



## *PhD Position in P2X7 Cell Biology and Biophysics*

### Laboratoire de Conception et Application de Molécules Bioactives Illkirch, France

**Start date:** October 1<sup>st</sup>, 2019

We seek to hire a highly motivated PhD student to investigate the function of P2X7 receptors, a family of trimeric transmembrane pores which open in response to ATP binding. One of the key features of these ion channels is their ability to permeabilize cells, a process that allows large molecules (up to 900 Da) to cross plasma membrane. Although this process has been first described 40 years ago, the molecular mechanism still remains elusive. In this project, we are willing to explore this mechanism by combining different experimental approaches, such as patch-clamp electrophysiology, cell imaging, molecular biology, chemical labelling and cross-linking.

The University of Strasbourg offers a highly dynamic social and scientific environment in a very nice place. The host team has worldwide recognition for its work on the structure and function of ATP-gated P2X receptors, and especially, for his pioneering work of the first light-gated P2X receptors.

The successful candidate must have a Master degree in one of the following disciplines: chemical biology, molecular biology, biochemistry or neuroscience.

The position has salary for 3 years co-funded by **ciFRC** (Chemistry Research Foundation) and the **Région Grand Est**.

Candidates should send a CV (including at least two references) and a motivation letter to Thomas Grutter ([grutter@unistra.fr](mailto:grutter@unistra.fr)).

#### Selection of publications from the host team:

- 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.