

Program of the 16th GGL Conference on Life Sciences

Day 1: Wednesday, 20th September 2023

08:30 – 09:00 Registration

09:00 – 09:15 **Welcome Address:** Prof. Dr. Dr. hc. Martin Kramer, Vice President of the Justus Liebig University
Opening Remarks: Prof. Dr. Eveline Baumgart-Vogt, Speaker of the GGL

Section 9 – Ecology and Global Change

Chairperson: Eva-Maria Minarsch

09:15 – 10:00 **Keynote: Dr. Martin Hartmann, ETH Zürich, Switzerland**

Organic and conventional agriculture promote distinct soil microbiomes with contrasting metabolic potential

10:00 – 10:15 **Kai Jansen:** Occurrence and dissipation of quaternary alkylammonium compounds in soils of Hesse, Germany

10:15 – 10:30 **Annalena Barth:** Black soldier fly as sustainable aquafeed for whiteleg shrimp

10:30 – 10:45 Coffee Break

Section 4 – Protein and Nucleic Acid Interactions

Chairperson: Daniel Bauer

10:45 – 11:30 **Keynote: Dr. Andreas Diepold, Max Planck Institute for Terrestrial Microbiology, Marburg**

Dynamic protein interactions control toxin injection through the bacterial type III secretion system

11:30 – 11:45 **Laura Rehneke:** Analyses of symbiont effector candidates in redirecting phytohormone signalling and activating beneficial effects in Arabidopsis

11:45 – 12:30 General Assembly

12:30 – 13:30 Lunch

Section 6 – Reproduction in Man and Animals

Chairperson: Christine Rager

Section 8 – Chemical Design and Analysis of Molecular Systems

13:30 – 14:15 Keynote: Prof. Dr. Jorma Toppari, University of Turku, Finland

Research on male reproductive health and toxicology

14:15 – 14:30 Dingding Ai: The role of resident macrophages in the immune response to bacterial infection of the murine epididymis

14:30 – 14:45 Katrin Wiltschka: Hydrodechlorination of mine water-specific Polychlorinated Biphenyls (PCBs) using palladium catalysts

14:45 – 15:00 Coffee Break

Section 2 – Infection and Immunity

Chairperson: Monique Überall

15:00 – 15:45 Keynote: Prof. Dr. Friedrich Frischknecht, Universitätsklinikum Heidelberg

Malaria research: from basics into parasite migration to new intervention methods

15:45 – 16:00 Yukino Kobayashi: Contribution of the actin-like-proteins Alp1 and Alp2b in Plasmodium transmission

16:00 – 16:15 Franziska Maria Dort: The role of autophagy and the related ER-phagy in coronavirus infected cells

16:15 – 16:30 Svenja Gramberg: Cutting-edge technologies in parasite research – How to create a molecular map of the liver fluke *Fasciola hepatica*

16:30 – 19:00 Poster Session and Finger Food

Day 2: Thursday, 21st September 2023

Section 10 – Clinical Sciences

Chairperson: Khaled Mahmoud

- 09:00 – 9:45** **Keynote: Dr. Patricia Altea Manzano, Laboratory of Cellular Metabolism and Metabolic Regulation, Katholieke Universiteit Leuven, Belgium**
Metabolic Reprogramming in Cancer Progression
- 9:45 – 10:00** **Frederike Hagedorn:** Molecular Subtyping of Diffuse Large B-Cell-Lymphoma Using Panel-Sequencing
- 10:00 – 10:15** **Salisa Kruijning:** A novel regulatory link between EZH2 and HIF2 α in breast cancer
- 10:15 – 10:30** **Yao Wang:** Orthodontic Compression Promotes Macrophage M2 Polarization via Histone H3 Hyperacetylation

10:30 – 10:45 Coffee Break

Section 1 - Nutrition and Metabolism

Chairperson: Rafael Castillo Negrete

Section 5 - Neurosciences

- 10:45 – 11:30** **Keynote: Prof. Dr. Regina Verena Taudte, Philipps University Marburg**
Metabolomics in Biomedical Research – The influence of ω -3 fatty acids on the brain metabolome during systemic inflammation
- 11:30 – 11:45** **Leona Bähr:** Psychological and inflammatory stress in mice: investigating how neutropenia effects heart rate variability as a readout parameter
- 11:45 – 12:00** **Meng Meng Zhou:** Glutaredoxin 5 as a novel target for β -cell survival and regeneration

12:00 – 13:00 Lunch

Section 7 - Bioresources, Bioinformatics and Biotechnology

Chairperson: Daniel Kreft

- 13:00 – 13:45** **Keynote: Dr. Angela Meccariello, Imperial College London, UK**
Making males: from medfly biology to medfly control
- 13:45 – 14:00** **Gözde Yildiz:** Linking genomic variation to gene expression using pangenome graphs

14:00 – 14:15 Coffee Break

14:15 – 16:45 Poster Session and Finger Food

Section 3 – Heart, Lung and Blood Vessels

Chairperson: Alejandro Egea Zorrilla

- 16:45 – 17:30** **Keynote: Prof. Jaya Krishnan, Institute of Cardiovascular Regeneration, Goethe University Frankfurt**
Modeling cardiopathologic TET2 CHIP in engineered cardiac ventricular tissue reveals therapeutics for disease resolution
- 17:30 – 17:45** **Esmeralda Vasquez Pacheco:** A unifying model to characterize lipofibroblast and myofibroblast differentiation
- 17:45 – 18:00** **Joshua Ayoson:** CD8+ T cells subpopulation “Tc17” induce a metabolic enriched microenvironment enabling lung cancer progression
- 18:00 – 18:15** **Vinita Sharma:** Exploring the early-stage pathomechanism of pulmonary hypertension in COPD: Insights into initial pulmonary vascular remodeling
- 18:15 – 18:45** **Closing Remarks and Award Ceremony**