

Post-doctoral researcher in Cardiac Electrophysiology

Research Laboratory : Inserm U1045 CRCTB, LIRYC – Electrophysiology and Heart Modeling Institute.

Project title : Mechano-electric Coupling in the Healthy and Pressure-Overloaded Right Ventricular Outflow Tract

Scientific fields : Cardiac electrophysiology, Mechanosensitivity

Keywords : Right ventricle, Arrhythmia, Cytoskeleton, Stretch-activated channels

Start date: 01/03/21

Project context and missions

The candidate will work within the Tissular Electrophysiology team at the IHU Liryc, the Electrophysiology and Heart Modeling Institute of Bordeaux (<https://www.ihu-liryc.fr/en/>). Liryc is a world-renowned multidisciplinary center of excellence led by Prof. Michel Haïssaguerre aiming at understanding cardiac rhythm disorders and improving their treatment. The position is currently funded for 2 years.

The candidate primary research will focus on completing the aims of a project funded by the French National Research Agency titled: Mechano-electric Coupling in the Healthy and Pressure-Overloaded Right Ventricular Outflow Tract (<https://anr.fr/Project-ANR-18-CE14-0027>). This translational project investigates arrhythmogenic mechanisms associated with acute and chronic right ventricular outflow tract (RVOT) stretch in large animal models and human donor hearts through an integrative approach using state-of-the-art techniques ranging from *in vivo* down to molecular levels. The candidate will specifically focus on the role of specific stretch-activated ion channels and their interaction with the cytoskeleton.

Profile

We are looking for an enthusiastic, self-motivated post-doctoral researcher who is able to work independently. The main research tasks for the candidate will include designing experiments, performing functional experiments on isolated ventricular myocytes (axial stretch, cellular electrophysiological recordings and fluorescence imaging), analyzing data, presenting at national and international conferences and writing scientific articles. A good knowledge of cardiac (electro)physiology and proficiency in at least one of the above-mentioned cellular techniques are strongly recommended.

Salary

Gross salary per annum: 31 to 35 k€ based on experience

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