



Workshop: Mitochondria, aging and disease

Organizers: Paulo Oliveira (Coimbra, Portugal), Carlos Palmeira (Coimbra, Portugal), Jose Viña (Valencia, Spain) & Mariusz Wieckowski (Warsaw, Poland)

Day: Wed. 30th May, Thu. 31st May and Fri. 1st June 2018

Time: Different schedules apply depending on day

Room: MR 01 (on Wed. 30th May) / MR 05 + 06 (on Thu. 31st May and Fri. 1st June)

Wednesday 30th May

Technology Focus Session

CHAIRS: Paulo J. Oliveira and Mariusz Wieckowski

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| 13:30 | Opening of Workshop
Paulo Oliveira (Coimbra, Portugal), Mariusz Wieckowski (Warsaw, Poland), Carlos Palmeira (Coimbra, Portugal) & Jose Viña (Valencia, Spain) |
| 13:30-13:50 | Back to the basics: evolution of mitochondrial respirometry and basic concepts
Paulo Oliveira (Coimbra, Portugal) |
| 13:50-14:15 | High-Resolution Fluorescence Respirometry, two techniques combined in one to explore mitochondrial function in health and disease
Carolina Doerrier (Innsbruck, Austria) |
| 14:15-14:40 | Measuring mitochondrial function and glycolysis using the Seahorse XF Analyzer
Sofia Vikstrom (Copenhagen, Denmark) |
| 14:40-15:05 | Narrowing the in vitro - in vivo divide: the importance cellular oxygenation measurement
Ian Hayes (Cork, Ireland) |
| 15:05-15:30 | Live-cell quantification of mitochondrial morphology
Werner Koopman (Nijmegen, Netherlands) |
| 15:30-15:45 | Speaker selected from submitted abstracts |
| 15:45-16:00 | Speaker selected from submitted abstracts |
| 16:00-16:30 | COFFEE BREAK |
| 16:30-16:55 | Assessing mitochondrial substrate utilization through Krebs cycle flux measurements
John Jones (Coimbra, Portugal) |
| 16:55-17:30 | Group discussion: Should we have a uniform nomenclature and normalization for cellular respirometry assays? |
| 17.30-19.00 | Opening Ceremony & Lecture in Room MR 10 + 11 |



Thursday 31st May

Mitochondria In Disease Pathology

CHAIRS: Werner Koopman and Antonio Zorzano

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| 8:30-8.55 | The opposing impact of Alzheimer’s disease and Diabetes on mitochondrial DNA in the human brain
Afshan Malik (London, UK) |
| 8:55-9:20 | New advances in the mitochondrial permeability transition pore structure
Mariusz Wieckowski (Warsaw, Poland) |
| 9:20-9:45 | Reactivation of dehydroorotate dehydrogenase by respiration restores tumor growth of mitochondrial DNA-depleted cancer cells
Jakub Rohlena (Prague, Czech Republic) |
| 9:45-10:00 | Speaker selected from submitted abstracts |
| 10:00-10:30 | COFFEE BREAK |
| 10:30-12:30 | COMMON ACTIVITIES - AWARD Lectures in Room MR 10 + 11 |
| 12.30-14.30 | LUNCH & Poster Viewing and evaluation |
| 14:30-14:55 | The role of mitochondria in neuronal innate immunity activation: relevance for Parkinson’s disease
Sandra Cardoso (Coimbra, Portugal) |
| 14:55-15:20 | Crosstalk between mitochondria and lysosomes in metabolic diseases
Nuno Raimundo (Gottingen, Germany) |
| 15:20-15:45 | Metabolic plasticity in obesity-related type 2 diabetes
Pablo Garcia-Roves (Barcelona, Spain) |
| 15:45-16:00 | Short selected talk |
| 16:00-16:30 | COFFEE BREAK |
| 16:30-16:55 | Improvement of mitochondrial efficiency in metabolic diseases
Carlos Palmeira (Coimbra, Portugal) |
| 16:55-17:10 | Speaker selected from submitted abstracts |
| 17:10-17:25 | Speaker selected from submitted abstracts |
| 17:30-19.00 | POSTER Viewing and evaluation with DRINKS |



Friday 1st June 2018

Joint Session With Hepato-Gastroenterology/Lipids Workshop

CHAIRS: Piero Portincasa and Carlos Palmeira

8:30-8:55 **Mitochondrial dysfunction and liver injury**
Jose Fernandez-Checa (Barcelona, Spain)

8:55-9:20 **Mitochondrial adaptation in steatosis**
Hans Zischka (Munich, Germany)

9:20-9:45 **Regulation of lipid metabolism in NAFLD**
Francesc Villarroya (Barcelona, Spain)

9:45-10:00 **An Update on the ETN project FOIE GRAS**
Paulo J. Oliveira (Coimbra, Portugal)

10:00-10:30 COFFEE BREAK

10:30-12:30 COMMON ACTIVITIES - Multidisciplinary Focus Lectures in Room MR 10 + 11

12.30-14.30 LUNCH & Poster Viewing and evaluation

Mitochondria in aging-associated-diseases

CHAIRS: Fabio Di Lisa and Jose Viña

14:30-14:55 **Mitochondria and neuroprotection with neuroglobin**
Marisol Corral-Debrinski (Paris, France)

14:55-15:20 **The role of mitochondria to explain gender associated differences in aging and age-associated diseases**
Consuelo Borrás (Valencia, Spain)

15:20-15:45 **Mitochondrial dynamics and its role in age-related metabolic diseases**
Antonio Zorzano (Barcelona, Spain)

15:45-16:00 Speaker selected from submitted abstracts

16:00-16:30 COFFEE BREAK

16:30-16:55 **Transcriptomic analysis reveals a distinct control of apoptosis in exceptional aging: role of mitochondria**
Jose Viña (Valencia, Spain)

16:55-17:20 **Mitochondrial and nuclear DNA in healthy aging**
José Enriquez (Madrid, Spain)



17:20-17:35 Speaker selected from submitted abstracts

17:35-17:45 **Short group discussion: The present and future of the mitochondrial workshop at ESCI Annual Scientific Meeting**

18:00-18:30 POSTER Prizes & Closing in Room MR 10 + 11