



CPI Retreat June 1-2 2023 - Max-Planck-Institute for Heart and Lung Research, Parkstr. 1, Bad Nauheim

June 1, 2023

09:55 Welcome

10:00 - 11:30 **Cellular Plasticity & Heterogeneity, Chair: Lukas Tombor & Isabelle Salwig** each talk 22 min incl. discuss
Kati Turkowski: Single-cell RNA sequencing reveals heterogeneity and plasticity of tumor associated macrophages in lung cancer
Ulrich Matt: Neutrophil efferocytosis reprograms mitochondrial metabolism to induce a pro-resolution phenotype
Rui Li: Endothelial FAT1 inhibits angiogenesis by controlling YAP/TAZ protein degradation via E3 ligase MIB2
Joao Carneira da Silva: Endocardial cells function as antigen-presenting cells to promote zebrafish heart regeneration

11:30 - 11:45 Coffee break

11:45 - 12:15 **Keynote Lecture - Bernard Thebaud (Member CPI Scientific Advisory Board); Chair: Norbert Weissmann**
The incredible HULC story from Petri dish to Patient

12:15 - 12:30 Poster Teaser Session 1 (1min.each)

Georgios Kiliaris: Mobilization of the mesenchymal niche in influenza virus induced lung injury
Kai Cui: Investigating the role of circadian nuclear receptors REV-ERB α/β in heart function at the single-cell level
Silke Kreher: Matrin3-based alternative splicing is indispensable for lymphangiogenesis
Christina Karantanou: Mitophagy controls endothelial quiescence and protein synthesis
Bhavesh Parmar: Elucidation of upstream ORF-mediated translation regulation in humans.
Remy Bonnavion: Loss of the endothelial CXCL12 decoy receptor GPR182 promotes recovery after myocardial infarction in mice
Nizam Ahmed: Transcriptional regenerative reprogramming of cardiac stromal cells post cardiac injury
Dongzhu Li: Implication of Clonal Hematopoiesis of Indeterminate Potential (CHIP) in pulmonary fibrosis
Flavia Rezende: The Omega Amidase Nit2 is a novel redox-sensitive key regulator of glutamine metabolism in endothelial cells
Fredy Delgado Lagos: Secreted modular calcium binding protein 1 is required for TGF- β -mediated resolution of inflammation
Emmanouil Solomonidis: Haematopoietic loss of KDM6A impairs cardiac recovery post myocardial infarction *via* pro-inflammatory myeloid cells

12:30 - 14:00 Postersession & Lunch

14:00 - 15:30 **Cellular Surveillance, Chair: Leo Kurian & Jie Lan** each talk 22 min incl. disc
Konstantinos Kokkaliaris: Multiplexed quantification of bone marrow hematopoietic microenvironments
Poornima Mahavadi: Organelle stress and crosstalk in interstitial lung diseases
Christian Münch: Protein quality control in stress responses
Gabrijela Dumbovic: RNA localization controls RNA function

15:30 - 15:45 Coffee break

15:45 - 17:15 **Morphogenesis, Remodeling & Regeneration, Chair: Soni Pullamsetti & Veronica Larcher** each talk 22 min incl. disc
Xuejun Yuan: Interplay of metabolism and epigenetics in heart regeneration
Serge Adnot: Eliminating senescent cells, a new approach to promote lung repair
Golnaz Hesami: IRG1/Itaconate axis play a role in cardiopulmonary disease through inter-organ communication
Wesley Abplanalp: Somatic mosaicism in cardiovascular aging and disease

17:15 - 17:30 Coffee break

17:30-18:10 **New Technologies, Chair: Mario Looso & Marek Bartkuhn** each talk 10 min incl. disc
Margarida Barroso: Human iPSC-derived lung organoids for disease modeling
Rajkumar Savai: Spatial phenotyping of lung disease microenvironment
Nils Kremer: Assessment of RV-PA Coupling under exercise
Marcel Schulz: Enabling complex data analysis at the CPI

18:10-18:40 **Keynote Lecture - Hesham Sadek (Member CPI Scientific Advisory Board); Chair: Thomas Braun**
Transcriptional Regulation of Cardiomyocyte Cell Cycle: From Mechanism to Therapy

18:40 Get-together