

Thursday February 16th, 2017 - 10h30

Conference room AI 1153 (*) - EPFL - Lausanne

Ziheng CHEN

Group of Apoptosis and Cancer Biology, Institute of Zoology, Chinese Academy of Sciences, Beijing, China

“A summary of my interest in Mitochondrial Quality Control”

Host: Prof. Johan Auwerx and Prof. Kristina Schoonjans

Abstract:

To protect against mitochondrial damage from environment including oxidative stress, cell have developed well-coordinated mechanisms to monitor mitochondrial health. These Mitochondrial Quality Control (MQC) mechanisms include mitochondrial dynamic and mitophagy. Here, we uncovered that the mitochondrial E3 ligase MARCH5 plays a role in regulating hypoxia-induced mitophagy by ubiquitylating and degrading mitophagy receptor FUNDC1, revealing a novel feedback regulatory mechanism to control the protein levels of a mitochondrial receptor to fine-tune MQC. As a part of collaborative research project, we have also revealed an unconventional function of non-degradative ubiquitination of Mfns in promoting mitochondrial fusion.

(*) 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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