

Detailed program:

Day 1 - 31.03.2022 -

9:45 - Opening words - Prof. Dr. Joachim Fandrey

10:15 - Session 1. Tissue

Chairing: Hoang An Dinh, Anna Wrobeln

O-1: The role of carbonic anhydrase IV in 4d sperm movement

- Aura Stoskus (Essen)

O-2: An extracellular carbonic anhydrase underlying a carbon concentration mechanism in calcifying cells of the sea urchin embryo

- Ann-Sophie Matt (Kiel)

O-3: Time-course of serum concentrations of type II collagen biomarkers (C2C, CPII) during 21-day of 6°-Head Down Tilt Bed Rest (HDT-BR), and the effect of countermeasures

- Elie-Tino Godonou (Erlangen)

O-4: Adaption of immune cells to Hypoxia & Inflammation

- Tina Schönberger (Essen)

O-5: Role of SLC26A2 in the kidney

- Iana Lukianova (Berlin)

O-6: Development of a high throughput metabolomics assay to analyze intact isolated nephron compartments

- Johannes Jägers (Aarhus, Denmark)

11:45 - Lunch break

12:45 - Session 2. Biophysics

Chairing: Gustavo Chaves, Michèle Bachmann

O-7: Regulation and gating mechanism of the two-pore domain potassium channel THIK-1 (KCNK13)

- Bisher Eymsh (Kiel)

O-8: Development of a method to quantify cellular mechanoreponse on the single cell level

- Dominika Ciechańska (Münster)

O-9: Negative charges in the S2-S3 linker are involved in voltage-dependent gating of HCN channels

- Inga Sass (Jena)

O-10: Cysteine cross-bridging reveals a translational movement in prestin (SLC26A5)

- Dominik Lenz (Marburg)

O-11: Low affinity genetically encoded glutamate fluorescent indicators: development and characterization

- Kateryna Ryndia (Jülich)

O-12: Neuropsin for selective optogenetic control of Gq signaling

- Udhayabhaskar Sathyanarayanan (Göttingen)

14:15 - **Poster session I & coffee**

15:30 - **Session 3. Pathophysiology**

Chairing: Yoshiyuki Henning, Zoltan Pethö

O-13: HIF in HHT - Hypoxia inducible factors in hereditary hemorrhagic telangiectasia

- Anna Wrobeln (Essen)

O-14: Addressing progesterone and cAMP signalling pathways for decidualization induction of endometrial stromal cells of patients with endometriosis

- Janine Moyer (Essen)

O-15: Three-dimensional equine intestinal organoids – a viable and practical model for investigating equine colic

- Christina Windhaber (Vienna, Austria)

17:45 - **Retreat: Zeche Zollverein**

19:00 - **Dinner at Mezzo Mezzo Restaurant**

Day 2 - 01.04.2022 -

9:00 - **Session 4. Neuroscience**

Chairing: Andreas Ritzau-Jost, Dominik Lenz

O-16: The connection between primary cilia and the hypoxia inducible-factor 2 alpha promotes the MEK/ERK signaling pathway

- Tristan Leu (Essen)

O-17: Dose dependent pain responses and tissue cross-talk after chemical stimulation of the fascia and muscle in humans

- Andreas Schilder (Heidelberg)

O-18: The influence of different gravity levels on brain cortical activity

- Constance Badali (Cologne)

O-19: Homeostatic effects of the neuropeptide Galanin on neuronal cortical excitability

- Fátima Gimeno-Ferrer (Jena)

O-20: Maximal firing rates and burst patterns in distinct dopamine neuron subpopulations

- Tabea Ziouziou (Frankfurt)

10:15 - Poster session II & coffee

11:30 - Keynote lecture: Prof. Dr. Onur Güntürkün
Chairing: Katharina Foreman

12:30 - Lunch break

13:30 - Session 5. Cancer

Chairing: Elena Czyrnik, Micol Rugi

O-21: The Ca²⁺-activated K⁺ channel K_{Ca}2.1 as a prognostic marker in Ewing Sarcoma

- Zoltan Pethö (Münster)

O-22: Inducing Ferroptosis, a new approach to target Biliary Tract Cancer?

- Dino Bekric (Salzburg)

O-23: P2X receptors in tumor vascularization: key mediators in the crosstalk between tumor and endothelial cells

- Giorgia Scarpellino (Torino, Italy)

O-24: Senicapoc induces apoptosis in non-small cell lung cancer (NSCLC) erlotinib resistance cells via ROS release and caspase-3 activation mechanism

- Luca Matteo Todesca (Münster)

O-25: Targeting ADAMs – a new retinoblastoma treatment option?

- Dario Van Meenen (Essen)

O-26: TFF1 in aqueous humor– a potential new biomarker for retinoblastoma

- André Haase (Essen)

15:00 - Award ceremony