

Cost IG16225

Chair:
Derek Hausenloy
(UK)

Vice Chair:
Peter Ferdinandy
(Hungary)

STSM Chair:
Coert Zuurbier
(Netherlands)

Grant Manager:
Anita Borba
(Hungary)

2nd Meeting of the COST Innovators Grant (CIG) "IMproving Preclinical Assessment of Cardioprotective Therapies" (IMPACT) IG16225 network

6th - 8th September 2023, Reykjavík, Iceland



Meeting venue:

deCODE genetics
Sturlugata 8
102 Reykjavík
(South-east entrance, 43P3+8X Reykjavík)

Please make sure you register [here](https://bit.ly/CIG16225) (link or QR code):
<https://bit.ly/CIG16225>

Organising committee

George Kararigas (University of Iceland)
CIG Core Group



Wednesday 6th September 2023

****Please note that all times are in the local time zone – i.e. GMT**

11:30-12:00 Registration (**please sign daily attendance form**)

12:00-13:00 Lunch

13:00-13:15 **Welcome and introductions**

Derek Hausenloy, Peter Ferdinandy, George Kararigas

Derek Hausenloy (UK)

COST IG16225 update and final summary

13:15-14:00 **Keynote Lecture (35 min talk, 10 min QA)**

Chair: George Kararigas

Christoph Maack (Germany)

Mitochondrial redox regulation in heart failure

14:00-15:15 **Session 1: Digital cardiovascular medicine and artificial intelligence**

Chairs: Jelena Jovanic, Peter Bencsik

1. **Davíð Ottó Arnar (Iceland) (35 min talk + 5 min QA)**

Will advances in genetics and digital healthcare reshape the practice of cardiology?

2. **George Kararigas (Iceland) (10 min talk + 5 min QA)**

Ethical implications of artificial intelligence

3. **Zoltan Gircz (Hungary) (10 min talk + 5 min QA)**

Improved infarct size evaluation by a novel AI-assisted tool

15:15-15:45 Coffee Break

15:45-17:30 **STSMs (6x10 min talk + 7 min QA)**

Chair: Coert Zuurbier, Attila Kiss

1. **Helmut Lieder (Germany)**

Quantification of microvascular obstruction in the closed-chest pig model with coronary occlusion/reperfusion

2. **Ulrika Dulova (Slovakia)**

Investigation of miRNA modifications improving cardioprotective effect

3. **Iasmina-Maria Hancu (Romania)**

Empagliflozin effects on MAO in HF mouse model with or without SGLT2 present

4. **Malaury Tournier (Switzerland)**

A new class of Pannexin1 channel inhibitors to treat long-term effects of myocardial injury

5. **Christopher Dostal (Austria)**

Bioinformatic analysis and identification of genes & pathways in diabetic cardiomyopathy

6. **Panagiota Nikolaou (Greece)**

Investigation of Empagliflozin as an agent to alleviate microvascular obstruction after myocardial ischaemia/reperfusion injury

17:30-18:15 **Keynote Lecture (35 min talk, 10 min QA)**

Chair: Gerd Heusch

Hilma Hólm (Iceland)

Genetic insights into cardiovascular disease

Thursday 7th September 2023

****Please note that all times are in the local time zone – i.e. GMT**

08:00-08:30 Registration (**please sign daily attendance form**)

08:30-10:30 **IMPACT small and large animal AMI Networks (7x10 min talk + 7 min QA)**
Chair: Derek Hausenloy

1. **Reinis Vilskerts (Latvia)**
Results of the IMPACT small animal studies
2. **Petra Kleinbongard (Germany)**
Histochemistry results of the IMPACT pig AMI studies
3. **Carlos Galan (Spain)**
MRI results of the IMPACT pig AMI studies
4. **Thomas Krieg (UK)**
Acidic malonate and cardioprotection
5. **Stephane Germain (France)**
ANGPTL4 and cardioprotection
6. **Panagiotis Efentakis (Greece)**
Dapaglifozin and malonate cardioprotection
7. **Robin Nijveldt (Netherlands) - VIDEO**
Ischaemia/reperfusion imaging and infarct imaging by CMR, focus on small animals and patients

10:30-10:45 **Group photo**

10:45-11:15 Coffee Break

11:15 **Free afternoon**

Friday 8th September 2023

****Please note that all times are in the local time zone – i.e. GMT**

08:00-08:30 Registration (**please sign daily attendance form**)

08:30-10:00 **Session 2: New cardioprotective therapies (5x10 min talk + 8 min QA)**
Chairs: Dominique de Kleijn, Edgars Liepnish

1. **Sauri Hernandez (Singapore)**
ND-13, a small DJ-1 derived peptide mediating big events for acute cardioprotection
2. **Sean Davidson (UK)**
Targeting PI3K for cardioprotection
3. **Pierre Croisille (France)**
Shock wave therapy and cardioprotection
4. **Mariann Gyöngyösi (Austria)**
The barrier of translation in cardioprotection
5. **Coert Zuurbier (Netherlands)**
Metabolic dependency of malonate protection in isolated mouse hearts

10:00-10:30 Coffee Break

10:30-12:00 **Session 3: Heart, metabolism & brain axis (6x10 min talk + 5 min QA)**
Chairs: Michal Maczewski, Bruno Podesser

1. **Rolf Blauenfeldt (Denmark)**
RIC in stroke – results of the RESIST trial
2. **Roni Ranghøj Nielsen (Denmark)**
Improving haemodynamics with ketones - from bench to bed
3. **Vilmante Borutaite (Lithuania)**
Imeglimin-induced protection against ischaemic damages in *in vivo* and *in vitro* models of brain ischaemia in rats
4. **Lina Badimon (Spain)**
DJ1DF on organ protection
5. **Magalie Viallon (France)**
MRI to detect myocardial changes during pig AMI
6. **Carlos Zaragoza (Spain)**
A new pig model of tricuspid valve regurgitation to prevent adverse arrhythmogenic outcomes and heart failure

12:00-12:45 **Keynote Lecture (35 min talk, 10 min QA)**
Chair: Hans Erik Bøtker

Vilmundur Guðnason (Iceland)
Using imaging in cardiovascular risk assessment

12:45-14:00 Lunch

14:00-15:30 **Session 4: Confounders of cardioprotection (6x10 min talk + 5 min QA)**
Chairs: Peter Ferdinandy, Ioanna Andreadou

1. **Monika Bartekova (Slovakia)**
Role of ageing and metabolic comorbidities in cardioprotection by natural antioxidants: effects of flavonoid quercetin in aged Zucker diabetic fatty rats
2. **Antonio Rodríguez-Sinovas (Spain)**
Contribution of air pollution to arrhythmias susceptibility
3. **Carlos Galan (Spain)**



A new pig model of cardiac pressure overload + chemotherapy cardiotoxicity in pigs

4. Panagiota Nikolaou (Greece)

Cardiotoxicity in light chain amyloidosis

5. Panagiotis Efentakis (Greece)

Immune check point inhibitors' cardiotoxicity

6. Brenda Kwak (Switzerland) - VIDEO

Mitochondrial pannexin1 controls cardiac sensitivity to ischaemia/reperfusion injury

15:30-16:00 Coffee Break

16:00-17:45 **Session 5: EU-METAHEART – A new COST Action! (5x10 min talks + 10 min QA)**
Chairs: Christoph Maack, Derek Hausenloy

1. Christoph Maack (Germany)

Overview of the new COST Action

2. Marisol Ruiz-Meana (Spain)

WG1: Metabolism

3. Gerd Heusch (Germany)

WG2: Vasculature

4. Gemma Vilahur (Spain)

WG3: Inflammation

5. Simon Sedej (Austria) and Dunja Aksentijevic (UK) - VIDEO

WG4: Mechano-energetic coupling

17:45-18:00 Meeting and IG16225 closing summary