

## Meeting Program (as of 21 September 2018)

### Monday, October 8<sup>th</sup>

13:00 **Check-in & Registration**

14:00 **Welcome**

Michael Paolillo & Robert Feil

#### Session 1: Cardiovascular Functions

**Chair: Robert Lukowski**

14:05 **Alexander Pfeifer**, Bonn

*Novel aspects of sGC regulation during vascular disease*

14:30 **Adrian Hobbs**, London

*Vascular and cardiac homeostatic roles for CNP*

14:55 **Philip Eaton**, London

*Redox regulation of PKG - translational opportunities*

15:20 **Thorsten Kessler**, München

*Genetic variants affecting NO-cGMP-signaling in coronary artery disease*

15:45 **Coffee break**

#### Session 2: Emerging Fields

**Chair: Peter Sandner**

16:15 **Dan Zimmer**, Ironwood Pharmaceuticals, Boston

*Discovery, pharmacological characterization and clinical development of broadly distributed and tissue-targeted sGC stimulators*

16:40 **Agnes Benardeau**, Bayer AG, Wuppertal

*sGC activators: Kidney protection and beyond*

17:05 **Renate Pilz**, San Diego

*cGMP/PKG signaling as a target for bone-anabolic therapies*

17:30 **Chris Tonkin**, Melbourne

*cGMP signaling is critical for host cell invasion in the human parasite *Toxoplasma**

17:55 **Philipp Henning**, Kassel

*Cyclic guanosine monophosphate analogues as potential antagonists of the cGMP-dependent protein kinase of *Plasmodium falciparum**

18:10 **Michael Majer**, Regensburg

*Esomeprazole treatment attenuates splenomegaly associated anemia in global IRAG-deficient mice*

18:25 **Group Picture**

18:30 **Get together & Poster session I with snacks and drinks** (ends at 21:30)

Discussion "**Women Researchers in Science**" moderated by Marlies Knipper (participants: female junior scientists, Agnes Benardeau, Miriam Cortese-Krott, Friederike Cuello, Susanne Feil, Renate Pilz) – time and location t.b.a.

## Tuesday, October 9<sup>th</sup>

### Session 3: Visualization, Dynamics & More

**Chair: Franz Hofmann**

- 8:30 **Ralf Middendorff**, Gießen  
*Visualization of cGMP effects in male reproductive organs*
- 8:55 **Michael Russwurm**, Bochum  
*Real-time measurements of cGMP in cardiac and neuronal cells*
- 9:20 **Alexander Gottschalk**, Frankfurt  
*Optogenetic tools for manipulation of cGMP and cAMP, and applications in *Caenorhabditis elegans**
- 9:45 **Roland Malli**, Graz  
*Imaging nitric oxide signals on the level of individual cells*
- 10:10 **Coffee break**
- 10:40 **Viacheslav Nikolaev**, Hamburg  
*Imaging local cGMP and its generating receptors in heart muscle cells*
- 11:05 **Lincoln Potter**, Minneapolis  
*Is the C-type natriuretic peptide-guanylyl cyclase-B system an anabolic bone regulator?*

### Session 4: Neuronal & Sensory Communication

**Chair: Lukas Rüttiger**

- 11:30 **François Paquet-Durand**, Tübingen  
*Targeting cGMP signaling in inherited retinal degeneration: From basic research to clinical translation*
- 11:55 **Jos Prickaerts**, Maastricht  
*Targeting cyclic nucleotides in CNS drug discovery: A translational approach into cognition enhancement*
- 12:20 **Snacks, Refreshments & Poster session II**
- 14:15 **Thomas Euler**, Tübingen  
*Studying neuromodulation using axial two-photon scanning in the retina*
- 14:40 **Achim Schmidtko**, Frankfurt  
*cGMP-dependent signaling pathways in chronic pain processing*
- 15:05 **Fritz Rathjen**, Berlin  
*cGMP signaling induced by the receptor guanylyl cyclase *Npr2* mediates T-shaped branching of axons of mesencephalic trigeminal neurons*
- 15:30 **Philipp Eckert**, Tübingen  
*GC-B deficient mice with axon bifurcation loss exhibit compromised auditory processing*
- 15:45 **Melissa Schepers**, Maastricht  
*The phosphodiesterase 4 inhibitor roflumilast improves remyelination in a mouse model for multiple sclerosis*
- 16:00 **Cross Culture Program** (city tour, museum ancient cultures, or punting; ends at 18:00)
- 19:30 **Dinner at Restaurant Kelter / Liquid Bar Tübingen** (Schmiedtorstraße 17)

## **Wednesday, October 10<sup>th</sup>**

### **Session 5: Circulation & Respiration**

**Chair: Jens Schlossmann**

- 9:00 **Ulrich Rothbauer**, Reutlingen  
*Nano- and chromobodies: How to visualize and quantify endogenous proteins in living cells*
- 9:25 **Miriam Cortese-Krott**, Düsseldorf  
*NO-cGMP signaling in RBCs*
- 9:50 **Friederike Cuello**, Hamburg  
*Intradisulfide formation regulates PKGI alpha activity*
- 10:15 **Coffee break**
- 10:45 **Robert Feil**, Tübingen  
*A shear-dependent NO-cGMP-cGKI cascade in platelets acts as an auto-regulatory brake of thrombosis*
- 11:10 **Andreas Friebe**, Würzburg  
*Pericytes, myofibroblasts, fibrosis - is there a role of NO/cGMP signaling?*
- 11:35 **Laura Lambrecht**, München  
*Platelet inhibition in carriers of the GUCY1A3 coronary artery disease risk allele*
- 11:50 **Awards**  
Franz Hofmann, Jens Schlossmann & Hannes Schmidt
- 11:55 **Closing remarks**  
Robert Feil & Michael Paolillo
- 12:00 **End of Meeting**
- 13:00 **Internal FOR 2060 Meeting** (ends at 15:00, location t.b.a)