

7th EU-CARDIOPROTECTION COST Action WG Online Workshop/Meeting

Thurs March 11th 2021
0830-1715 CET

Cost Action CA16225

Chair:

Derek Hausenloy
(UK)

Vice Chair:

Peter Ferdinandy
(Hungary)

WG1: New Targets

Ioanna Andreadou
(Leader, Greece)
Derek Hausenloy
(Co-leader, UK)

**WG2: Combination
Therapy**

Sean Davidson
(Leader, UK)
Marisol Ruiz-Meana
(Co-leader, Spain)
Attila Kiss
(Co-leader, Austria)

WG3: Confounders

Rainer Schulz
(Leader, Germany)
Peter Ferdinandy
(Co-leader, Hungary)
Alina Scridon
(Co-leader, Romania)

WG4: Consortium

Hans Erik Botker
(Leader, Denmark)
Gerd Heusch
(Co-leader, Germany)
Jacob Lonborg
(Co-leader, Denmark)

STSM Chair:

Coert Zuurbier
(Netherlands)

Science Communications

Manager:

Jelena Jovanic
(Bosnia)

Webmasters:

Søren Erik Pischke
(Norway)

Grant Manager:

Beatrix Sereg (Hungary)



Thur Mar 11th 2020

0830-1000 **COST Workshop – Mitochondria/metabolism/microvasculature**

Chairs: Maija Dambrova, Edgars Liepinsh
6 x 15 min (10 min talk and 5 min QA)

Methods

1. Obesity, mitochondrial dysfunction, and cardiovascular comorbidities – lifestyle matters
Erich Gnaiger (Oroboros, Austria)
2. Measuring metabolic flux in hearts
Dunja Aksentijevic (London, UK)
3. Measuring mitochondrial fatty acid oxidation: concept and reality
Marina Makrecka-Kuka (Riga, Latvia)
4. Mitochondrial imaging
Marko Vendelin (Estonia)
5. Cardiac and brain mitochondrial respiration, hydrogen peroxide production and Q-redox state under tissue normoxia versus experimental hyperoxia
Luiza Cardoso (Oroboros, Austria)
6. Intravital imaging of the beating heart microcirculation post-reperfusion injury
Neena Kalra (Birmingham, UK)

1000-1130 **Chairs:** Derek Hausenloy, Marisol Ruiz Meana

Targets

4 x 20 min (15 min talk and 5 min QA)

1. The many facets of mitochondrial ROS in cardiac injury and protection
Fabio Di Lisa (Padova, Italy)
2. Mitochondrial complex 2 as target for cardioprotection
Antonio Rodríguez Sinovas (Barcelona, Spain)
3. Redox-sensitive chaperone and protease DJ1 in heart protection
Lina Badimon (Madrid, Spain)
4. Systemic Blockade of ACVR2B Ligands Protects Myocardium from Acute Ischemia-Reperfusion Injury
Johanna Magga (Finland)

1130-1230 Lunch break

1230-1300 **Welcome and introductions to meeting**

Derek Hausenloy, Ioanna Andreadou, Peter Ferdinandy

COST ACTION update

1. Future meetings
2. Small and large animal networks

1300-1415 **INVITED SPEAKERS**

Chairs: Peter Ferdinandy, Rainer Schulz

1. Mitochondrial redox regulation in heart failure
Christophe Maack (Wurzberg, Germany) (20'5)
2. Novel antisense therapy targeting microRNA-132 in patients with heart failure
Thomas Thum (London, UK) (20'5)
3. Acute Myocardial Infarction: empty vessels make the most noise
Stéphane Germain (Paris, France) (20'5)

1415-1445 **NEW COST ACTION PROPOSAL ON POST-AMI HEART FAILURE**

Chair: Derek Hausenloy

Outline of potential new cost action proposal
Christophe Maack, Marisol Ruiz-Meana, Gemma Vilahur

1445-1500 **Comfort break**

1500-1600 **STSM reports**

Chairs: Coert Zuurbier, Jelena Jovanovic

4 x 15 min (10 min talk, 5 min Q&A)

1. Activation of PPAR β/δ protects mitochondrial function during myocardial ischemia/reperfusion
Ioanna Papatheodou (Lazou (Greece) to Dambrova (Latvia))
2. Role of Diabetes-associated circulating proinflammatory factors in cardiac electrical remodeling in a metabolic-induced model of type 2 diabetic rat
Julian Zayas (Casis+Ruiz-Meana (Spain) to Turan (Turkey))
3. Discovery and in vitro evaluation of potent inhibitors for reverse activity of mitochondrial F1F0 ATP synthase
Panagiota-Efstatia Nikolaou (Andreadou (Greece) to Davidson (UK))
4. Use of isolated heart preparations to assess cardiac pathophysiology
Maria Cardoso (Girão (Portugal) to Antonio Rodriguez Sinovas (Spain))

1600-1630 **RAPID FIRE abstract presentations**

Chairs: Sean Davidson, Rainer Schulz

4 x 7 min talks (5 min talk [5 slides only using template], 2 min Q&A)

1. An intrinsic mechanism of metabolic regulation modulates the cardiac response to stress
Matteo Sorge (Italy)
2. Cardioprotective effect of Elamipretide: targeting mitochondria.
Janis Kuka (Riga, Latvia)
3. Deletion of Pannexin1 confers protection against cardiac ischemia-reperfusion injury
Olga M Rusiecka (Switzerland)
4. Identification of a novel circRNA, circ-RCAN2, in a porcine model of myocardial infarction and in porcine cardiac progenitor cells in vitro
Julia Mester-Tonczar (Austria)

1630-1700 **IMPACT Criteria for selecting novel target/therapy**

Chairs: Hans Erik Botker, Derek Hausenloy, Gerd Heusch

Defining criteria for selecting a novel target/therapy for cardioprotection
IMproving Preclinical Assessment of Cardioprotective Therapies
(IMPACT)
Sandrine Lecour (South Africa) 20' talk 10' Q&A

1700-1715 **Summary and Action plan**

Meeting close