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EXTINCTION LEARNING: THE NEURAL, BEHAVIOURAL, ONTOGENETIC, EDUCATIONAL, AND CLINICAL MECHANISMS

April 24 - 25, 2018 Veranstaltungszentrum, Ruhr University Bochum

Wednesday	April 25, 13:10 – 16:00
Session 4	Bridging the gap – Implications for psychopathology

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Tracing the dynamic representations of emotional memories in humans

The last two decades of neuroscientific research have produced many new insights on the representation and dynamic nature of memory. This research is not only relevant for our conceptualisation of memory, but also highly relevant for clinical science as it has generated new and promising hypotheses on the malleability of emotional memories. In humans, the study of memory representations relies on neuroimaging techniques such as functional Magnetic Resonance Imaging (fMRI). However, traditional approaches to analyse fMRI data do not take into account that memory representations are ever-changing. In this talk, I will present a series of experiments in which we applied multi-voxel pattern analysis (MVPA) to fMRI data collected during aversive conditioning, in order to specifically capture the dynamic processes related to the formation and extinction of associative fear memory. I will consider the potential of such techniques for advancing translational research on the development and treatment of psychopathology.





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