

# MITOEAGLE Working Groups Workshop 2017

Obergurgl, Tyrol, Austria  
2017, July 28-29



## Programme

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### Friday, July 28 – Morning

#### **F1 9:00-10:00 Selected presentations WG2, WG4**

- Erich Gnaiger:** Opening WG meeting
- Luciana Ferreira:** Doxorubicin toxicity and mitochondrial dysfunction in mouse induced pluripotent stem cells-derived cardiomyocytes.
- Luiz Crisostomo:** Glycerol metabolism in testicular cells – a mitochondrial tale that may control male reproductive potential.
- Guida Bento:** Isolation of human urine-derived stem cells for mitochondrial function profile assessment.
- Roberto Scatena:** [Cancer stem cell differentiation induced by PPAR ligands. Which role for an inhibition of mitochondrial respiratory chain? \(poster\)](#)
- 10:00 – 10:30** Terminology discussion  
*10:30 - 11:00* Coffee/tea break

#### **F2 11:00 – 12:00 Selected presentations WG2, WG1**

- Pablo Garcia-Roves:** MITOEAGLE data repository on muscle tissues - current status.
- Carolina Doerrier:** Upper limit of OXPHOS capacity: effect of oxygen and ADP.
- Andras Meszaros:** Personal proficiency and reproducibility of experimental results: a comparative study on respirometric analysis of HEK cells.
- 11:45 – 12:00** Terminology discussion: reference protocols, pathways  
*12:00 – 16:00* Lunch, Walk&Talk, Run&Fun

### Friday, July 28 – Afternoon

#### **F3 16:00 – 19:00 Selected presentations WG2**

- Jozef Ukropec:** Could functional state of muscle mitochondria reflect exercise-induced changes in insulin sensitivity, glucose tolerance and cognitive performance in individuals with mild cognitive impairment?
- Kasja Pavlovic:** Establishing cellular model for studying mechanisms of muscle insulin resistance: towards understanding the role of mitochondria.
- Petr Waldauf:** Effect of propofol on energy metabolism in an in vitro model of human skeletal muscle homogenates.
- Adela Krajcova:** Developing a method of assessing mitochondrial functions in homogenates of human heart muscle.
- Beatrice Chabi:** [Optimization of permeabilized fibers preparation for mitochondrial respiration measurements using Design of Experiments methodology. \(poster\)](#)
- 17:00 – 17:30** Discussion  
**17:30 - 18:00** Coffee/tea break
- Timea Komlodi:** Common pitfalls in the everyday work with respirometry.  
**18:15** Discussion  
*19:00* Dinner

## Saturday, July 29 – Morning

### G1 9:00-10:00 Oxidative and nitrosative stress

**Javier Iglesias-Gonzales:** Oscillations in mitochondrial ROS production as a new mechanism for cell cycle control.

**Timur Gainutdinov:** Different ways of reactive oxygen species (ROS) formation by brain mitochondria.

**Herve Dubouchaud:** Effects of a single bout of exercise on the production of reactive oxygen species in muscle and liver isolated mitochondria.

**Jordi Muntane:** Integration of oxidative and nitrosative stress in the overall cell death signaling induced by Sorafenib in hepatoma cells.

**10:00 – 10:30 Discussion**

*10:30 - 11:00 Coffee/tea break*

### G2 11:00 – 12:00 Presentations WG4: blood cells

**Luiz Garcia-Souza:** Towards a database on PBMC mitochondrial respiration: first steps on a literature survey linked to the MitoFit experimental data.

**Beata Velika:** High-Resolution Respirometry and viability of cryopreserved blood cells.

**Zuzana Sumbalova:** Comparison of methods for PBMC isolation: the effect on yield, purity and respiration.

**11:45 – 12:00 Discussion blood cells**

*12:00 – 16:00 Lunch, Walk&Talk, Run&Fun*

## Saturday, July 29 – Afternoon

### G3 16:00 – 17:30 Discussion in WG

*(Splitting according WG interests to separate WG)*

**16:00 – 17:30 WG4 - Blood cells**

**16:00 – 17:30 WG4 - Cell lines**

**16:00 – 17:30 WG3 - Next steps**

**16:00 – 17:30 WG2 - Steps towards database**

**16:00 – 17:30 WG1 - Steps towards terminology manuscript**

*17:30 - 18:00 Coffee/tea break*

**18:00 – 19:00 WG summary**

*19:00 Dinner*

