

PhD Student Position in Molecular Engineering of PIEZO Channels

UMR7199 – Team “Ion Channel Engineering” led by Thomas Grutter
Illkirch, France

Start date: Beginning of the year 2024

Deadline: December 31st, 2023

We are looking for a motivated PhD student to develop innovative biophysical approaches for studying PIEZO channels—a recently discovered family of mechanically-activated ion channels involved in touch sensation and regulating blood pressure. Our team has recently pioneered the development of the first light-gated PIEZO channels [see Peralta et al. (2023)]. The project aims to devise innovative biophysical methodologies to interrogate PIEZO function in native systems. Various experimental techniques from diverse disciplines will be utilized, including the design of chemical tools, advanced patch-clamp electrophysiology, piezoelectric-driven devices, light irradiation systems, molecular biology, cell biology, and physiology.

The University of Strasbourg provides a dynamic scientific setting within the beautiful Alsace region. Our team enjoys global recognition for its work on the biophysics of ion channels, particularly for pioneering the development of the first light-gated P2X receptors and PIEZO channels (see selected publications for details).

The successful applicant must hold a Master's degree. We are seeking candidates with backgrounds in chemical biology, molecular biology, biophysics, cell biology or neuroscience. Expertise in ion channel biophysics is advantageous. Moreover, effective written and oral communication skills, initiative, strong interpersonal abilities, and a passion for collaborative work and continual learning are highly desirable.

This position offers a 3-year salary funded by a **UFA grant** (Université Franco-Allemande).

Please send your CV and a one-page cover letter, including at least two references, to Thomas Grutter (grutter@unistra.fr) by December 31st, 2023.

Selection of publications from the host team:

- Peralta *et al.* (2023) *Nat. Commun.* **14**, 1269.
- Harkart *et al.* (2017) *PNAS (USA)* **114**, E3786-E3795.
- Habermacher *et al.* (2016) *eLife* **5**, e11050.
- Lemoine *et al.* (2013) *PNAS (USA)* **110**, 20813-20818.
- Jiang *et al.* (2012) *EMBO J.* **31**, 2134-2143.
- Jiang *et al.* (2011) *PNAS (USA)* **108**, 9066-9071.

