



# METAHEART

**European Network to tackle METAbolic alterations in HEART failure**  
(EU-METAHEART; COST Action 22169)

**Management Committee (MC4) Meeting**



**Bratislava, SK**

AC Hotel Bratislava Old Town

**March 17<sup>th</sup> - 19<sup>th</sup>, 2026**

## Tuesday, March 17<sup>th</sup>

- 15:00 – 16:30**      **EU-METAHEART YRI Committee meeting**
- 16:45**                **Welcome to COST Action EU-METAHEART Meeting**  
**Christoph Maack (DE), Monika Bartekova (SK)**
- 17:00**                **Keynote Lecture**  
Chairs: **Dunja Aksentijević (UK), Monika Bartekova (SK)**  
**Luke O'Neill (IE):** How mitochondria control inflammation
- 18:00**                Welcome reception in the hotel

## Wednesday, March 18<sup>th</sup>

- 08:30 – 09:00**      **Christoph Maack (DE):** Welcome, Overview and update on the COST Action EU-METAHEART (CA22169)
- 09:00 – 10:30**      **Immunometabolism (WG3)**  
Chairs: **Alessandra Ghigo (IT), Gemma Vilahur (ES)**
- 09:00 – 09:22      **Sandrine Lecour (SA):** Doxorubicin-induced cardiotoxicity: impact on lipoprotein protective potential
- 09:22 – 09:45      **Gianluigi Condorelli (IT):** Single-cell insights into macrophage activation during dyslipidemia-induced diastolic dysfunction
- 09:45 – 10:07      **Elena Osto (AT):** Beyond body weight loss: immunometabolic and vascular actions of incretins
- 10:07 – 10:30      **Ulrich Hofmann (DE):** Role of T-cells in Duchenne cardiomyopathy
- 10:30 – 11:00**      **Coffee break (with poster viewing)**
- 11:00 – 12:30**      **Metabolic impact of coronary vascular dysfunction (WG2)**  
Chairs: **Barbara Kutryb-Zajac (PL), Gerd Heusch (DE)**
- 11:00 – 11:22      **Ebba Brakenhielm (FR):** Lymphatic vessels and heart failure
- 11:22 – 11:45      **Henrique Girao (PT):** Pulmonary hypertension
- 11:45 – 12:07      **Lucio Barile (CH):** Extracellular vesicles in cardiovascular pathophysiology
- 12:07 – 12:30      **Andreas Bergthaler (AT):** Bioenergetic trade-offs between the immune system and the heart
- 12:30 – 13:30**      **Lunch break**

- 13:30 – 15:00**      **Mechano-energetic uncoupling and redox alterations in cardiac diseases (WG4)**  
Chairs: **Dunja Aksentijević (UK), Simon Sedej (AT)**
- 13:30 – 13:52      **Vasco Sequeira (DE):** Mechano-energetic uncoupling in hypertrophic cardiomyopathy
- 13:52 – 14:15      **Ana Vujic (UK):** RET-ROS, diastolic dysfunction and exercise
- 14:15 – 14:37      **Kei Sakamoto (DK):** Shaping the Precision Regulation of AMP-activated Protein Kinase for the Treatment of Type 2 Diabetes and Fatty Liver Disease
- 14:37 – 15:00      **Dragan Djuric (RS):** Homocysteine and high-sensitivity troponins: Combined cardiac injury biomarkers evaluation in experimental cardiometabolic models
- 15:00 – 16:30**      **Poster Session with coffee**
- 16:30 – 18:00**      **Substrate and intermediary metabolism in heart failure (WG1)**  
Chairs: **Sini Skarp (FI), Mathias Mericskay (FR)**
- 16:30 – 16:52      **Carolina E Hagberg (SE):** White adipocyte dysfunction and obesity-associated pathologies in humans
- 16:52 – 17:15      **Monika Bartekova (SK):** Diabetic cardiomyopathy
- 17:15 – 17:37      **Frank Lezoual'ch (FR):** Dysregulation of iron metabolism in cardiac disease and aging
- 17:37 – 18:00      **José Antonio Enríquez (ES):** Mitochondrial dysfunction across diseases
- 19:00**              **Dinner**

## Thursday, March 19<sup>th</sup>

- 08:30 – 10:00**      **Core group and YRI Committee meeting**
- 10:00 – 10:30      Coffee break
- 10:30 – 12:30**      **Management Committee Meeting (MC4)**
- 12:30 – 13:30      Lunch
- 13:30 – 15:30**      **Social Networking and INTERACT kick-off meeting (Melanie Paillard et al.)**
- 16:00**              **Social networking during Expedition to Bratislava**
- 18:00**              **Dinner**

### **About the COST Action EU-METAHEART (CA22169):**

The COST Action “EUropean network to tackle METAbolic alterations in HEART failure” (EU-METAHEART) will bring together excellent researchers from Europe to contribute a broad spectrum of scientific expertise, cutting-edge technologies, scientific exchange and education to foster breakthrough science that moves the field forward towards improving the treatment of patients with heart failure. By sharing diverse expertise that cover not only conventional analyses of metabolism and mitochondrial function, but also omics-based approaches towards genetics, epigenetics and metabolism and in particular, integrated assessment of excitation-contraction coupling with mitochondrial redox control and energetics, as well as advanced in vivo imaging technologies, the novelty of this COST Action is that it will allow to develop a comprehensive and cutting-edge approach towards deeper understanding of metabolic dysfunction in HF. We have identified four scientific key areas to which metabolic or mitochondrial dysfunction are central, which will be addressed by four working groups (WGs):

- 1) Impact of metabolic disorders on substrate and intermediary metabolism in cardiac myocytes
- 2) Metabolic aspects of vascular dysfunction
- 3) Immunometabolism: how metabolic alterations control inflammation and vice versa
- 4) Mechano-energetic uncoupling and mitochondrial redox alterations

These research areas are tightly intertwined and can hardly be investigated in isolation (from each other). Therefore, EU-METAHEART will employ an integrative approach to bring all these research fields under one umbrella. The working groups focus on their respective four topics, but benefit from the expertise in the respective other WGs to overcome scientific and methodological boundaries and rapidly move the field forward towards drug development.

For more information, please go to: <https://cost-metaheart.eu/>

<https://www.cost.eu/actions/CA22169/>

And/or follow us at X:

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