



Universidad de
Oviedo



XIV GEIRLI Congress

Oviedo, 17-19th July 2024 (Historic Building University of Oviedo)

Wednesday 17th July

- 15:30 Registration and documentation pick up
- 16:00 Groups meeting
- 17:00 Welcome from Organizing Committee
- 17:30 Coffee break
- 18:00 Plenary lecture: **Giovanni E. Mann** "Roadblocks for clinical translation: Importance of physiological O₂ for high throughput screening in live cell models" (Professor of Vascular Physiology, Kings College, London). Presented by **Juan Sastre** (President SFRR-Europe)
- 19:30 Cocktail (Vino español)

Thursday 18th July

Session 1

Oxidative stress and Pathophysiology of Disease

Moderator: Juan C. Mayo & Teresa Carbonell Camos

- 8:30 **Federico V. Pallardó** "Innovative approaches in Friedrich' Ataxia: The substantial impact of calcium and oxidative stress" (INCLIVA, Universidad de Valencia)
- 9:00 **Dolores Pérez-Sala** "The connections of type III intermediate filaments with oxidative stress: a role in neurodegeneration" (CIB Margarita Salas, CSIC, Madrid)
- 9:30 **Ana I. Rodríguez-Perez** "Renin Angiotensin System and Oxidative stress" (IDIS, Universidad de Santiago de Compostela)

Selected Oral Communications

- 10:00 **Diego Moneo Corcuera** "Oxidative stress induces vimentin remodeling into assemblies compatible with biomolecular condensates" (CIB Margarita Salas, CSIC, Madrid)
- 10.15 **Norma Alva Bocanegra** "Previous hypothermic perfusion attenuates warm ischemia-reperfusion damage in isolated liver: early attempts to decipher the mechanism" (Universidad de Barcelona)
- 10:30 Poster session
- 11:00 Coffee break



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Session 2

Technical Approaches and omic-sciences in the Investigation of Redox Biology

Moderator: David Hevia Sánchez & Isabel Quirós González

- 11:30** **Jesús Vázquez** "Novel proteomics approaches for high-throughput analysis of oxidative post-translational protein modifications" (CNIC, Madrid)
- 12:00** **Luis Valledor González** "Metabolomics: A powerful tool for investigating redox responses to abiotic stress in *Chlamydomonas reinhardtii*" (Universidad de Oviedo)
- 12:30** **Vanesa Cepas López** "Patient-derived organoids and genetically-encoded redox biosensors, a step forward to study single cell redox dynamics" (Candiolo Cancer Institute, Turín)

Commercial communications

- 13:00** **Miriam Contreras Mostazo** "Illuminating Oxidative Stress: Cutting-Edge ROS Measurement with Seahorse, Cytation, Novocyte, and Synergy Technologies". (Agilent Technologies, Spain)
- 13:15** **Julio Martin** "Real-time intracellular monitoring of ROS induction in live cells with a SPACHIP technology" (Arrays for Cell Nanodevices_A4cell, Madrid, Spain)
- 13:30** Poster session
- 13:30** Lunch break

Session 3

Redox control of Cell Signaling

Moderators: Jordi Muntané

- 15:30** **Juan C. Mayo** "The Interplay Between Redox Signaling and Circadian Clock Genes" (IUOPA, Universidad de Oviedo)
- 16:00** **Maria Luisa Sandalio** "Subcellular and light/dark-dependent redox dynamic changes in stress and signaling in plants" (Estación Experimental del Zaidín, Granada)
- 16:30** **Susana Cadenas** "Cardioprotective role of uncoupling protein UCP3 in ischemia-reperfusion injury" (CBM Severo Ochoa, CSIC, Madrid)

Selected Oral Communications

- 17:00** **Eva Martín Prieto** "RONS facilitate AMPK and AKT phosphorylation which drive GLUT4 translocation to plasma membrane in skeletal muscle cells (C2C12 myotubes)" (Universidad de Salamanca)
- 17:10** **Clara Luna Marco** "Disruption of circadian rhythm markers and oxidative stress in leukocytes of type 2 diabetes" (INCLIVA, Universidad de Valencia)
- 17:20** **Clara García Calvo** "NOX2 correlation with lipid metabolism, prognosis and survival in acute myeloid leukaemia" (Universidad de Salamanca)



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- 17:30 Coffee break
- 18:00 Plenary Lecture: **Pedro Friedmann Angeli** "Selenocysteine metabolism and ferroptosis resistance, the (un)expected connection" (Rudolf Virchow Center, University of Würzburg)
- 19:00 GEIRLI members meeting
- 20:00 Visit to the historic downtown and dinner

Friday 19th July

Session 4

Mitochondria, Oxidative Stress and Cell Death

Moderator: Victor M. Victor & Pedro González Menéndez

- 9:00 **Antonio Martínez Ruiz** "What does sodium and calcium transport in mitochondria have to do with redox signaling in hypoxia and inflammation?" (Instituto de Investigación Sanitaria Princesa, CSIC, Madrid)
- 9:30 **Javier Traba** "Regulation of innate and adaptive immune cells by mitochondrial reactive oxygen species" (CBM Severo Ochoa, Madrid)
- 10:00 **Laura Doblado Bueno** "Mitochondrial oxidative stress as a key determinant for cardiovascular disease in type 2 diabetes" (IIBM, CSIC, UAM, Madrid)

Selected Oral Communications

- 10:30 **Julia Cacace** "Poor glycaemic control in type 2 diabetes promotes mitochondrial dysfunction" (FISABIO, Valencia)
- 10:40 **Belén García Soler** "Effects of SOD2 dysregulation on spermatogenesis and early embryo development" (IUOPA, Universidad de Oviedo)
- 10:50 **Manuela Hidalgo López** "Loss of mitochondrial plasticity negatively impacts hepatocellular carcinoma development in the context of MAFLD" (IIBM, CSIC, UAM, Madrid)
- 11:00 Poster Session-Coffee Break

Session 5

Redox Homeostasis in Model Organisms

Moderator: Rosa M. Sainz

- 11:30 **Francisco J. Corpas** "Pepper fruit ripening: A colorful and edible nitro-oxidative cocktail" (Estación Experimental del Zaidin, Granada)
- 12:00 **Nuria Paricio** "Oxidative stress in Drosophila and human cell models of Parkinson's disease" (Universidad de Valencia)



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- 12:30 Round table: The future of Redox Biology in the IA era
Juan Sastre, Jordi Muntané, Teresa Carbonell y Rosa M Sainz
- 13:00 Plenary Lecture Ana Navarro: **Isabel Fabregat** "Lights and shadows about the role of NADPH oxidases in liver fibrosis and cancer" (IDIBELL, Barcelona)
- 14:30 Awards and Closing Ceremony



<https://www.geirli2024oviedo.es/>

ORGANIZAN:



COLABORAN:

