

## Engineer-Electrophysiologist (M/F)

Fixed-term contract – Engineer/Other - 12 months (renewable)

Degree: Bac+5 / Master

IPMC-CNRS Sophia-Antipolis, University of Côte d'Azur

Salary according to the diploma and experience, following the grids of the French public service

Starting date: February 2, 2022

Send application to : [chatelain@ipmc.cnrs.fr](mailto:chatelain@ipmc.cnrs.fr) ou [lesage@ipmc.cnrs.fr](mailto:lesage@ipmc.cnrs.fr)

**Keywords :**

Patch-Clamp, Ion channels, Pharmacology, Molecular mechanisms of pain, Molecular biology.

**Description**

Position available at the Institute of Molecular and Cellular Pharmacology (IPMC) (<https://www.ipmc.cnrs.fr/cgi-bin/site.cgi>). This joint research unit under the dual supervision of the CNRS and the Université Côte d'Azur is located in the university campus of Sophia-Antipolis in the commune of Valbonne. The person recruited will work in the team "Physiology and physiopathology of ion channels", led by Florian Lesage and under the supervision of Dr Franck Chatelain. The main project concerns the pharmacological screening of a library of chemical compounds as potential modulators of a potassium channel from the K2P family. The recruited engineer will also be involved in the development of a research project to characterize the electrophysiological profile of sensory fibers of a transgenic mouse expressing a modified potassium channel.

**Description of the position**

The candidate will be in charge of the pharmacological characterization of a library of chemical compounds for their efficiency in modulating a potassium channel of the K2P family. He/she will have to ensure the solubility and the conservation of these compounds. He will be responsible for his electrophysiology workstation and, using the Patch Clamp technique, will record in a stable eukaryotic cell line, the potassium currents generated by a K2P channel in the presence and absence of these compounds. He will also be in charge of the maintenance of this cell line and the induction of the channel expression. In parallel to this pharmacological screening program, the candidate will record the action potentials of neurons derived from DRG of transgenic mice expressing a potassium channel with modified ion selectivity.

**Skills required**

1. Expertise in electrophysiological recording techniques (Patch Clamp in Cell Attached/Excised, Two Electrode Voltage Clamp, Current Clamp,...)
2. Expertise in electrophysiology analysis software.
3. Expertise in cell culture techniques for stable lines and primary cultures.
4. Experience in the biology of membrane proteins.

**Desired profile**

1. Master or engineer in experimental biology
2. Successful experience in electrophysiology
3. Organizational skills, synthetic reporting of scientific results.
4. Ability to synthesize and write in English is essential.
5. Good communication with biological researchers, interest in biological issues.
6. Ability to work in a team, to listen and to make proposals. Autonomy.
7. Skills and experience in molecular biology would be an asset.

