

# Hippo pathway and tissue regeneration

Leonardo SCHIRONE - *Sapienza University of Rome*

Organ repair and regeneration are essential physiological functions. The Hippo signaling pathway is a highly conserved kinase cascade that has a critical role in cell death and proliferation by controlling YAP/TAZ transcription co-activators. The Hippo pathway is also essential in stem cells' self-renewal and proliferation. In past decades, Hippo pathway activation was linked with increased maladaptive tissue repair and reduced recovery after tissue injury. Murine models of Hippo pathway genetic and pharmacological inhibition showed improved tissue regeneration and reduced fibrotic remodeling in different organs. However, the Hippo pathway is also a tumor suppressor mechanism and caution must be paid in inhibiting its functions in translational applications. This talk will discuss the opportunities and issues associated with Hippo pathway manipulation in different state-of-the-art therapeutic approaches.