



The Unit of Physiology and Biophysics (Department of Biomedical Sciences) is doing research with a main focus on Membrane Biophysics (<http://www.vetmeduni.ac.at/biophysik>).

We are looking for a

PhD Student in Biophysics/Electrophysiology

Full-Time-Position for 36 months
The earliest starting day is October 1st, 2019

We invite you to be a part of the EU Research Framework Programme H2020 / Marie Skłodowska-Curie Actions "PROTON".

<https://www.jku.at/institut-fuer-biophysik/forschung/forschungsprojekte/proton/>

We look for students holding or very close to completing their Master degree in (Bio)Physics, (Bio)Chemistry, Biological Engineering or Molecular Biology and interested in membrane biophysics and structure/function of mitochondrial proteins.

You are eligible to apply if you are: (i) in the first three years (full-time equivalent) of your research career; (ii) have not resided or carried out your main activity (work, studies, etc.) in Austria for more than 12 months in the 3 years immediately prior to their recruitment; (iii) are competent in written and spoken English.

Your responsibility will be measurements of the transport function of transmembrane proteins and their mutants in artificial lipid membranes and giant liposomes.

For an exact description of the project please see

https://vetdoc.vu-wien.ac.at/vetdoc/suche.projekt_uebersicht?sprache_in=de&menue_id_in=300&id_in=12602

Please send your application (letter of motivation, detailed CV) to elena.pohl@vetmeduni.ac.at (0043/1/25077-4571).

Please indicate 1-3 persons for the references.

For an introduction to the topic please see recent publications

- 1) Rupprecht et al. (2010) Role of the transmembrane potential in the membrane proton leak. *Biophys. J.* 98, 1503-1511
- 2) Jovanovic, O., Pashkovskaya, A.A., Annibal, A., Vazdar, M., Burchardt, N., Sansone, A., Gille, L., Fedorova, M., Ferreri, C., Pohl, E.E. (2015) The molecular mechanism behind reactive aldehyde action on transmembrane translocations of proton and potassium ions. *Free Radical Biology and Medicine*
- 3) Macher, G., Koehler, M., Rupprecht, A., Kreiter, J., Hinterdorfer, P., Pohl, E.E. (2018) Inhibition of mitochondrial UCP1 and UCP3 by purine nucleotides and phosphate. *Biochim Biophys Acta* 1860, 664–672
- 4) Pohl, EE., Rupprecht, A., Macher, G., Hilse, KE (2019) Important Trends in UCP3 Investigation. *Front Physiol.* 2019; 10:470