



# International Symposium 2023

**27 March 2023****09:00** Welcome address and housekeeping notes**09:15 – 10:30** Cellular Identities and Epigenetics I *Franziska Schneider-Warme***09:15** **Michael Alexanian** - Activation of fibroblasts in heart disease: molecular mechanisms and targets for therapeutic interventions**09:45** **Dominic Grün** (P01) - Dynamics of cardiac scar formation at single-cell resolution**10:00** **Ralf Gilsbach** (P02) - Decoding and steering of cardiac enhancers**10:15** **Sebastian Preissl** (P03) - Dissecting cardiovascular diseases using single cell genomics**10:30** Coffee break (posters on display)**11:00 – 12:30** Cellular Interactions and Immune Cell Function I *Lutz Hein***11:00** **Merry Lindsey** - Cardiac wound healing: from fibroblasts and MMP to ECM and immune cell contributions**11:30** **Daniel Dürschmied** (P07) - Platelet subpopulations in myocardial infarction**11:45** **Nina Cabezas-Wallscheid** (P09) - Modulating hematopoietic stem cell activity by a vitamin A metabolite is beneficial for long-term recovery upon myocardial infarction**12:00** **Andyson Chan** (P01, poster-selected talk) - Tracking spatio-temporal dynamics of scar formation at single-cell resolution**12:15** **David Meral** (P05, poster-selected talk) - Single nucleus RNAseq analysis of aldosterone-induced heart failure with preserved ejection fraction**12:30** Lunch break (posters on display)**13:30 – 15:00** Implications for Scar Development and Modulation I *Ursula Ravens***13:30** **Sonia Nielles-Vallespin** - Non-invasive microstructural imaging of the heart**14:00** **Franziska Schneider-Warme** (P13) - Novel optogenetic tools to manipulate cardiac EP**14:15** **Wilhelm Röhl** (P14) - Modulation of Connexin43 expression in the myocardial scar: Effects on scar formation, cardiac function and electrical vulnerability**14:30** **Tsai-Sang Dederichs** (P08, poster-selected talk) - Myeloid cells with clonal hematopoiesis-driver mutations enter cardiovascular lesions**14:45** **Joachim Greiner** (P11, poster-selected talk) - Novel tools for image analysis**15:00** Coffee break (posters on display)**15:30 – 16:30** Portraits of two CRC *Peter Kohl***15:30** **Marc Freichel** – CRC1550**15:50** **Stefan Frantz** – CRC1525**16:15** Meeting photo**16:30 – 18:30** Poster session (drinks will be provided)**16:30** Poster presentation (odd project numbers)**17:30** Poster presentation (even project numbers)**19:00** Conference Dinner



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**28 March 2023****09:15 – 10:30 Cellular Identities and Epigenetics II***Jana Grune*

- 09:15 **Vincent Segers** - Epigenetic regulation of intercellular communication in cardiac lesions
- 09:45 **Sukanya Guhathakurta (P04)** - The lysine acetyltransferase MOF regulates diverse nonhistone targets
- 10:00 **Achim Lothar (P05)** - Regulators of cardiac endothelial cell gene expression in health and disease
- 10:15 **Dennis Wolf (P06)** - Deciphering autoimmunity in cardiovascular disease
- 10:30** **Coffee break** (posters on display)

**11:00 – 12:15 Cellular Interactions and Immune Cell Function II***Thorsten Kessler*

- 11:00 **Kory Lavine** - Macrophage diversity in cardiac homeodynamics, pathology and repair
- 11:30 **Tamara Vico (P08)** - Sensitive cardiac macrophage interactions determine cardiac health
- 11:45 **Olaf Groß (P10)** - Small molecules triggering NLRP3
- 12:00 **Eva Rog-Zielinska (P11)** - Cardiac nano-dynamics - imaging motion on the sub-nanometre scale
- 12:15** **Lunch break** (posters on display)

**13:15 – 14:45 Implications for Scar Development and Modulation II***Eilidh MacDonald*

- 13:15 **Ebba Brakenhielm** - Cardiac lymphatics: roles in steady state and remodelling
- 13:45 **Timo Heidt (P15)** - Interventional Treatment and Molecular Imaging of Coronary and Myocardial Inflammation by MRI
- 14:00 **Marbely Calderon Fernandez (P13, poster-selected talk)** - Optogenetic investigation of electrotonic coupling between myocytes and non-myocytes in cardiac remodelling
- 14:15 **Esther Carls (P14, poster-selected talk)** - Magnet-assisted cell positioning and immunomodulation significantly improve the engraftment of intramyocardially transplanted cardiomyocytes or cardiac fibroblasts after myocardial infarction
- 14:30 **Felix Wiedmann (P16, poster-selected talk)** - Atrial fibrillation-associated electrical and structural remodelling - is there a potential for reversibility?
- 14:45** **Coffee break** (posters on display)

**15:15 – 16:15 Implications for Scar Development and Modulation III***Stephan Lehnart*

- 15:15 **Callum Zgierski-Johnston (P17)** - Perivascular excitation tunnelling as a novel mechanism of cardiac reperfusion arrhythmias
- 15:30 **Jochen Knaus (INF)** - Structured experimental documentation with linkage of biological samples from the CardioVascular BioBank
- 15:45 Poster prizes and concluding remarks
- 16:30** **Time for informal meetings**