

SECOND  
INTERNATIONAL  
MUNICH  
**ROS**  
MEETING  
GERMAN HEART CENTER  
MUNICH  
July 6-8, 2018

## Welcome

In the past two decades, reactive oxygen species (ROS) have been found to not only evoke cellular damage but also to affect redox regulations and various signaling pathways important for physiological as well as pathophysiological processes.

The International Munich ROS Meeting has been established in the course of major European consortia funded by EU and the German BMBF such as EU-ROS, Acidox and Epiros as an interdisciplinary forum to discuss the double-faced biology of ROS.

The **2<sup>nd</sup> International Munich ROS Meeting** will continue this path. Internationally renowned experts will discuss the role of ROS and redox regulations in cardiovascular, metabolic and cancer diseases, and in the context of development, regeneration and cell stress responses.

You are cordially invited to participate in this exciting meeting and we are looking forward to welcoming you at the German Heart Center Munich this summer!



Prof. Dr. med. Agnes Görlach



**Deutsches Herzzentrum München**  
des Freistaates Bayern  
Klinik an der Technischen Universität München



## Venue

German Heart Center Munich  
at the Technical University Munich  
Lazarettstr. 36  
80636 Munich  
[www.dhm.mhn.de](http://www.dhm.mhn.de)



## Registration

General admission: **July 1<sup>st</sup>, 2018**  
mail to: [goerlach@dhm.mhn.de](mailto:goerlach@dhm.mhn.de)  
**Admission is free of charge**

## Organizer

Prof. Dr. Agnes Görlach  
Experimental and Molecular Pediatric Cardiology  
German Heart Center Munich at the TU Munich  
Lazarettstr. 36  
80636 Munich  
p: +49 89 1218 2700  
e-mail: [goerlach@dhm.mhn.de](mailto:goerlach@dhm.mhn.de)

## Local Organizers

Dr. Andreas Petry: contact: [petry@dhm.mhn.de](mailto:petry@dhm.mhn.de)  
Damir Kracun: contact: [damir.kracun@gmx.de](mailto:damir.kracun@gmx.de)  
Dr. Sarala Raj Murthy  
Katharina Hochkogler  
Silvia della Morte  
Oliver Czarnecki  
Luisa Lehmann  
Philipp Mutzel  
Sebahat Özer

# Friday, July 6<sup>th</sup>, 2018

<b>14.00-14.15</b>	<b>Welcome</b> Prof. Ulrike Protzer, Vice Dean Medical Faculty, Technical University Munich Prof. Heribert Schunkert, Vice Director, German Heart Center Munich	
<b>14.15-15.15</b>	<b>Opening lecture</b> <i>Chair: Agnes Görlach</i>  Hypoxic signalling and metabolic regulation in heart and skeletal muscle	Thomas Braun Bad Nauheim, DE
<b>15.15-16.45</b>	<b>ROS, cardiac development and remodeling</b> <i>Chair: Jozef Dulak</i>	
15.15-15.45	Hypoxia signaling and metabolic reprogramming of the embryonic heart	Silvia Martin-Puig, Madrid, ES
15.45-16.15	Combinatorial effects of diabetes and Hif1a mutation on cardiovascular development and function	Gabriela Pavlinkova, Prague, CZ
16.15-16.45	Cardiac remodeling, nitric oxide synthases and oxidant stress	Jean-Luc Balligand, Leuven, BE
<b>16.45-17.15</b>	<b>Coffee break</b>	
<b>17.15-19.15</b>	<b>ROS, redox and cell stress</b> <i>Chair: Thomas Kietzmann</i>	
17.15-17.45	A novel brown adipose tissue specific mechanism regulating autophagy	Siegfried Ussar, Munich, DE
17.45-18.15	Ferroptosis mechanisms and pathophysiological relevance	Marcus Conrad, Munich, DE
18.15-18.45	Oxeiptosis – a cell death pathway to mitigate damage caused by radicals	Andreas Pichlmair, Munich, DE
18.45-19.15	On the role of ROS in induction of liver cancer	Matthias Heikenwälder, Heidelberg, DE
<b>19.15</b>	<b>Reception at DHM</b>	

# Saturday, July 7<sup>th</sup>, 2018

08.30-10.30	<b>ROS and cancer</b> <i>Chair: Sonia Rochan</i>	
08.30-09.00	Cellomics of mitochondrial morphofunction	Werner Koopman, Nijmegen, NL
09.00-09.30	Mitochondria at the crossroad: metabolic symbiosis within cancer microenvironment	Paola Chiarugi, Florence, IT
09.30-10.00	Oxidative stress and breast cancer	Semir Vranic, Doha, QA
10.00-10.30	ROS signalling and redox metabolism in angiogenesis and cancer	Massimo Santoro, Padova, IT
<b>10.30-11.00</b>	<b>Coffee break</b>	
<b>11.00-12.00</b>	<b>Keynote lecture</b> <i>Chair: Stefan Burdach</i>	
	Translational control of the oxidative stress response--common pathways across diverse diseases	Poul Sørensen, Vancouver, CA
<b>12.00-13.00</b>	<b>Hypoxia signaling</b> <i>Chair: Silvia Martin-Puig</i>	
12.00-12.30	Mitochondria-dependent regulation of hypoxia signaling	Thomas Kietzmann, Oulu, FI
12.30-13.00	Oxygen sensing by chromatin	Sonia Rocha, Liverpool, UK
<b>13.00-14.00</b>	<b>Lunch break</b>	
<b>14.00-16.30</b>	<b>ROS and metabolic dysfunction</b> <i>Chair: Gabriela Pavlinkova</i>	
14.00-14.30	Non-genetic control of multigenerational health	Raffaele Teperino, Munich, DE
14.30-15.00	NADPH oxidases in metabolic regulation	Ildiko Szanto, Geneva, CH
15.00-15.30	Lipoxygenase products in the cardiovascular system	Christopher Thomas, Cardiff, UK
15.30-16.00	Redox regulation in adipose tissue - Revealing the link between obesity, cardio-metabolic diseases and cancer	Aleksandra Jankovic, Belgrade, RS
16.00-16.30	Macrophage contribution to insulin resistance independently of inflammation	Myriam Aouadi, Huddinge, SE
<b>16.30-17.00</b>	<b>Coffee break</b>	

## Saturday, July 7<sup>th</sup>, 2018

<b>17.00-19.30</b>	<b>ROS, cardiovascular dysfunction and regeneration</b> <i>Chair: Massimo Santoro</i>	
17.00-17.30	Endothelial dysfunction in mice with heart failure driven by cardiomyocyte-specific overexpression of Gαq* protein	Stefan Chlopicki, Krakov, PL
17.30-18.00	Nox5 NADPH oxidase in human vasculature - from atherosclerosis to aneurysm development	Tomaz Guzik, Glasgow, UK
18.00-18.30	Role of Nrf2 and Hmox1 in muscle satellite cells differentiation	Jozef Dulak, Krakov, PL
18.30-19.00	Peroxidasin: a link between reactive oxygen and ECM formation	Miklos Geiszt, Budapest, HU
19.00-19.30	A cell lineage perspective of scar tissue development and diversity	Yuhai Rinkevich, Munich, DE
<b>20.00</b>	<b><i>Dinner at Hofbräuhaus</i></b>	

## Sunday, July 8<sup>th</sup>, 2018

<b>08.30-11.45</b>	<b>ROS: New technologies and perspectives</b> <i>Chair: Paola Chiarugi</i>	
08.30-09.00	EPR 4 ROS. Applications in biology and medicine	Milos Mojovic, Belgrade, RS
09.00-09.30	Facts and artefacts in measurement of H <sub>2</sub> O <sub>2</sub> production – normoxia, hyperoxia, hypoxia	Erich Gnaiger, Innsbruck, AT
09.30-10.00	Extracellular vesicles in cell communication: messengers between neural cells and beyond	Eva-Maria Albers, Mainz, DE
<b>10.00-10.15</b>	<b><i>Coffee break</i></b>	
10.15-10.45	Mitochondrial ROS-mediated redox regulations upon inflammation	Andrey Kozlov, Vienna, AT
10.45-11.15	Mitochondrial ROS in Wilson disease	Hans Zischka, Munich, DE
11.15-11.45	The enigmas of Nox5	Rhian Touyz, Glasgow, DE
<b>11.45-12.00</b>	<b>Wrap up and Farewell</b> Lunch at Restaurant	