



Sensory Processes: From Molecules to Cognition

April 12 - 13, 2016, Veranstaltungszentrum, Ruhr University Bochum

Tuesday April 12, morning (9:25 – 12:35)

Session 1 Cellular Mechanisms

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The dynamic architecture of the adult visual cortex or how can I keep my brain young?

My lab is focussed on understanding the development and plasticity of neuronal circuits in the mammalian cortex. We use a combination of techniques, including various imaging/physiological techniques and behavioural analyses to explore how experience and learning influence the structure and function of nerve cell networks and how activity patterns and genetic factors influence these processes.

In my lecture, I will focus on very recent experiments about the role of various stimulating environments on visual cortical plasticity in mice. In addition, I will present a completely new molecular mechanism governing both the duration of a critical period in early postnatal development and the maturation of nerve cell contacts.

