

Tuesday March 21, 2017 - 11h30

Conference room AI 1153 (*) - EPFL - Lausanne

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“Cortical and subcortical mechanisms of stress adaptation and pathology”

Host: Prof. Kristina Schoonjans

Abstract:

The organismal stress response is an integrated physiological and behavioral response to actual or perceived threat to homeostasis. The brain plays a central role in orchestrating these stress responses via many interacting circuits in the forebrain, hypothalamus and brainstem. This seminar will discuss prominent hypothalamic mechanisms that integrate distinct brainstem monosynaptic inputs required for the global regulation of stress responses across multiple effector systems. In addition, the seminar will present how reorganization of prefrontal cortical stress-control circuitry in the chronically stressed brain contributes to depression, and how this relates to rapid acting antidepressants such as the NMDA receptor antagonist ketamine or scopolamine, a non-selective muscarinic acetylcholine receptor antagonist. Collectively, these studies demonstrate that stress-induced imbalances among cortical and subcortical circuits play a causal role in the development of maladaptive stress reactions that can culminate in affective diseases.

(*) IMPORTANT NOTICE: All external participants have to pass through SV Reception/Welcome Desk to be able to access to AI 1153.

Contact person to call at arrival at SV Reception Desk: Administrative Assistant: 39522 / Kristina Schoonjans 31891

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