



UniversitätsKlinikum Heidelberg

External Seminar Speaker

Prof. Dr. Ulrich Kintscher

Director of the Institute of Pharmacology
Charité Berlin



Place: Analysezentrum 3, 2. OG, Room 02.332

Date: Tuesday, October 29th

Time: 12 am
1 pm Get together

Adipose tissue lipolysis and cardiac function: from flies and mice

There is increasing evidence that an adipose tissue - heart interorgan crosstalk plays an important role during the pathogenesis of heart failure. We could recently show that adipose tissue lipolysis - the breakdown of triacylglycerols to fatty acids and glycerol - regulates the circulating lipid profile and affects the cardiac lipidome during pressure overload-mediated cardiac failure. More importantly, blocking adipose tissue lipolysis by inhibition of the key lipolytic enzyme, adipose triglyceride lipase (ATGL), results in the prevention of left ventricular failure. This becomes important in the light of recently developed new pharmacological inhibitors of ATGL, which may serve as new therapeutic agents for the treatment of heart failure including HFrEF and HFpEF. This presentation will discuss the role of adipose tissue lipolysis in heart failure development in different pre-clinical models including mice and *Drosophila melanogaster*, and will critically evaluate the clinical relevance of this approach.

Host: **Prof. Dr. med. Johannes Backs**
Director of the Institute of Experimental Cardiology
Department of Internal Medicine VIII
University of Heidelberg