

Joern Steinert's research interests

My research interests lie in elucidating mechanisms of regulating neuronal function and synaptic transmission under physiological conditions and in neuropathology. I study glutamatergic neurotransmitter release with particular interest in the effects of redox signalling and how, for instance, nitric oxide is involved in regulating release mechanisms in physiology but also in neurodegenerative conditions. For my studies I use mouse, cell culture and *Drosophila* (larval neuromuscular junction and adult CNS) models. With my main background in neurophysiology I employ electrophysiological and live imaging techniques to uncover new pathways of modulating synaptic release events and vesicle recycling as well as controlling activity-dependent mechanisms to set neuronal excitability.