

GRK 2576 Guest Lecture

Title: The Adhesion-GPCR Latrophilins: novel players in the regulation of insulin release

Speaker: Prof. Dr. Simone Prömel

Professor and Head of the Institute for Cell Biology,
Heinrich-Heine-University Düsseldorf

Date: 20. October 2021

Time: 14:00 h CET

Location: virtual - Cisco Webex

(<https://hhu.webex.com/hhu-en/j.php?MTID=mab9c34e849a9fab4ea99e5f92fe62960>)

Meeting number (access code): 2731 107 6572

Meeting password: siWGM6JpT84

Biography



Prof. Dr. Simone Prömel studied biochemistry at the *Freie Universität Berlin* and gained her diploma in 2006. Subsequently, she moved to the Institute for Biochemistry at the University of Oxford where she investigated the molecular mechanisms of latrophilin signaling. There she obtained her doctorate (D.Phil) in 2010. After a two year long research stay at the Weatherall Institute of Molecular Medicine in Oxford, she returned to Germany in 2012 as a junior group leader at the Rudolf-Schönheimer Institute for Biochemistry at the University Leipzig. Simone Prömel was awarded a full professorship at the Heinrich-Heine University Düsseldorf in January 2021, and since that time she is head of the Institute for Cell Biology.

Professor Prömel investigates signaling mechanisms and the relevance of adhesion-G-protein coupled receptors (aGPCR) in different biological processes. aGPCR play important roles in immunological, metabolic and neurological processes as well as in central physiological functions like cell polarity. Mutations in aGPCR are supposed to contribute to severe diseases like the Usher syndrome, the bilateral frontoparietal polymicrogyria, and several tumors. Simone Prömel focuses on the functions of aGPCR in developmental processes, metabolism as well as in the modulation of diseases like diabetes and adipositas. For more insights please see <https://www.zellbiologie.hhu.de/en/research>.

Selected recent publications

Gershkovich MM, Groß VE, Vu O, Schoeder TC, Meiler J, **Prömel S**, Kaiser A (2021) Structural perspective on ancient neuropeptide Y -like system reveals hallmark features for peptide recognition and receptor activation. *J Mol Biol.* 15:166992. doi: 10.1016/j.jmb.2021.166992. Online ahead of print

Gershkovich MM, Groß VE, Kaiser A, **Prömel S** (2019) Pharmacological and functional similarities of the human neuropeptide Y system in *C. elegans* challenges phylogenetic views on the FLP/NPR system. *Cell Commun Signal.* 17(1):123. doi: 10.1186/s12964-019-0436-1.

Röthe J, Thor D, Winkler J, Knierim AB, Binder C, Huth S, Kraft R, Rothemund S, Schöneberg T, **Prömel S** (2019) Involvement of the Adhesion GPCRs Latrophilins in the Regulation of Insulin Release. *Cell Reports* 26(6):1573-1584

***Information on access:** please visit <https://www.vivid.hhu.de/qualification-program/guest-lectures> Contact: Dr. Nicole Rockel, +49-211-3382-558, vivid@hhu.de