

# Research Associate (m/f/x) with a Master's Degree for Joint FWF Project (PhD Student) 30h

Become a part of our prestigious research at the FH Upper Austria as a research associate.

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| <b>FH OÖ Forschungs &amp; Entwicklungs GmbH</b> | Fakultät für Technik und Angewandte Naturwissenschaften | Functional interaction of TTHY2 and ApoE to facilitate lipid transfer |
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## Your Tasks

You will be part of a young, interdisciplinary, and international team working on a fundamental research project in the field of protein-lipid interactions. Your responsibilities will include independently conducting research, writing scientific publications and project reports, and contributing to the preparation of research proposals. You will also work on your doctoral dissertation. Participation in (international) conferences and specialized events is an integral part of your role, as is supervising the scientific theses of our students.

Project Description: The research project, led by B. Plochberger (FH Upper Austria) and R. Dutzler (University of Zurich), explores lipid transport mechanisms in the brain, crucial for brain health and diseases like Alzheimer's. While ApoE plays a key role in lipid transfer, recent findings suggest that TTYH2, previously identified as an anion channel, may act as a catalyst in this process. Using advanced techniques like atomic force microscopy, super-resolution microscopy, and cryo-electron microscopy, the study investigates how TTYH2 and ApoE interact and how factors like ApoE type and membrane environment affect lipid exchange. This research bridges molecular biophysics and structural biology, paving the way for new insights into diseases and potential therapeutic strategies.

## Your Profile

You hold a completed Master's degree in a scientific, molecular biology, or technical field such as (Bio)Physics, Biology, Molecular Biology, Analytical Chemistry/Biochemistry, or a related discipline. Ideally, you have experience in membrane biophysics, lipid-lipid/protein interactions, and biological in vitro systems (cell culture, ion channels, lipid metabolism), as well as in fundamental biophysical techniques (atomic force microscopy, high-resolution microscopy, single-molecule techniques). Additionally, you possess basic skills in statistics and IT. You have strong problem-solving abilities and excel at working independently in a scientific setting. Proficiency in both written and spoken English completes your profile. This position is limited to a duration of three years.

## Key Facts

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| <b>Salary</b><br>Salary on a full-time basis € 3.700,- / month   | <b>Contact person</b><br>Priv.Do. Prof.-FH Dipl.Ing Dr. Birgit Plochberger                                  |
| <b>Requirements</b><br>University or higher education degree at master level                                   | <b>Telephone number</b><br><u>+43 660 9265792</u>   |
| <b>Location</b><br>Fakultät für Technik und Angewandte Naturwissenschaften,<br>Garnisonstraße 21,<br>4020 Linz | <b>Degree program / Department</b><br>Functional interaction of TTHY2 and ApoE to facilitate lipid transfer |
| <b>Employment type</b><br>Part-time  |   |

## Putting the thesis in prosthesis!