

Individual Research Projects:

1.	1. Lateral Proton Migration along lipid membranes	Prof. Peter Pohl
2.	2. Proton Uptake from the membrane surface by membrane channels and transporters	Prof. Peter Pohl
3.	3. Second harmonic (SH) Imaging of charge, water and proton mobility on free standing lipid membranes	Prof. Sylvie Roke
4.	4. Ion channels as seen by water	Prof. Sylvie Roke
5.	Biomimetic synthetic self-assembled proton channels	Dr. Mihail Barboiu
6.	Proton transport on the hydrated surfaces of Green Fluorescent Protein (GFP) and collagen fibrils and mats	Prof. Noam Agmon
7.	Mechanism of the proton transport activation in UCPs	Prof. Elena Pohl
8.	Protozoal and human proton-coupled lactate transport: molecular mechanisms and drug-like inhibitors	Prof. Eric Beitz
9.	Proton-gating of the urea channel (Urel) from the human gastric pathogen <i>Helicobacter pylori</i>	Dr. Harmut Luecke
10.	Proton transfer at anionic membrane interfaces	Prof. Ana-Nicoleta Bondar
11.	Formate nitrite transporters: proton-coupled transport and inhibitor design from MD simulations	Prof. Jochen Hub
12.	Molecular characterization of the mobility and hydration of the function-relevant region of the urea channel HpUrel located at the vicinity of the proton sensitive loop	Prof. Martin Hof
13.	Proton-sensing mechanism of GPR68	Dr. Herbert Nar
14.	Application of FCCS to analyse reconstituted membrane proteins in Giant Unilamellar Vesicles (GUV) and related artificial membranes, using the example of the proton channel H _v 1	Dr. Stefan Hannus
15.	Mitochondrial Uncoupling Proteins: proton channels or proton-fatty acid co-transporters?	Dr. Harmut Luecke