

Extensive characterization and quantification of proteins associated with neurodegenerative diseases is crucial for the understanding of molecular mechanisms and identification of relevant biomarkers for positive diagnosis.

In these objectives, the Postdoctoral Researcher will develop innovative high-resolution mass spectrometry techniques related to the project, in particular in the fields of quantitative top-down and bottom-up mass spectrometry, in order to precisely characterize the proteoforms and post-translational modifications of biomarkers in tissues and biological fluids from patients with neurodegenerative diseases.

As a consequence, he/she will need a solid grounding in protein mass spectrometry and the handling of human biological samples. The post-doc also aims at applying such methods to clinical cohorts, including data analysis and interpretation. The project will require writing scientific articles or reports.

Core activity of the laboratory is the development of innovative analytical methods based on mass spectrometry (*Hansbauer EM et al, Anal. Chem 2017, Viodé A et al, Front Neurosci. 2018, Viodé A et al, Analyst 2019, Dubois C et al, J Proteome Res. 2020*). Further information on CEA at <http://www.cea.fr/drf/english/>.

### **Contract :**

The position is available for a period of 24 months, with an expected starting date 1<sup>st</sup> December 2020, and is located at laboratory LEMM (Saclay, 20 km south of Paris, France).

### **Requirements :**

The candidate will hold a doctoral degree in analytical chemistry or biochemistry. Prior research experience in mass spectrometry-based quantitative proteomics is required. Enthusiasm for interdisciplinary research, ability to work in a team and good English skills are expected

Applications should be written in English or French comprising a statement of motivation and research interests, a CV, a full publication list, and the names of two referees.

These files should be sent by email to: [sandrine.leblois@cea.fr](mailto:sandrine.leblois@cea.fr) and [francois.becher@cea.fr](mailto:francois.becher@cea.fr)