

Barcelona BioMed Conference Mitochondrial Autophagy March 21-23, 2011

Programme

Monday, March 21, 2011

8.30 Registration

9.00 Welcome by Joan J Guinovart, IRB Barcelona Director

Session I:

Chair: Luca Scorrano, University of Geneva (Geneva, Switzerland)

9.15 - 10.00 **Jodi Nunnari** University of California (Davis, CA, USA) *Regulation of Mitochondrial Dynamics*

10.00 - 10.45 Alex van de Bliek University of California (Los Angeles, CA, USA) *Mitochondrial inner membrane fusion proteins and stress*

10.45 - 11.15 Coffee break and poster session

11.15 - 12.00 **Katsuyoshi Mihara** Kyushu University (Fukuoka, Japan) *Mitochondrial Recruitment of Drp1 during Mitochondrial Fission in Mammalian Cells*

12.00 - 12.45 **Antonio Zorzano** IRB Barcelona (Barcelona, Spain) *Impact of mitofusin 2 ablation on muscle and liver metabolism*

12.45 - 13.30 Manuel Rojo Institut de Biochimie et Génétique Cellulaires (Bordeaux, France)

Pathogenic mutations of the mitochondrial ATP6 gene inhibit mitochondrial fusion

13.30 - 13.45 **Cristiane Beninca** IBMB (Barcelona, Spain) Short talk: *A new paradigm for G protein signaling in mitochondria*

13.45 - 14.00 Silvia Ramírez Peinado IDIBELL (Hospitalet de Llobregat, Spain) Short talk: Inhibition of glucose metabolism

Tuesday, March 22, 2011

Session II:

Chair: Thomas Langer, University of Cologne (Cologne, Germany)

9.00 - 9.45 Ana-Maria Cuervo Albert Einstein College of Medicine (Bronx, NY, USA) Selective Autophagy on the Response to Stress in Aging and Age-related disorders

9.45 - 10.30 Patricia Boya Centro de Investigaciones Biológicas, CIB-CSIC (Madrid, Spain)

Autophagy in neural tissues: from development to neurodegeneration

10.30 - 11.00 Coffee break and poster session

11.00 - 11.45 Ivan Dikic Goethe University Medical School (Frankfurt, Germany)

Molecular basis of selective Autophagy

11.45 - 12.30 Angelika Rambold National Institute of Child Health and Human Development (Bethesda, MD, USA)

Starved cells use mitochondria for autophagosome biogenesis

12.30 - 13.15 **Karin Nowikowsky** University of Vienna (Vienna, Austria) *Pathophysiology of mitochondrial volume homeostasis and autophagy*

13.15 - 13.30 **Silvia Campello** University of Geneva (Geneva, Switzerland) Short talk: *Mitochondrial shape changes and autophagy counteracts Activation-Induced Cell Death (AICD) in T lymphocytes*

13.30 - 15.15 Lunch (FrescCo, C/ Carme, 16)

Session III:

Chair: Ana Maria Cuervo, Albert Einstein College of Medicine (Bronx, NY, USA)

15.15 - 16.00 **Thomas Langer** University of Cologne (Cologne, Germany) *Mitochondrial quality control and neurodegeneration*

16.00 - 16.45 **Heidi McBride** University of Ottawa Heart Institute (Ottawa, Canada) *Mitochondrial quality control through vesicular transport*

16.45 - 17.15 Coffee break and poster session

17.15 - 18.00 **Orian Shirihai** Boston University (Boston, MA, USA) *Mitochondrial Dynamics and Autophagy: Regulation by Nutrients*

18.00 - 18.45 Marco Sandri Dulbecco-Telethon Institute (Padua, Italy) Autophagy and the control of mitochondrial network in skeletal muscle

18.45 - 19.00 Luisa Coletto Venetian Institute of Molecular Medicine (Padova, Italy) Short talk: Autophagy inhibition mediated by chronic activation of Akt causes muscle dystrophy in collagen VI KO animals

Wednesday, March 23, 2011

Session IV:

Chair: Orian Shirihai, Boston University (Boston, MA, USA)

9.00 - 9.45 Luca Scorrano University of Geneva (Geneva, Switzerland)

During autophagy mitochondria elongate, are spared from degradation and sustain cell viability

9.45 - 10.30 **Paul Ney** St. Jude Children's Research Hospital (Memphis, TN, USA) *Mechanism of mitochondrial clearance during erythrocyte development*

10.30 - 11.00 Coffee break and poster session

11.00 - 11.45 **Koji Okamoto** National Institute for Basic Biology (Okazaki, Japan) *Mechanism of Atg32-mediated mitophagy in yeast*

11.45 - 12.30 Hagai Abeliovich Institute of Neurological Disorders and Stroke (Bethesda, MD, USA)

Regulation of stationary phase mitophagy in Saccharomyces cerevisiae

12.30 - 13.15 Francesco Cecconi University of Rome Tor Vergata (Rome, Italy) *Mitochondrial BCL-2 inhibits AMBRA1-induced autophagy*

13.15 - 13.30 **Joe Pogson** University of Sheffield (Sheffield, UK) Short talk: Discovery of novel modulators of PINK1 combining cell based RNAi screens and Drosophila models of Parkinson's disease

13.45 - 15.15 Lunch (FrescCo, C/ Carme, 16)

Session V:

Chair: Antonio Zorzano, IRB Barcelona (Barcelona, Spain)

15.15 - 16.00 **Alexander J. Whitworth** University of Sheffield (Sheffield, UK) *PINK1/parkin pathway in mitophagy; clues from Drosophila*

16.00 - **16.45** Lesley Kane National Institute of Neurological Disorders and Stroke (Bethesda, MD, USA)

Mechanisms of Parkin-mediated mitophagy

16.45 - 17.15 Coffee break and poster session

17.15 - 18.00 **Bingwei Lu** Stanford University School of Medicine (Stanford, CA, USA) What Role Does Autophagy Play in the Pathogenesis of Parkinson's Disease?

18.00 - 18.15 Vincent Soubannier University of Ottawa Heart Institute (Ottawa, Canada)

Short talk: Parkin functions in a novel vesicular pathway governing mitochondrial quality control

18.15 General discussion and concluding remarks