

Thursday April 27th, 2017 - 10h30

Conference room AI 1153 (*) - EPFL - Lausanne

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“Serotonin as a new therapeutic target for diabetes mellitus and obesity”

Host: Prof. Johan Auwerx

Abstract:

Serotonin (5-hydroxytryptamine or 5-HT) is a monoamine that has various functions in both neuronal and non-neuronal systems. Recent studies revealed that peripheral 5-HT plays an important role in metabolic regulation in peripheral tissues. Inhibition of 5-HT synthesis reduced the weight gain and improved the metabolic dysfunction in a diet-induced obesity mouse model. Pharmacological inhibition of 5-HT synthesis suppressed the lipogenesis in epididymal white adipose tissue (WAT), induced beige adipogenesis in inguinal WAT and activated the adaptive thermogenesis in brown adipose tissue. Mice genetically depleted adipocyte serotonin exhibited similar phenotypes, suggesting the localized effects of 5-HT on adipose tissues. These results support the clinical significance of the peripheral serotonergic system as a therapeutic target for obesity and diabetes.

(*) 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: Johan Auwerx 30951 /Administrative Assistant: 39522.

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