

Mitochondria and Metabolism in Health and Disease

10th Annual MetNet International Meeting

Institut d'Estudis Catalans (IEC) Carrer del
Carme, 47, 08001 Barcelona. Barcelona,
October 24th-25th, 2024

Thursday October 24th

- 8:15-9:00 Registration
9:00-9:15 Welcome

Session 1: Mitochondria and metabolism in immunology: Chair Mariona Guitart

- 9:15 - 9:45 Albert Pol, ICREA-IDIBAPS-UB, Barcelona, Spain.
Defensive-lipid droplets: Cellular organelles designed for antimicrobial immunity.
- 9:45- 10:15 Stephanie Wculek, IRB, BIST, Barcelona, Spain.
Metabolic Dependencies of Innate Immune Cells.
- 10:15-10:30 Short talk selected from Abstracts.

Sponsor session: Methodologies to measure Mitochondrial function and Metabolism:

- 10:30-10:55 Miriam Contreras and Alfredo Caro-Maldonado, Agilent Technologies, Spain.
Improvements in sensitivity and flexibility in measurements of mitochondrial function.
- 10:55-11:20 Mike Lu, Lucid Scientific, USA
Resipher, a new non-invasive method to measure mitochondrial oxygen consumption.
- 11:20 -12:15 Coffee & refreshments

Session 2: Mitochondria and metabolism in ageing and age-related diseases: Chair Josep Julve

- 12:15-12:45 Laura Formentini, CBM-CSIC-UAM, Madrid, Spain.
Substrate-dependent mitochondrial efficiency: a new metabolon.
- 12:45-13:15 Laurent Martinez, IM2C-INSERM, Toulouse, France.
Energizing Aging Research: Mitochondrial Bioenergetics for Biomarker and Target Discovery in the Inspire-T cohort.
- 13:15-13:30 Short Talk Selected from Abstracts.
- 13:30-15:30 Posters of Sessions 1 and 2 + Finger food lunch at Poster Hall

Session 3: Inherited mitochondrial and metabolic diseases: Chair Mariona Guitart

- 15:30-16:00 Albert Quintana, UAB, Barcelona, Spain.
Parallel cell-type specific neurodegenerative pathways in mitochondrial disease.
- 16:00-16:30 Yolanda Cámarra, Vall D'Hebron Institut de Recerca, CIBERER, Barcelona, Spain
In vivo role of accessory subunit NDUFA10 beyond stabilization of respiratory complex I.
- 16:30-16:45 Short Talk Selected from Abstracts.
- 16:45-18:45 Poster of Sessions 3 and 4 + Refreshments at Poster Hall

Sponsors (22/07/24):

Friday October 25th

Session 4: Mitochondria and metabolism in metabolic associated liver disease: Chair Josep Julve

- 9:15-9:45 **Joan Clària**, Clínic-UB, CIBEREHD, Barcelona, Spain.
Mitochondrial Dysfunction in Chronic Liver Disease.
- 9:45-10:15 **José Antonio Enríquez**, CNIC, CIBERFES, Madrid, Spain.
Mitochondria in the aged liver.
- 10:15-10:45 **Giorgia Benegiamo**, Laboratory of Integrative Systems Physiology, EPFL, Switzerland
The genetic background shapes the susceptibility to mitochondrial dysfunction and NASH progression.
- 10:45-11:45 **Coffee & refreshments**

Session 5: Celebrating Prof. Atan Gross with new mechanisms of mitochondria and metabolism regulation I:

Chair Marc Liesa

- 11:45-12:15 **Orian S. Shirihi**, UCLA, Los Angeles, USA.
The Social life of mitochondria within the cell, exclusive clubs and dynamic networks.
- 12:15-12:45 **Antonio Zorzano**, UB,IRB, CIBERDEM, Barcelona, Spain
Mitochondrial dynamics and inflammation.
- 12:45-13:15 **Luca Scorrano**, University of Padova, Padova, Italy
Keeping mitochondria in shape, a matter of life and death.
- 13:15-13:30 **Short Talk selected from Abstracts.**
- 13:30-15:30 **Posters of Sessions 4, 5 and 6 + Finger food lunch at Poster Hall**

Session 6: Celebrating Prof. Atan Gross with new mechanisms of mitochondria and metabolism regulation II:

Chair Marc Liesa

- 15:30-16:00 **Ana Victoria Lechuga Vieco**, University of Oxford, UK.
Mitochondrial heterogeneity: friend or foe?
- 16:00-16:30 **Maria E. Solesio Torregrosa**, Rutgers University, New Jersey, USA.
Inorganic polyphosphate and mammalian metabolism.
- 16:30-17:00 **Heidi McBride**, McGill University, Montreal, Quebec, CA
Mitochondrial vesicles in immunology and evolution.
- 17:00-17:15 **Short Talk selected from Abstracts**
- 17:15-17:45 **Concluding remarks and farewell**

Organizing Committee: Josep Julv , Institut de Recerca Sant Pau, Barcelona (Spain), CIBERDEM, jjulve@santpau.cat
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