

<i>Time</i>	<i>Thursday, 14.03.</i>	<i>Friday, 15.03.</i>
09:00		
09:15		
09:30	Registration	Oral Session 5 - Protons
09:45		
10:00	Welcome	Poster Session + Coffee
10:15		
10:30		
10:45	Oral Session 1 - Tissue Physiology	Oral Session 6 - Ion channels and Biophysics
11:00		
11:15		
11:30		
11:45		
12:00		
12:15		Career Workshop: Prof. Ute Scholl
12:30	Lunch	
12:45		
13:00		Photo + Lunch
13:15		
13:30	Oral Session 2 - Receptors	
13:45		
14:00		Oral Session 7 - Neurophysiology
14:15		
14:30		
14:45	Coffee	
15:00	Oral Session 3 - Biophysics	Coffee + Voting
15:15		
15:30		Award Ceremony
15:45		
16:00	Poster Session + Coffee	
16:15		
16:30		
16:45		
17:00	Oral Session 4 - Hypoxia and Inflammation	
17:15		
17:30		
17:45		
18:00		
18:15		
18:30		
18:45		
19:00	Guided City Tour	
19:15		
19:30		
19:45		
20:00	Social Dinner	
20:15		
20:30		

## Detailed Program

Thursday, 14.03.2019

09:30 **Registration**

10:00 **Welcome**

11:45 **Oral Session 1: Tissue Physiology**

*Jannis Meents, Aachen*

O-01 The role of increased phosphorylation in the hypersensitivity of iPSC-derived nociceptors from chronic pain patients

*Thomas Seidel, Erlangen*

O-02 Contribution of longitudinal components of the transverse-axial tubular system to Ca<sup>2+</sup> release in ventricular cardiomyocytes

*Anja Wenzl, Hannover*

O-03 Micromechanical investigations of hiPSC-CMs and human ventricular heart tissue at myofibrillar level reveal functional differences

*Anika Kraetzig, Leipzig*

O-04 Effects of n-butyrate on porcine colon epithelium under hypoxia

*Johannes Jägers, Duisburg-Essen*

O-05 The use of perfluorocarbon based artificial oxygen carriers is a promising approach to sustain physiological properties of the kidney during isolated warm perfusion

*Luisa Kaluza, Aachen*

O-06 Loss-of-function mutation causes gain-of-pain syndrome: neuropathy patient harbors a trafficking deficient sodium channel mutation

12:30 **Lunch**

13:30 **Oral Session 2: Receptors**

*Christoph Klenk, Zürich*

O-07 Crystal structure of the parathyroid hormone 1 receptor in complex with a peptide agonist

*Alexandr Ilyaskin, Erlangen*

O-08 Tauro-deoxycholic acid (t-DCA) inhibits human purinergic receptor P2X4 heterologously expressed in *Xenopus laevis* oocytes

*Lisa Baaske, Leipzig*

O-09 Regulation of free fatty acid transporters in ovine rumen

*Saskia Cönen, Jülich*

O-10 Molecular dynamics study of hP2X<sub>2</sub> receptors desensitization

14:45 **Coffee Break**

15:00 **Oral Session 3: Biophysics**

*O-11 Marcus Schewe, Kiel*

A Pharmacological Master-key Mechanism that Unlocks the Selectivity Filter Gate in K<sup>+</sup> Channels

*O-12 Bettina Mertens, Jülich*

Vesicular glutamate transporters (VGLUTs): channels, transporters, both?

*O-13 Dominik Lenz, Marburg*

Insights into the gating pathway of prestin (SLC26A5)

16:00 **Poster Session + Coffee**

17:00 **Oral Session 4: Hypoxia and Inflammation**

*O-14 Franziska Dengler, Leipzig*

Expression levels of HIF prolyl 4-hydroxylase enzymes in murine jejunum epithelium

*O-15 Yoshiyuki Henning, Essen*

Thyroid hormones in ocular angiogenesis and inflammation – implications for retinal degeneration

*O-16 Micol Rugi, Münster*

The role of sodium transporters for neutrophil chemotaxis

18:00 – 19:00 **Break**

19:00 **Guided City Tour**

20:00 **Social Dinner at Heilig Geist Spital**

(Spitalgasse 16, 90403 Nürnberg)

Friday, 15.03.2019

09:00 **Oral Session 5: Protons**

*O-17 Stefan Bernhard, Ulm*

Interleukin 8 alters the intracellular pH and glucose uptake of neutrophil granulocytes

*O- 18 Zoltan Pethö, Münster*

Environmental pH and mechanical stress orchestrate pancreatic stellate cell activation

*O-19 Gustavo Chaves, Nürnberg*

Mechanism of zinc inhibition on the voltage-gated proton channel

10:00 **Poster Session + Coffee**

11:00 **Oral Session 6: Ion Channels and Biophysics**

*O-20 Indra Schröder, Darmstadt*

Site-specific ion occupation in the selectivity filter causes voltage-dependent gating in a viral K<sup>+</sup> channel

*O-21 Sarah Thull, Aachen*

Resurgent-like sodium currents induced by insecticide in the absence of pore-blocker

*O-22 Navin K. Ojha, Jena*

Membrane potential manipulation with visible flashlight illumination of targeted superparamagnetic beads

*O-23 Karolina Najder, Münster*

TRPM2 channel sustains low intracellular sodium concentration in activated neutrophils

12:15 **Career Workshop: Prof. Ute Scholl**

13:15 **Photo + Lunch Break**

14:15 **Oral Session 7: Neurophysiology**

*O-24 Andreas Ritzau-Jost, Leipzig*

Potassium channel-independent action potential amplitude in small nerve terminals revealed by high-resolution current clamp recordings

*O-25 Matthias Deutsch, Jülich*

Knockdown of HCN channels in mouse hippocampal neurons by virus delivered gene-interfering tools

*O-26 Kim Le Cann, Aachen*

Efficient RNA transfer by fusogenic liposomes into induced-pluripotent stem cell-derived neurons for the study of a Huntington's Disease in vitro model

15:15 **Coffee + Poster Voting**

15:45 **Award Ceremony**