

XIX IBiS RESEARCHERS FORUM



Biomedical challenges in aging and rejuvenation

Sevilla, March 15th–16th, 2023

15:00 Opening - IBI Director, HUVR Director Manager, HUVM Director Manager

15:15 Forum presentation by organizers - Dr. Matilde Bustos / Dr. Pablo Mir

15:30 **Round Table I** - "Biomedical challenges in aging and rejuvenation I"
Chairs: **Dr. Pablo Mir / Dr. Aida Platero**

"Targeting cellular aging as the latest preventative medicine"

Dr. Aida Platero - Pathophysiology of neural stem cells
Institute of Biomedicine of Sevilla (IBIS)

"Cell senescence in development, regeneration, cancer and aging"

Dr. Manuel Collado - Head, Laboratory of Cell Senescence, Cancer and Aging
Health Research Institute of Santiago de Compostela (IDIS)

"Cellular senescence and adaptive immune responses"

Dr. Inés Marín Guillén - Laboratory of Cellular Plasticity and Disease
Institute Research in Biomedicine (IRB Barcelona)

17:00 Coffee break

17:30 **Scientific Session I** - Chairs: **Dr. Daniel Gómez Cabello / Dr. Remedios Otero**

"Selective histone methyltransferase G9a inhibition reduces metastatic development of Ewing sarcoma through the epigenetic regulation of NEU1"

Dr. Enrique de Álava - *Molecular Pathology of Sarcomas and other Tumors*

"Animal models for understanding cellular and molecular mechanisms of early central nervous system development in both health and disease"

Dr. Patricia Ybot González - *Neurodevelopment and neuropediatric diseases*

"Searching for new epigenetic biomarkers of chronic thromboembolic pulmonary hypertension"

Dr. Verónica Sánchez López - *Respiratory Diseases*

"Diet supplementation with polyphenol-rich halophytes in neurovascular disease"

Dr. Carmen del Río Mercado - *Neurovascular*

18:30 Presentations of Selected 2022 Publications

18:30 Women leadership publication - Chair: **Dr. Carmen Paradas**

Gual-de-Torrella A, Delgado-Valverde M, Pérez-Palacios P, Oteo-Iglesias J, Rojo-Molinero E, Macià MD, Oliver A, Pascual Á, Fernández-Cuenca F. **Prevalence of the fimbrial operon mrkABCD, mrkA expression, biofilm formation and effect of biocides on biofilm formation in carbapenemase-producing Klebsiella pneumoniae isolates belonging or not belonging to high-risk clones.** Int J Antimicrob Agents. 2022 Oct;60(4):106663

18:50 Fundamental research publication – Chair: **Dr. José Luis Venero Recio**

Cabello-Rivera D, Ortega-Sáenz P, Gao L, Muñoz-Cabello AM, Bonilla-Henao V, Schumacker PT, López-Barneo J. **Oxygen regulation of breathing is abolished in mitochondrial complex III-deficient arterial chemoreceptors.** Proc Natl Acad Sci USA. 2022 Sep 27; 119(39):e2202178119. doi: 10.1073/pnas.2202178119. Epub 2022 Sep 19. PMID: 36122208; PMCID: PMC9522341

19:10 Clinical research publication - Chair: **Dr. Jesús Rodríguez Baño**

Peñalva G., Crespo-Robledo P., Molvik M., López-Navas A., Kacelnik O., Cisneros JM., EU-JAMRAI WP7.4.1 group. **A step forward in antibiotic use and resistance monitoring: a quarterly surveillance system pilot in 11 European Union/European Economic Area countries, September 2017 to May 2020.** Euro Surveill. 2022;27(46):2200082

19:30 End of the day

Thursday, March 16th, 2023

**Venue: "Patio central Hospital General HUVR"
"Aula Magna - Edificio de Gobierno HUVR"**

12:00 Posters Session

"Patio central Hospital General HUVR" – Coffee

14:00 Finger food and drinks

"Patio central Hospital General HUVR"

15:00 Round Table II - "Aula Magna - Edificio de Gobierno HUVR"

"Biomedical challenges in aging and rejuvenation II"

Chairs: Dr. Matilde Bustos / Dr. Gabriel Núñez

"Immunometabolism at the crossroad between inflammation and aging"

Dr. Maria Mittelbrunn - Centro de Biología Molecular Severo Ochoa
CSIC – Madrid

"Epigenetic reprogramming of aging in mice"

Dr. Alba del Valle Vilchez Acosta - Ocampo lab
University of Lausanne-Switzerland

"Aim and scope of Nature Aging"

Dr. Anna Kriebs - Nature Aging

16:45 Coffee break

"Patio central Hospital General HUVR"

17:30 Scientific Session II – "Aula Magna - Edificio de Gobierno HUVR"

Chairs: Dr. María Dolores Giráldez / Dr. José Manuel Rodríguez

"Full protection from SARS-CoV-2 brain infection and damage in susceptible transgenic mice conferred by MVA-CoV2-S vaccine candidate"

Dr. Juan José Toledo Aral - *Cell therapy and molecular physiology*

"CtIP-dependent nascent RNA expression flanking DNA breaks guides the choice of DNA repair pathway"

Dr. Daniel Gómez Cabello - *Synthesis and Function of Ribosomes*

"Role of thymus in the immune response to COVID-19 vaccine: a longitudinal study in a nursing home"

Dr. María del Mar del Pozo Balado - *Immunology*

"Ex vivo effect of JAK inhibition on JAK-STAT1 pathway hyperactivation in patients with dominant-negative STAT3 mutations"

Dr. Pilar Blanco Lobo - *Inborn Errors of Immunity*

18:30 Awards ceremony of the 2nd IBiS Scientific Photography Contest

"Aula Magna - Edificio de Gobierno HUVR"

18:50 Conclusions – "Aula Magna - Edificio de Gobierno HUVR"

19:00 End of Forum