



9th INTERNATIONAL
CELL SENESCENCE
ASSOCIATION (**ICSA**)
CONFERENCE

PUERTO VARAS 2024

PROGRAM

Subject to change.



November 7th, afternoon - Day 1

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| 14:45 | Welcoming Comments | |
| 15:00 | Session 1: | Metabolism and Mitochondria's impact on senescence. |
| 25+5 min | Cesar Cardenas - MERCS, calcium and therapy induce senescence. | |
| 10+2 min | Romain Villot - Exploring the role of cholesterol metabolism during cellular senescence: regulation of the senescence-associated secretory phenotype by the CH25H/25-HC axis. | |
| 25+5 min | David Bernard - Emerging role of ITPR channels and ER-mitochondria contacts and exchanges in cellular senescence, aging and cancer. | |
| 10+2 min | Celia Quijano - Metabolic fates of acetyl-CoA in oncogene-induced senescence. | |
| 16:30 | Coffee Break | |
| 17:00 | Session 2: | Virus's impact on senescence. |
| 25+5 min | Pablo Gonzalez - Asymptomatic herpes simplex brain infection elicits earlier onset and more severe multiple sclerosis-like disease in mice together with cellular senescence phenotypes in the central nervous system. | |
| 10+2 min | Julio Aguado - The Role of Virus-Induced Senescence in Post-Acute Neurotropic Infection Syndrome. | |
| 10+2 min | Carmen Rivas - Cellular senescence as the basis for HCMV-related | |
| 10+2 min | Peter Lidsky - Antiviral activity of senescent cells: are they an immune "militia"? | |
| 10+2 min | Concepción Peiró - SARS-COV-2 s protein reduces cytoprotective defenses and promotes premature human endothelial cell senescence and vascular dysfunction. | |
| 18:30 | Manuel Serrano - Judith Campisi Memorial Lecture: Exploring Judith Campisi's discoveries: the key role of mitochondria in the SASP. | |
| 19:30 | Welcoming Reception | |



November 8th, evening - Day 2

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| 09:00 | Session 3: | Senescence versus Cancer: Antagonist or Allies in the biological Saga. (Part I) (Chair: Eduardo Artz, Florencia Herbstein) |
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| 25+5 min | Sheila Stewart - Tumor progression and therapy-induced comorbidities, a role for senescence. |
| 10+2 min | Omelyan Trompak - Spontaneous tumor senescence drives cancer metastasis. |
| 25+5 min | Manuel Collado - Reprogramming cell senescence and cancer. |

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| 10:15 | Short talks |
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| 5 min | Camilla Romagnoli - Exploring the Role of Mechanobiology on Endothelial Senescence. |
| 5 min | Florencia Herbstein - Intracrine action of IL-6 in tumor senescence. |
| 5 min | Maximilian Schmid-Siegel - Proteostasis and metabolism profoundly differ between non-proliferative senescent and quiescent dermal fibroblasts. |
| 5 min | Andreia Cadar - The Impact of D+Q on Influenza Vaccine and Infection Responses in Young and Aged Mice. |
| 5 min | Juliana Delgado - Multi-omics analyses reveal heterogeneity in the therapy-induced senescent landscape. |
| 5 min | Hernán Huerta - Targeting Chemotherapy-Induced Senescence with Ketogenic Diet for Breast Cancer Treatment. |

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| 10:45 | Coffee Break |
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| 11:15 | Session 3: | Senescence versus Cancer: Antagonist or Allies in the biological Saga. (Part II) (Chair: Gerardo Ferbeyre) |
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| 25+5 min | Daniel Muñoz-Espín - Role of senescence in the lung tumour microenvironment: therapeutic and detection modalities. |
| 10+5 min | Timothy Cash - Targeting PD-L2 on senescent cells in cancer and fibrosis. |
| 10+5 min | Darko Bosnakovski - Targeting EWS::FLI1-Driven Senescence Evasion via P300/CBP Inhibition and Senolytics: A Novel Therapeutic Strategy for Ewing Sarcoma. |



November 8th, evening - Day 2 (Cont.)

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| 12:15 | Short talks |
| 5 min | Blake Monroe - Lipid-Derived Electrophiles Induce Carbonyl Stress, Mitochondrial Dysfunction, and Cellular Senescence: 4-Hydroxynonenal as a Physiological Determinant of Adipose Senescence in Obesity and Aging. |
| 5 min | Rodrigo Maldonado-Agurto - Transcriptional Activation of Matrisome Genes in Endothelial Cells Induced to Senescence. |
| 5 min | Vanessa Smer-Barreto - AI to identify novel glioblastoma therapies. |
| 5 min | Guillermo Díaz Araya - Resolvin D1 mitigates TGF- β 1-induced senescence in cardiac fibroblasts. |
| 5 min | Veronica Villalobos - The Age-Related Decline of CD204 in Macrophages and Their Impact on Gingival Aging and Disease. |
| 12:45 | ICSA General Assembly |



November 8th, afternoon - Day 2

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| 15:00 | Session 4: | Senescence's impact on wound healing and regenerative processes. (Part I) (Chair: Monica Caceres) |
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| 25+5 min | Maximina Yun - Salamander insights into negligible senescence. |
| 10+2 min | Karla Valdivieso - Induction of rapid-onset senescence is integral to healing and is independent of transcription. |
| 25+5 min | Mikolaj Ogrodnik - Spatiotemporal controls over senescent cells in wounds and the healing process. |

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| 16:15 | Short talks |
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| 5 min | Margarita Carrasco-Jeldres - Repairing the Skin Barrier: Utilizing Topical Senolytics for Age-Related Wound Healing. |
| 5 min | Amit Agrawal - Naturally occurring p16 cells are heterogeneous and change with aging. |
| 5 min | Grace Yu - Effect of Senescent Dermal Fibroblasts on Human Skin Aging. |
| 5 min | Vidyani Suryadevara - Detection of senescence in human osteoarthritis talus joints using a novel β -galactosidase responsive Gd-chelate. |
| 5 min | Rebeca Sereda - Role of Chaperone-Mediated Autophagy in Cellular Senescence and Aging. |
| 5 min | Federica Mossa - Uncovering the role of proteasomal dysregulation in cellular senescence and ageing. |

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| 16:45 | Coffee Break |
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| 17:15 | Session 4: | Senescence's impact on wound healing and regenerative processes. (Part II) (Chair: Monica Caceres) |
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| 25+5 min | Marco Demaria - Modulating the balance between cell death and senescence for optimal tissue repair. |
| 10+5 min | Giovanni Lombardi - Harnessing the molecular signature of senescent muscle cells and their released factors: implications for osteoblast differentiation and function. |
| 10+5 min | Almudena Chaves-Perez - Metabolic Reprogramming and Senescence: Unveiling the Role of OGDH and α -Ketoglutarate in Cell Fate and Tissue Regeneration. |

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| 18:15 | Poster Session (The "Posters" appendix includes a list of the exhibitors.) |
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| 19:15 | yICSA Activity |
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November 9th, evening - Day 3

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| 09:00 | Session 5: | Deep down in cellular senescence. (Chair: Frederick Antoine Mallette) |
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| 25+5 min | Myriam Gorospe - Insights into human cell senescence from RNA biology. |
| 10+2 min | Roberto A. Avelar - Mosaic Regulation of Stress Pathways: The Key to Understanding Senescent Cell Phenotypic Heterogeneity. |
| 10+2 min | Marta Kovtcheva - Dynamic BH3 profiling for improved senolysis strategies. |
| 25+5 min | Peter Adams - One or two novel mechanisms to regulate the SASP. |
| 10+2 min | Gerardo Ferbeyre - Senescence: The Result of Signaling Beyond the Optimal Range |
| 10+2 min | Allancer Nunes - Extra-oral Bitter Taste Receptors: New Targets for Suppressing Cellular Senescence. |
| 10+2 min | Paolo Turano - Functional and Transcriptional Profiling of Senescent SA-βGal Expressing CD8+ T Cells Suggests Their Involvement in Disease and Aging. |

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| 11:00 | Coffee Break | |
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| 11:30 | Session 6: | Unveiling the mysteries of the Aging Brain: Exploring senescence and neuropathologies. (Chair: Christian Gonzalez B) |
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| 25+5 min | Susana Castro Obregón - Targeting nuclear-cytoplasmic transport to delay brain aging |
| 10+2 min | Michel Lopez-Teros - Comparative analysis of cytokine secretion and RNA-seq profiles in palmitate-induced senescent and reactive rat primary astrocytes. |
| 25+5 min | Felipe Court - Senescent Peripheral Glia as a Barrier to Nerve Regeneration in Aging and Chronic Denervation |
| 10+2 min | Akang Bassey - Senescent cell ablation and modulation of their secretome prevents tumour formation in mouse models of adamantinomatous craniopharyngioma (ACP). |



November 9th, afternoon - Day 3

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| 15:00 | Session 7: | Untangling Aging's Web: Exploring Diseases through Senescence. |
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| 25+5 min | Laura Niedernhofer - Mapping senescent cells in human and mouse tissues. |
| 10+2 min | Susana Gonzalo - A non-canonical STING pathway drives cellular and organismal aging. |
| 25+5 min | Han Li - The new tricks of an old dog: cellular senescence and cell plasticity in health and disease. |
| 10+2 min | Christian Fernandez - Unraveling the Mechanisms of Senescent Cell Accumulation during Aging and Immune Evasion. |
| 25+5 min | Joao Passos - Mitochondria and Cellular Senescence: A Matter of Life and Death. |

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| 17:00 | Coffee Break |
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| 17:30 | Session 8: | Aging and Age-related diseases: Unveiling tomorrow's therapies today. (Chair: Florencia Barbé-Tuana) |
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| 25+5 min | Paul Robbins - Development of Novel Senotherapeutics to Extend Healthspan. |
| 10+2 min | Genève Perron-Deshaies - Ovariectomy-Induced Senescence in Mice: Insights into Menopausal Aging. |
| 25+5 min | Marcelo Mori - An Adipocentric View of Aging: The Role of microRNAs. |
| 10+2 min | Iryna Moskalevska - Impact of sexual dimorphism on senescence immune checkpoints (SIC) modulation of immunosurveillance and implications in age-related diseases. |

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| 19:00 | Fabrizio d'Adda di Fagagna - Telomere biology in aging and disease. Leonard Hayflick memorial lecture. |
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| 20:00 | Party |
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Posters

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| Bianca Bossé - Pancreatic cancer cells escape FOLFIRINOX-induce senescence by the action of the S6K protein. |
| Veronique Bourdeau - Identification of a Senescence Restriction Point Involving a Network of Transcription Factors that Induce Chromatin Opening and Senescence. |
| Cristian Geronimo - Exceptional Longevity Modifying Gene APOE2 Promotes DNA damage repair and Senescence Resilience. |
| Inés Marmisolle - The senescence-inducing stimulus defines the bioenergetic profile of human fibroblasts. |
| Silvina Sonzogni - Prenatal protein malnutrition alters cellular senescence mechanisms and induces epigenetic changes in a mouse embryonic fibroblast model. |
| Francisca Díaz - Expression and alpaca's immunization of p16 for nanobody discovery using surface-displayed bacteria. |
| Lucas Grun - Inhaled nitric oxide therapy enhances immune response by reducing senescence and T-cell exhaustion in younger Covid-19 Patients. |
| Hiroya Mizuno - B cell senescence promotes age-related changes in IgA secretion and oral microbiota. |
| Daniely Kertesz - Hyperglycemia and fibroblasts senescence: Effects of supplementation with Vitamins C and E. |
| Rebekah-Louise Scanlan - Systematic transcriptomic analysis and temporal modelling of the senescent fibroblast. |
| Cristopher Villablanca - Cytoskeleton remodeling in senescent astrocytes leads to morphological changes and SASP production. |
| Ignacia Gonzalez - Transcriptional Activation of Matrisome Genes in Endothelial Cells Induced to Senescence. |
| Daniela Rebolledo - Targeting cell senescence and fibrosis to enhance peripheral nerve regeneration following chronic damage. |
| Karina Girardi - Interplay of senescent cells and macrophage polarization in peripheral nerve repair in aging and chronic denervation. |
| Andrea Puebla - Interaction between Bcl-xL and VDAC1 regulates mitochondrial Ca ²⁺ uptake as a survival mechanism in early stage of Therapy-Induced Senescence (TIS). |
| Romain Perouf - Metabolic Alterations in Senescent Mesenchymal Stromal Cells of Acute Myeloid Leukemia Patients: Impact on Mitochondrial Transfer ability and Immunomodulatory Functions. |
| Jennyfer Martínez - P53 regulates mitochondrial bioenergetics in therapy-induced senescence: a role for 4-aminobutyrate aminotransferase (ABAT). |
| Eliana Chacón - Development of a Senotherapeutic Agent that Targets the Senescent Associated Secretory Phenotype. |
| Chen Zhang - Functions of Small Maf Proteins in Senescence. |
| Hailey Goldberg - A Nanoparticle-Based Platform for the Treatment of Senescence-Related Pathologies. |



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| Barbara Teodoro Castro - Lamins dysfunction-induced replication fork instability and its consequences for progeria. |
| Rafael Cancado de Faria - STING-STAT1 axis drives cellular, tissular, and organismal aging in Progeria . |
| Nahuel Matias Martinez - UVB induced senescent dermal papilla cells cause paracrine senescence on hair follicle keratinocytes, altering hair follicle regeneration cycle. |
| Roberto Rosales Rojas - Targeting protein-protein interactions involve in senescence. |
| Diego Ormeño - Nuclear analysis for characterization of senescent cells in gingival tissue. |
| Mauricio Garrido - Topological Evaluation of Proliferation and Senescence Markers in the Pulp and Apical Papilla of Immature Permanent Teeth with Deep Caries. |
| Maria Isabel Sanchez Perez - Iodido Platinum Compounds Exhibit Promising Anti-Tumor Activity by Disrupting Cancer Cell Metabolism and Inducing ROS and Senescence in Gastrointestinal Cancer Cells. |
| Pablo Morgado-Cáceres - DRP1 and Bcl-xL interaction in therapy-induced senescence progression in a model of colorectal cancer. |
| Janina Borgonovo - Nothobranchius furzeri as an ageing model to study sporadic synucleinopathy in the gut-brain axis. |
| Rebeca Sereda - Role of Chaperone-Mediated Autophagy in Cellular Senescence and Aging. |
| Vanessa Smer-Barreto - AI to identify novel glioblastoma therapies. |