

The KFO5001 ResolvePain cordially invite you to a hybrid-lecture of the visiting scientist

**Apl. Prof. Dr. Barbara Namer,
Uniklinikum of the RWTH Aachen**

on 31st March 2023, 13.00 h

A3 Hörsaal ZIM 1, Uniklinikum Würzburg
- Snacks provided -

or

<https://uni-wuerzburg.zoom.us/j/62165669189?pwd=QnJGczgxYm5pL3NMcTUwQnExVG9oUT09>

Meeting-ID: 621 6566 9189, Passwort: 405844



“Dysfunction of small fibers relevant for neuropathic pain - insights from microneurography”

About the speaker:

Barbara Namer, M.D., apl. Prof. is currently leading the research group „Neuroscience: translational pain research“ funded by the interdisciplinary center for clinical research (IZKF) at the university hospital of the RWTH Aachen Germany. She combines her medical background as physician including some experience in clinical neurology with her keen interest in basic functions of peripheral neurons for investigating translational aspects of itch and pain research. Her main technical expertise is microneurography, an electrophysiological technique that records single action potentials from single nerve fibers in conscious humans, including patients with neuropathic pain or itch. Microneurography of nociceptors/pruriceptors is currently performed only in about 6 laboratories world-wide. For over two decades, Barbara Namer has explored the properties of different nociceptor classes in humans, which form two input systems to the brain with different roles in itch and pain. Her research has contributed to the understanding of peripheral nociceptors in neuropathic pain showing that spontaneous activity in a special subclass of nociceptors is a correlate to the peripheral component of neuropathic pain. Further, she elucidated signaling mechanisms of non-histaminergic itch. In the past decade, a main focus of her lab was on the influence of voltage gated sodium channels on neuropathic pain scrutinizing the nerve fiber function in patients with sodium channel mutations leading to monogenic painful diseases. More recently, she has expanded her focus to incorporate modern technologies and computational progresses for better recording techniques and detailed analyses of signal coding in peripheral sensory neurons. This will bring microneurography a major step forward as a valuable research tool for human peripheral nerve fibers and as a diagnostic tool for small fiber neuropathy and neuropathic pain.