

Postdoctoral position in ion channel function

A postdoctoral position, funded by the Swiss National Science Foundation, is available in the laboratory of Stephan Kellenberger at the Department of biomedical Sciences (DSB) of the University of Lausanne. Our laboratory works towards a molecular understanding of the activation mechanisms of the "acid-sensing ion channels"(ASICs). ASICs are neuronal ion channels involved in pain sensation, the expression of fear, and neurodegeneration after ischemia (for review see Kellenberger and Schild, *Pharmacol Rev* 67: 1-35, 2015). The postdoctoral fellow will investigate the ASIC activation mechanism with functional approaches, based on predictions from high-resolution structures and from Molecular Dynamics simulations. To this end, she/he will analyze Molecular Dynamics data and use electrophysiological and fluorescent approaches on mostly recombinantly expressed ASICs.

Your profile

We are looking for a talented and motivated postdoctoral researcher. Applicants need to have a PhD in life sciences or a related domain. They must have relevant experience with electrophysiology (patch-clamp or two-electrode voltage-clamp) and fluorescence approaches, and ideally be familiar with the analysis of protein structures. Additional desired qualifications are a basic knowledge of molecular biology and biochemistry.

What we offer

We are a small, dynamic and motivated team. The position is for 18 months. The DSB, with 18 research teams, offers a stimulating and competitive research environment in modern biology with multidisciplinary expertise (www.unil.ch/dsb). Lausanne, with its university and the EPFL is a center of life science research.

Beginning: December 2024 or January 2025

Applications are invited in the form of a motivation letter, a curriculum vitae, a brief description of research experience and doctoral thesis, and the names and addresses of three academic references, before October 7, 2024.

Contact address for inquiries and for submission of applications: Prof. Stephan Kellenberger, Département de Sciences biomédicales, Université de Lausanne, Rue du Bugnon 27, CH-1011 Lausanne, tel. +4121 692 5422, Stephan.Kellenberger@unil.ch, <https://wp.unil.ch/kellenberger-lab/>

For further information, please consult the following publications that illustrate our approaches:

Molton O, et al., 2024. *Open biology* 14: 240028, 10.1098/rsob.240028

Vullo S et al., 2021. *eLife* 10, 10.7554/eLife.66488