PhD position (50% TV-L E13) in P2X7 receptor signaling
Associated with the SFB 1328 "Adenine nucleotides in immunity and inflammation"
(https://www.sfb1328.de, Project A15)

We offer an exciting research project aiming to identify the molecular mechanisms of P2X7 receptor signaling and its involvement in immune cell function and migration. The P2X7 receptor is an ATP-gated ion channel and key mediator of inflammation. Its activation results in a variety of effects (e.g. cytokine secretion, cell morphology changes, apoptosis) that are incompletely understood (Kopp et al. Front. Mol. Neurosci.). In the proposed project we aim to use P2X7 knock-out and BAC transgenic P2X7-EGFP mouse models (Kaczmarek-Hájek, Zhang, Kopp et al., eLife, 2018) in combination with biochemical (cross-linking mass spectrometry), biophysical (two-electrode voltage clamp, voltage clamp fluorometry) and functional approaches (migration assays, fluorescence imaging) to identify and validate identified P2X7 interaction partners and possible roles of P2X7 in immune cell function.

Requirements

- We are looking for highly motivated researchers with enthusiasm for basic science and a good background in molecular biology and biochemistry.
- The ability to responsibly plan and perform experiments and to work in an international team is expected.
- Experience in working with genetically modified mice, functional analysis of in channels and cell migration assays is an advantage.

We are an interdisciplinary and international group and integrated in several research networks that enable scientific exchange with leading scientists in the field and multiple training possibilities as well as access to state-of-the-art instrumentation and facilities. The institute is located in the middle of Munich and the Bavarian lakes and Alps can be easily reached by public transport in less than 1h.
Salary is determined according to the German public sector pay scale TV-L.

LMU Munich is an equal opportunity employer committed to excellence through diversity and therefore explicitly encourages women to apply. Disabled applicants with essentially equal qualifications will be given preference.

Please send your complete application (including a letter of motivation, CV with certificates, and two reference letters) in a single pdf file (not exceeding 10 MB) until 29.01.2023

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