

EINLADUNG

zum Vortrag im Rahmen des Seminars des SFB/TRR 31

Freitag, 12. Dezember 2014, 14 Uhr c.t.

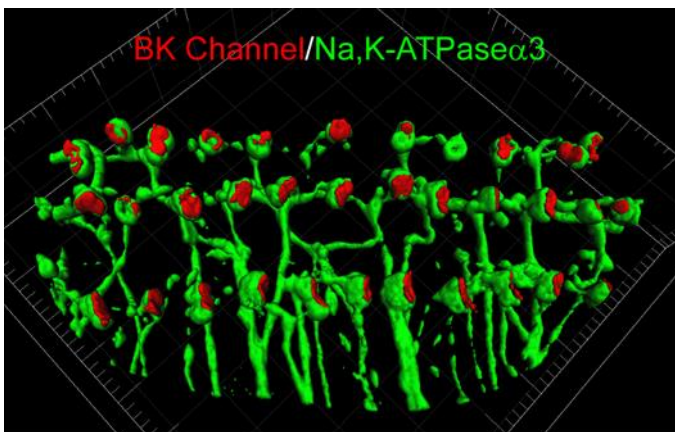
im Raum W2 1-143 der Universität Oldenburg
und Raum H28 / R 2.31 des Med. Campus Magdeburg
(per Videoübertragung)

"From molecule to mechanism: understanding the function of the efferent auditory system one ion channel at a time"

Sonja Pyott

University Medical Center Groningen

Work in Dr. Sonja Pyott's laboratory, now at the University Medical Center Groningen, uses a variety of electrophysiological, optical, and genetic techniques to understand the molecular functioning of the auditory and vestibular periphery. Her research is particularly focused on understanding the synaptic relays between the sensory hair cells and brain. This talk will review recent work examining the contribution of the calcium- and voltage-activated BK potassium



channel to function of the inner ear and especially the auditory efferent system.

Examination of BK channel knockout mice has provided insights into the molecular functioning of efferent synapse in mammals and has also permitted investigation of some of the proposed contributions of the mammalian efferent system, including protection from acoustic injury, enhanced

sensitivity and frequency detection, and development of cochlear function. Future research aims to investigate the role of other related potassium channels.