

# WORKSHOP

## “REDOX BIOLOGY IN HEALTH AND DISEASE”

Barcelona, June 27<sup>th</sup>-28<sup>th</sup>, 2024

Organizers: Victoria Campuzano, Gustavo Egea, Isabel Fabregat

**FREE REGISTRATION! Limited number of attendees: 100.**

Full program and registration available in:

<https://tgfbeta-redox.cat/workshop>

### Thursday 27<sup>th</sup>

08:30 – 09:00 **Registration**

09:00 – 09:30 **Welcome**

09:30 – 11:00 **SESSION 1: ROLE OF MITOCHONDRIA IN THE REGULATION OF REDOX BIOLOGY-I.** Chaired by: **Joaquim Ros**, Universitat de Lleida, Lleida, Spain.

- **Antonio Enríquez**, Spanish National Center for Cardiovascular Research (CNIC) and CIBERFES, Madrid, Spain. “*Redox communication through mitochondria*”.
- **Antonio Zorzano**, University of Barcelona and Institute for Research in Biomedicine and CIBEREDem, Barcelona, Spain. “*Mitochondrial fusion proteins and their role in cell homeostasis*”.
- **Jose-Carlos Fernández-Checa**, IDIBAPS, Barcelona Clinic Hospital and CIBEREHD, Barcelona, Spain. “*Mitochondrial cholesterol trafficking in metabolic-associated steatohepatitis and liver cancer*”.

11:00 – 11:30 **Coffee Break**

11:30 – 12:30 **SESSION 2: ROLE OF MITOCHONDRIA IN THE REGULATION OF REDOX BIOLOGY-II.** Chaired by: **Elena Hidalgo**, Universitat Pompeu Fabra, Barcelona, Spain.

- **M. Isabel Hernández-Álvarez**, University of Barcelona, Barcelona, Spain. “*Mitochondrial fusion proteins and organelle connections in metabolism*”.
- **Juan Pedro Bolaños**, University of Salamanca and CIBERFES, Salamanca, Spain. “*Astrocyte metabolism: energy or signaling?*”.

12:30 – 13:30 **OPENING KEYNOTE LECTURE.** Chaired by: **Gustavo Egea**, Universitat de Barcelona, Barcelona, Spain.

**Victor Thannickal**. Tulane University School of Medicine, New Orleans, USA). “*From Oxygen to Redox Biology and Organ Regeneration*”.

13:30 – 15:00 **Lunch**

**15:00 – 16:30 SESSION 3: REDOX BIOLOGY IN INFLAMMATION AND NEUROLOGICAL DISEASES.** Chaired by: **Teresa Carbonell**, Universitat de Barcelona, Barcelona, Spain.

- **Gemma Marfany**, University of Barcelona and CIBERER, Barcelona, Spain. *"Bringing light to darkness: CERKL, a retinal resilience gene against oxidative stress"*.
- **Joaquim Ros**, University of Lleida, Lleida, Spain *"Alterations of mitochondrial function in Friedreich's Ataxia"*.
- **Juan Sastre**, University of Valencia, Valencia, Spain. President of the SFRR-Europe. *"TRP14 regulates intracellular cystine reduction and protein cysteinylolation"*.

## Friday 28<sup>th</sup>

09:30 – 11:00 **SESSION 4: REDOX SIGNALLING IN CARDIOVASCULAR PATHOLOGIES.**  
Chaired by: **Victoria Campuzano**, Universitat de Barcelona, Barcelona, Spain.

- **Susana Cadenas**, Center of Molecular Biology Severo Ochoa – CBMSO (CSIC/UAM), Madrid, Spain. *"Redox signaling and cardioprotection in ischemia-reperfusion injury"*
- **Vivian de Waard**, Amsterdam University Medical Center (AUMC), University of Amsterdam, Amsterdam, The Netherlands: *"Resveratrol as antioxidant therapy in aortic disease in Marfan syndrome"*.
- **María Galán**, University Rey Juan Carlos (URJC), Madrid, Spain. *"Targeting mitochondrial stress to limit aortic dilation in murine models of aneurysm"*.

11:00 – 11:30 **Coffee Break**

11:30 – 12:30 **SESSION 5: NEW INSIGHTS ABOUT NADPH OXIDASES AS THERAPEUTIC TARGETS IN HUMAN DISEASES.** Chaired by: **Juan Sastre**, University of Valencia, Valencia, Spain. President of the SFRR-Europe.

- **Susan M.E. Smith**, Kennesaw State University, Kennesaw, Georgia, USA. *"Comparison of NOX structures suggests potential new druggable site(s)"*.
- **Miklós Geiszt**, Semmelweis University, Medical School, Budapest, Hungary. *"Lessons from the rabbit model of NOX5 deficiency"*.

12:30 – 13:30 **CLOSING KEYNOTE LECTURE.** Chaired by: **Isabel Fabregat**, IDIBELL and CIBEREHD, Barcelona, Spain.

**Ulla Knaus**, School of Medicine, University College Dublin, Dublin, Ireland. *"NADPH oxidase: culprit and protector in the intestine"*.

13:30 – 14:00 **CONCLUDING REMARKS.**