Postdoctoral Scientist (M/F)

Environment

The Laboratory of Signalling and Cardiovascular Pathophysiology (UMR-S 1180) is a joint INSERM and University Paris-Saclay funded research unit. It is part of the Faculty of Pharmacy of the University Paris-Saclay. It is located since 2022 in a brand new building in Orsay (25 km south of Paris, France), right in the middle of the Paris-Saclay Cluster. The general goal of the Unit is to better understand the molecular and cellular mechanisms by which physiological and pathological stimuli act on cardiac function through membrane receptors, ion channels, cyclic nucleotides, energetic metabolism and intracellular compartments, both structural (contractile proteins, sarcoplasmic reticulum, mitochondria, nucleus) and dynamic. The characterization of the underlining signaling cascades is necessary for the identification of new therapeutic targets and molecules to improve heart function and clinical outcomes. This aspect is explored within the core facilities and complementary skills available at our Faculty of Pharmacy. Check our website: https://www.inserm-u1180.universite-paris-saclay.fr

Scientific project

Cardiac myocytes have a surface membrane and a dense network of transverse tubules (TT), which are invaginations of the surface membrane that penetrate deep into the cell interior. Many membrane proteins are localized in both the surface and TT membranes: this is the case for ß-adrenergic receptors. Our goal is to explore the function of ß-adrenergic receptors in these two membrane compartments. The experiments will be performed in isolated ventricular myocytes from both male and female animals. The 4-year project funded by ANR (Agence Nationale de la Recherche) involves three other laboratories involved in physical chemistry, biochemistry and molecular modelling, all located close to our lab. The budget finances a full-time scientist position at UMR-S 1180, starting as soon as 1st February 2024 and lasting for 30 months.

Qualifications

Applicants should have a PhD and (ideally) a few years of postdoctoral experience. A background in cardiac electrophysiology and/or fluorescent microscopy is desirable. Independence and strong motivation are required. The job will require skills in cell physiology, microscopy, patch-clamp, single cell contractility, protein expression/purification, biochemical assays, cell culture, etc., as well as data analysis and science communication. Fluency in English is required.

Our offer

We offer the special opportunity to contribute to an exciting new interdisciplinary scientific project. The postdoc will benefit from all laboratory expertise as well as from a large number of core facilities. Our worldwide collaborative network is substantial and offers many opportunities for professional development. The salary will depend on qualifications and professional experience and is calculated in accordance with INSERM salary scales.

Please send your cover letter and complete application documents with CV, references/recommendation letters to rodolphe.fischmeister@inserm.fr. Please indicate "Postdoctoral Scientist" in the subject line.