



UniversitätsKlinikum Heidelberg

## 2<sup>nd</sup> "Meet the expert" seminar 2016

Speaker: **Prof. Ajay Shah** 

BHF Professor of Cardiology & Head of Cardiovascular Division

King's College London



## "Tuning cardiac stress responses: A surprising Nox story"

Abstract: The concept that oxidative stress - an imbalance between reactive oxygen species (ROS production) and antioxidant reserves - exacerbates cardiovascular disease is well established, but deceptively simple. ROS in fact can have a wide variety of effects including the precise modulation of cellular signalling pathways. Nox proteins are professional ROS generators that are especially important in redox signalling. Recent work on the complex actions of distinct Nox isoforms in the heart, including their molecular signalling mechanisms and functional impact on cardiac pathophysiology, will be discussed. Nox-dependent fine-tuning of cardiac stress responses may offer novel therapeutic possibilities.

Date: Wednesday, 06.07.2016

Time: 17:00 (refreshments will be served after the seminar)

Venue: Analysenzentrum III, INF 669, Room F02.332

Host: Johannes Backs

Department of Molecular Cardiology and Epigenetics