Wednesday, March 30

14:00-14:10  Thomas Sommer & Heike Graßmann (MDC) – Welcome to MDC
14:10-14:20  Norbert Hübner (MDC) – Strategic direction of the MDC (POF IV)
14:20-14:30  Hellmut Augustin (MedMa, UHEI) – The vision of the Helmholtz Institute for Translational AngioCardioScience (HI-TAC)
14:30-15:30  Session I: Multiomics meets AngioCardioScience
   Laleh Haghverdi (MDC) – Trustworthy inference of secondary quantities (e.g. cell state velocities, cell type labels, pseudotime) from single-cell omics data
   Ashley Sanders (MDC) – Somatic cell mutations and their consequences by single-cell sequencing
   Fabian Coscia (MDC) – Histopathology meets single cell proteomics for precision medicine
   Daniela Panáková & Jan Philipp Junker (MDC) – Cellular drivers of injury response and regeneration in the adult zebrafish heart
   Julio Saez-Rodrigues (MedHD, UHEI) – Spatial multi-omic map of human myocardial infarction
15:30-16:00  Coffee
16:00-17:30  Session II: Recent developments in AngioScience
   Annette Hammes (MDC) – The role of Piezo2 in vascularization
   Philipp Reiners-Koch (MedMa, UHEI) – Hepatic angiodiversity controls organ function and disease
   Armin Rehm (MDC) – Lymphoma and angiogenesis: An integrative view on lymph node microarchitecture, immune response and clinical disease course
   Mahak Singhal, (MedMa, UHEI) – Adaptation of vascular homeostasis to pathological challenge
   Jörg Heineke (MedMa, UHEI) – Endothelial cells as crucial regulators of organ fibrosis
Daniel Dürrschmied (MedMA, UHEI) – Blood platelets as a key regulator of inflammatory processes

Thomas Blankenstein (MDC) – The tumor vasculature as target of T cells

17:30-18:30 Session III: Berlin Cooperating Partners

Axel Pries (Charité – Universitätsmedizin Berlin) & Christopher Baum (Berlin Institute of Health at Charité (BIH)) – Introduction

Ulf Landmesser (Charité) – Clinical research programs in vascular and interventional medicine

Michael Potente (BIH) – Metabolic decisions in vascular development and disease

Claudia Langenberg (BIH) – Plasma proteomics for target discovery and disease prediction

Burkert Pieske (Charité) – Heart failure with preserved ejection fraction – Mechanistic understanding for stratified therapies: the new CRC 1470

Volkmar Falk (Charité) – The future heart center - DHZC

18:30 Get together

Thursday, March 31

09.00-09:30 Coffee
09:30-10:00 Welcome & Campus Tour
10:00-10:30 Session IV: MDC Infrastructure

Jutta Steinkötter (MDC) – Scientific technology platforms at MDC

Michaela Herzig (MDC) – Talent management at MDC

10:30-12:00 Session V: Recent developments in CardioScience

Johannes Backs (MedHD, UHEI) – HDACs in heart diseases: From mechanisms to therapies

Constanze Schmidt (MedHD, UHEI) – Atrial arrhythmopathy - From underlying molecular mechanisms to new therapeutic approaches

Chi-Chung Wu (MedMA, UHEI): Regulatory mechanisms of mammalian cardiomyocyte polyploidy
**Gergana Dobreva** (MedMa, UHEI) – Genetic and epigenetic regulation of cardiovascular development and disease

**Maarten van den Hoogenhof** (MedHD, UHEI) – CAMK2D underlies cardiac dysfunction in RBM20 cardiomyopathy

**Arica Beisaw** (MedHD, UHEI) – Intercellular communication in zebrafish cardiomyocyte regeneration

**Norbert Frey** (MedHD, UHEI) – Vision for cardiovascular medicine 2030 at Heidelberg University

12:00-12:30  Coffee & Snacks

12:30-13:20  Session VI: Cardiometabolic science & imaging

**Mirko Völkers** (MedHD, UHEI) – RNA metabolism in diseased cardiomyocytes

**Gabriele Schiattarella** (MDC) – Molecular underpinnings of cardiometabolic HFpEF

**Gary Lewin** (MDC) – Hypoxia and metabolism in naked mole-rats

**Thoralf Niendorf** (MDC) – Cardiovascular MRI

13:20  Concluding remarks