



CA15203 Mitochondrial fitness mapping: Conference, Working Groups and MC meeting - COST Action MITOEAGLE

Date: 2017 March 21-23
Venue: Institut d'Estudis Catalans, Barcelona, ES

Preliminary programme

2017-02-10

DAY 1. Tuesday, 2017-03-21 – MITOEAGLE Conference

- 08:30 Registration and signature of attendance.
08:45 Pablo Garcia-Roves (ES) Welcome: Introduction of COST-MITOEAGLE and Barcelona meeting to all participants

Session 1: Connecting mitochondrial physiology – global perspectives and case studies

Chair: *Kathrin Renner-Sattler - Germany*

- 09:15 Erich Gnaiger (AT) Quality first: a paradigm shift in mt-respiratory control towards global connection.
09:45 Paul Coen (USA) To bring MITOEAGLE and MoTrPAC together.
10:15 **General discussion**
10:20 Werner Koopman (NL) Standardized quantification of mitochondrial morphology and function in living patient fibroblasts using microscopy.
10:40 Roberto Scatena, Patrizia Bottoni (IT) Mitochondria and cancer stem cells in hepatocarcinoma. An illustrative example of a tangled methodological approach.
10:55 Rob Wüst (NL) Mitochondrial Complex I function in heart failure: different angles to analyze mitochondrial function.

11:10-11:40 COFFEE BREAK

Session 2: Connecting data on cardiac and skeletal muscle mitochondria

Chair: *Terje Larsen - Norway*

- 11:40 Andrew Murray (UK) Metabolic adaptation to high altitude in Himalayan Sherpas.
12:10 Hervé Dubouchaud (FR) Effects of different fatty acids on skeletal muscle mitochondrial function.
12:25 Michal Nemeč (SK) Functional state of mitochondria in patients with preclinical and early stage neurodegenerative disease"
12:40 Arild Rustan (NO) Metabolic studies in human skeletal muscle cells.
12:55 Ellen Aasum (NO) Mitochondrial function in the diabetic heart – effect of an acute fat-load.
13:10 Marko Vendelin (EE) VDACS open in the heart mitochondria.

13:25 **General discussion**

13:40-15:00 LUNCH

Session 3: Connecting data on adipocyte mitochondria

Chair: *Jan Nedergaard - Sweden*

- 15:00 Irina Shabalina (SE) Control of UCP1 activity in brown fat mitochondria.
 15:30 Tobias Fromme (DE) Source depot and dietary status influence oxidative phosphorylation capacity in permeabilized mature adipocytes.
 15:45 Manuela Sanchez-Feutrie (ES) RAP250 deficiency protects from obesity, and enhances mitochondrial metabolism in adipose depots.
 16:00 Marc Claret (ES) Mitochondrial performance and central regulation of energy balance.
 16:15 Lisa Chakrabarti (UK) Mitochondrial lipid and proteomics comparative studies in mammalian ageing.

16:30-17:00 COFFEE BREAK

Session 4: Connecting data on cultured cells and blood cells

Chair: *Magdalena Labieniec-Watala - Poland*

- 17:00 Nicoleta Moiso (UK) Models of Parkinson's with focus on cell lines.
 17:30 Claus Desler (DK) Mitochondrial mediated genomic instability in aging with focus on cell lines.
 17:15 Elisa Calabria (IT) Age and frailty related changes in PBMCs mitochondrial function and whole body physiology.
 18:00 Maria Monsalve (ES) Mitochondrial biogenesis in PMBC: potential biomarkers.
 18:15 Slawomir Michalak (PL) Mitochondrial respiration in intact peripheral blood mononuclear cells in patients with extrapyramidal syndromes.
 18:30 Clair Hartmann (DE) Mitochondrial respiration of peripheral blood mononuclear cells in an experimental porcine brain injury model.
 18:45 Karolina Siewiera (PL) The effect of metformin on blood platelet bioenergetics and platelet function.

DAY 2. Wednesday, 2017-03-22 – Working Groups (WG)

Session 1: Joint WG meeting

Chair: *Elisa Calabria - Italy*

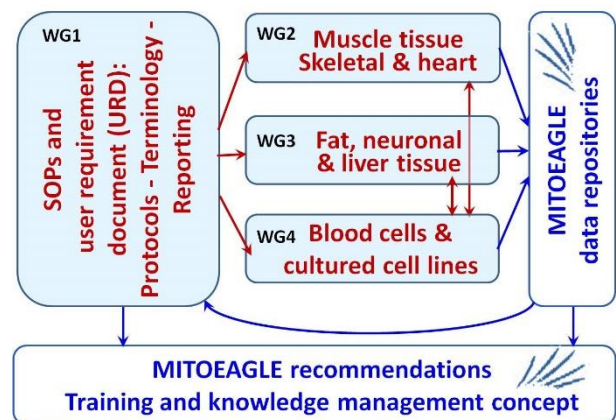
- 09:00 WG1 Presentation of tasks and current status.
 09:30 WG2 Presentation of tasks and current status.
 10:00 WG3 Presentation of tasks and current status.
 10:30 WG4 Presentation of tasks and current status.

11:00-11:30 COFFEE BREAK

Session 2: Specific WG presentations (5+5 min)

Chair: *Pablo Garcia-Roves - Spain*

- 11:30 Erich Gnaiger (AT) Current proposal about 'New terminology' on SUI protocols and coupling/pathway control states (WG1).



- 11:45 Marina Makrecka-Kuka (LT) Fatty acid oxidation evaluation in mitochondria (WG1).
12:00 Paul Coen (USA) and Pablo Garcia-Roves (ES) Technical perspective of high-resolution respirometry in permeabilized skinned muscle fibers: humans and animal models (WG2)
12:30 Odeta Arandarcikaite (LT) Age-related responses of brain mitochondria to ischemic insult (WG3).
12:45 Ondrej Sobotka (CZ) The effect of 24 weeks of high-fat and high-cholesterol diet on rat liver mitochondria (WG3).
13:00 Mario Ost (DE) Multivariate biomarkers of age-dependent sarcopenia: A blood based bioenergetics & cytokine profiling approach (WG4).
13:15 Natasha Kopitar-Jerala (SI) Mitochondrial ROS and inflammation (WG4).

13:30–14:30 LUNCH

Session 3: Specific WG meetings

14:30-17:00

- WG1 - Room TBA
- WG2 - Room TBA
- WG3 - Room TBA
- WG4 – Room TBA

17:00-17:30 COFFEE BREAK

Session 4: Joint WG meeting - conclusions and future WG actions.

- 17:30 WG1:
Towards a preprint publication on terminology in mitochondrial respiratory physiology.
17:50 WG2:
Fatty acid oxidation evaluation in mitochondria
18:10 WG3:
18:40 WG4:

DAY 3. Thursday, 2017-03-23 – Management Committee (MC)

09:00 Management Committee Meeting

11:00-11:30 COFFEE BREAK

13:00 End

