

COLLOQUIA IN PHYSIOLOGY AND VASCULAR BIOLOGY

Venue: Medical University Vienna, Center for Physiology and Pharmacology,
Institute of Physiology, SchwarzschanierstraÙe 17, 1090 Vienna,

"Big Lecture Hall Physiology"

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Friday **29.01.2016** 12.00 s.t. **Christos Tsatsanis** (host: G. Schabbauer)
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"Akt signaling, miRNAs and metabolism regulating macrophage responses in inflammatory diseases"

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Abstract:

Macrophages are central mediators of inflammatory diseases, obesity-related pathologies and inflammation-related cancers. Akt kinases mediate a variety of signals, including insulin and Toll Like Receptor signals, controlling cell activation, survival and metabolism. The contribution of Akt kinases in macrophage activation and metabolism as well as in the regulation of micro RNAs that are involved in these processes will be presented. Cellular and mouse models of inflammation, obesity and cancer were used in combination with gene-knockout strategies to understand the role of these signalling cascades in disease. The impact of the same molecules in regulating the gut microbiome, as a key player of immune regulation, will also be presented.