



+++SAVE THE DATE+++

INTERNATIONAL CONGRESS

**24–27 JUNE, 2027**

UNIVERSITY HOSPITALS OF  
RUHR UNIVERSITY BOCHUM  
LECTURE HALL CENTER ST. JOSEF HOSPITAL



#### Session 1 — Metabolic and Cardiorenal Organ Crosstalk

##### **Adipose–Heart Axis: Beyond Fat Storage:** **Prof. Sanjiv J. Shah**

Focus: epicardial and visceral adipose tissue, adipokines, lipotoxicity, inflammation, insulin resistance, and their effects on myocardial stiffness and coronary microvascular function.

##### **Liver–Heart Communication in Cardiometabolic Disease:** **Prof. Kenneth Cusi**

Focus: hepatic steatosis, lipoprotein metabolism, bile acids, hepatokines, fibroblast growth factor 21, and liver-derived inflammatory signals affecting cardiac remodeling.

##### **Kidney–Heart Crosstalk: Congestion, Endothelial Dysfunction, and Metabolic Failure: Prof. Claudio Ronco**

Focus: cardiorenal syndrome, sodium handling, renal inflammation, uremic toxins, mineral metabolism, neurohormonal activation, and the kidney's role in treatment response.

##### **Integrating the Metabolic Organs: From Multi-Omics to Mechanism-Based Therapy: Prof. Carolyn S. P. Lam**

Focus: systems biology, organ-to-organ signaling networks, circulating mediators, patient phenotyping, and development of therapies that target shared metabolic pathways rather than the myocardium alone.

#### Session 2 — Immune, Neurovascular, Gastrointestinal, and Muscular Control of the Heart

##### **Immune–Heart Crosstalk: Inflammation as a Driver of Remodeling: Prof. Filip K. Swirski/Douglas L. Mann**

Focus: macrophages, T cells, neutrophils, cytokines, endothelial activation, myocardial fibrosis, and immune-defined heart-failure phenotypes.

##### **Brain–Heart Communication: Autonomic, Neuroendocrine, and Neuroinflammatory Pathways:** **Prof. David S. Goldstein/John S. Floras**

Focus: sympathetic activation, vagal regulation, hypothalamic–pituitary signaling, sleep and stress biology, autonomic dysfunction, and central regulation of cardiovascular reserve.

##### **Gut–Heart Signaling: Barrier Function, Microbial Metabolites, and Inflammation:** **Prof. Stanley L. Hazen, Prof. Matthias Nahrendorf**

Focus: intestinal permeability, short-chain fatty acids, trimethylamine N-oxide, bile-acid signaling, microbial dysbiosis, and therapeutic modulation of the gut–heart axis.

##### **Skeletal Muscle–Heart Crosstalk: Exercise Capacity as a Multiorgan Phenotype:** **Prof. Jessica Kitzman/Michael J. Joyner/Barry A. Borlaug**

Focus: skeletal-muscle mitochondrial dysfunction, myokines, peripheral oxygen extraction, vascular reserve, deconditioning, and exercise training as a systemic intervention.

#### Session 3 — From Reverse Remodelling to Heart-Failure Remission

##### **Reverse remodelling and myocardial recovery:** **Prof. Lars H. Lund, Prof. Nicolas Girerd**

Focus: Heart-failure recovery, reverse remodelling, guideline-directed therapy, and remission biology.

##### **Obesity treatment and GLP-1 biologics:** **Prof. Mikhail N. Kosiborod**

Focus: Obesity-related HFpEF, semaglutide, cardiometabolic phenotypes, symptoms, and functional recovery.

##### **Mitochondrial restoration and myocardial energetics:** **Prof. E Douglas Lewandowski**

Focus: Cardiac substrate use, mitochondrial energetics, metabolic flexibility, and myocardial energy failure.

##### **Reversing fibrosis and maladaptive remodelling:** **Prof. Michael D. Schneider**

Focus: Cardiac fibrosis, regenerative signaling, fibroblast biology, and myocardial repair.

#### Session 4 — Proteostasis, Regeneration, and Precision Myocardial Repair

##### **iPSC, gene editing, and engineered myocardium:** **Prof. Joseph C. Wu**

Focus: Induced pluripotent stem cells, precision disease modelling, gene editing, and regenerative cardiovascular medicine.

##### **Proteostasis and protein-misfolding disorders:** **Prof. Jeffery W. Kelly**

Focus: Protein homeostasis, amyloid biology, proteotoxicity, and pharmacological stabilization of misfolded proteins.

##### **Cell-based cardiac regeneration: Prof. Eduardo Marbá**

Focus: Cardiac stem-cell therapy, myocardial regeneration, tissue repair, and clinical translation.

##### **Clinical translation: from recovery signal to durable remission: Prof. Mandeep R. Mehra**

Focus: Advanced heart failure, myocardial recovery, mechanical unloading, transplantation, and clinical implementation.

#### Session 5 — Treating the Cardiovascular System at the Molecular Level

##### **RNA Therapeutics and Precision Drug Delivery:** **Prof. Pieter R. Cullis**

Focus: Lipid nanoparticles, messenger RNA (mRNA) and small-interfering RNA (siRNA) delivery, organ targeting, tissue-specific uptake, and next-generation cardiovascular therapeutics.

##### **Gene Silencing, Gene Editing, and Epigenetic Therapies:** **Prof. Kiran Musunuru**

Focus: CRISPR-based editing, base and prime editing, epigenome manipulation, permanent correction of cardiovascular risk pathways, and translation from genetic discovery to therapeutic intervention.

##### **Targeted Protein Degradation and Molecular-Glue Therapeutics: Prof. Alessio Ciulli**

Focus: Proteolysis-targeting chimeras (PROTACs), molecular glues, selective elimination of pathogenic proteins, drugging previously inaccessible targets, and opportunities for cardiovascular disease.

##### **Mitochondrial Therapeutics and Immune Modulation:** **Prof. Navdeep S. Chandel**

Focus: Mitochondrial redox biology, reactive oxygen species, immunometabolism, inflammatory signaling, mitochondrial quality control, and therapies designed to restore cellular resilience in the diseased cardiovascular system.

#### Session 6 — Meet the Editors: What Makes Cardiovascular Research Publishable?

##### **Circulation: Prof. Bradley A. Maron, MD, PhD**

Focus: Editorial triage, cardiovascular novelty, mechanistic depth, clinical relevance, and what makes a study suitable for a leading cardiovascular journal.

##### **Nature: Dr. Magdalena Skipper, PhD**

Focus: Conceptual originality, interdisciplinary impact, methodological rigor, broad scientific significance, and how cardiovascular discoveries reach a general scientific audience.

##### **Journal of the American College of Cardiology (JACC):** **Prof. Harlan M. Krum**

Focus: Clinical relevance, patient-centred outcomes, methodological rigor, real-world evidence, data transparency, and the editorial standards required for research to influence cardiovascular practice and health policy.

##### **European Heart Journal: Prof. Tomasz Guzik**

Session 7 — Cardiology 2035: From AI-Assisted Diagnosis to the Digital Cardiovascular Twin

**AI-Supported Diagnosis and the Future Role of the Cardiologist: Prof. Eric Topol**

Focus: Artificial intelligence (AI)-supported diagnosis, generative AI, clinical decision support, responsible implementation, and how the cardiologist’s role will evolve from image interpretation toward supervision, integration, and shared decision-making.

**Digital Twins and Virtual Cardiovascular Trials: Prof. Pablo Lamata**

Focus: Patient-specific cardiovascular modelling, mechanistic and data-driven digital twins, treatment simulation, virtual comparators, and in silico trials for precision cardiology.

**Wearable-Derived Phenotyping and Multimodal Patient Data: Prof. Michael Inouye**

Focus: Wearables, longitudinal physiological monitoring, electronic health records, genomics, proteomics, single-cell and spatial biology, multimodal data integration, and AI-enabled precision prevention.

**AI-Enabled Cardiovascular Imaging and Precision Phenotyping: Prof. Sikander Hayat**

Focus: Artificial intelligence in echocardiography and cardiovascular imaging, automated image interpretation, multimodal phenotyping, digital biomarkers, early disease detection, individualized risk prediction, and the clinical implementation of AI-assisted diagnosis.

Session 8 — Sino-European sessions

Organ-organ interaction

Clinical studies in Asian countries with an impact on the Guidelines of cardiology societies and vice versa

Treatment of heart failure in Asia compared to Europe and America: how do we learn from each other

Session 9 — sudden cardiac death: treat early and reduce the risk

**Predictors and the risk of sudden cardiac death in ischemic and non-ischemic cardiomyopathy: Prof. Nikolaos Dagres**

Focus: current data, update and the impact of the chronobiology on the risk after ICD implantation

**The global burden of sudden cardiac death and challenges: Prof. Eloi Marijon**

Focus: the burden of sudden cardiac death, treatment pathways and interdisciplinary approach

**Wearable-device to predict the phenotype at risk: Prof. Valentina Kutyifa**

Focus: Wearables, longitudinal physiological monitoring, electronic health records, gender differences

**Cardiac imaging and phenotyping of myocarditis to prevent sudden cardiac death: Prof. Enrico Ammirati**

Focus: diagnosis, deep phenotyping and treatment of myocarditis, prevention of sudden cardiac death and lifestyle changes after the event

Session 10 — Inherited channelopathies: underlying mechanisms, diagnostic and treatment approaches

**The diagnostic and genetic yield and outcome in idiopathic ventricular fibrillation Prof. Andrew Krahn**

Focus: idiopathic ventricular fibrillation, outcome, genetics

**The diagnostic and genetic yield in patients with AV-block: Prof. Henrik Kjærulf Jensen**

Focus: AV-block, screening and diagnostic

**Subcutaneous or transvenous ICD in patients with inherited channelopathies: Prof. Reinoud E Knops**

Focus: subcutaneous ICD, implantation rate, complications

**Inherited channelopathies during the pregnancy diagnostic and treatment: Prof. Kristian Haugaa**

Focus: Limitations of drug treatment during pregnancy, diagnostic

Session 11 — Let’s meet the expert, ECG session 60-80 minutes from 25th-27th

Prof. Joseph Brugada (mainly channelopathy and SCD cases)

Prof. Gerhard Hindricks? (cardiomyopathies?)

Prof. Michael Ackermann?

Session 12 — Young-DGK-DZHK

Activities of Young DGK in research and networking: Dr. Hannah Billig

Strategic Applications for Funding in Cardiovascular Research: national and European opportunities: Dr. Eric Schoger

Career Development in the clinic: possibilities and challenges: N.N. Philipp Scheene?

The clinician-scientist in cardiovascular medicine: structure, challenges and opportunities: Prof. Nina Pabel?

Session 13 — Prevention session (lipids, hypertension...)

PCSK9 inhibitors and lipoprotein lowering drugs a direction of personalized medicine: Prof. Ulf Landmesser

Lipoprotein a and cardiovascular outcome: Prof. Dr. Simon Kraler

Gut Microbiota and Vascular Aging: PD Dr. Soheil Saeedi Saravi, Zürich, Switzerland

The clinician-scientist in cardiovascular medicine: structure, challenges and opportunities

Session 14 — Cardiomyopathies: the past, today and tomorrow

Specific drug treatments in cardiomyopathies: Prof. Dr. Pablo Garcia-Pavia

The role of artificial intelligence in the diagnostic and treatment of non-ischemic cardiomyopathies: Prof. Dr. Benjamin Meder

Nuclear and chromatin dynamics across development, disease and ageing in cardiomyopathies: Prof. Dr. Gergana Dobрева

Challenges in the diagnostic and treatment and underlying mechanisms in takotsubo syndrome: Prof. Dr. Dana Dawson

Session 15 —State of Art Amyloidosis

Diagnostic approaches and interdisciplinary work: N.N.

Frontiers of drug development in amyloidosis: N.N.

Short- and long-term outcomes of amyloidosis: N.N.

Session 16 — The interaction between atrial fibrillation and valve diseases

challenges in the diagnostic and treatment approaches of atrial fibrillation: Prof. Dr. Renate Schnabel?

Pulsed-field-ablation development and challenges: Prof. Dr. Kars Neven

Treat the valve insufficiency or the fire the atrial fibrillation: Prof. Dr. Jörg Hausleiter

Digital devices in the diagnostic field and treatment of atrial fibrillation: Prof. Dr. Dominic Lenz

Session 17— The progress of heart failures guidelines and future perspectives

Challenges and progress of heart failure guidelines: Prof. Alexandre Mebazaa

The different faces of heart failure with preserved ejection fraction: Prof. Nicolas Girerd

GLP1 agonists in the era of heart failure: Prof. Francesco Paneni

Key note sessions

Two keynote sessions on 25th and 26th

Educational Echocardiography training

Basic course and advanced, Hand on and live on patients  
Daily up to 2 hours from 25th-27th