



UniversitätsKlinikum
Heidelberg

External Seminar Speaker

Michael S. Kapiloff, MD, PhD

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Place: Analysezentrum 3, 2. OG, Room 02.332
Date: Friday, December 13th
Time: 12 am
1 pm Get together

Signalosomes – Nodal Regulators and Therapeutic Targets For Heart Failure

An abstract for my talk is as follows: Specificity and efficacy in intracellular signal transduction can be conferred by the anchoring and co-localization of key enzymes and their upstream activators and substrate effectors by scaffold proteins. The Kapiloff lab studies how signalosomes organized by scaffold proteins regulate cellular function in the heart and eye, in particular regarding pathological cardiac myocyte hypertrophy and retinal ganglion cell neuroprotection. A major focus of our laboratory has been the characterization of multimolecular signaling complexes organized by the scaffold protein mAKAP β located at the nuclear envelope in cardiac myocytes. Our research into the mechanisms of mAKAP β signalosome function has evolved now into the preclinical development of mAKAP β -targeted gene therapy for the prevention of heart failure. Separately, research has revealed a new mechanism for calcineurin A β -specific anchoring that confers compartmentation specific for the regulation of cardiac hypertrophy.

Host: **Prof. Dr. med. Johannes Backs**
Director of the Institute of Experimental Cardiology
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