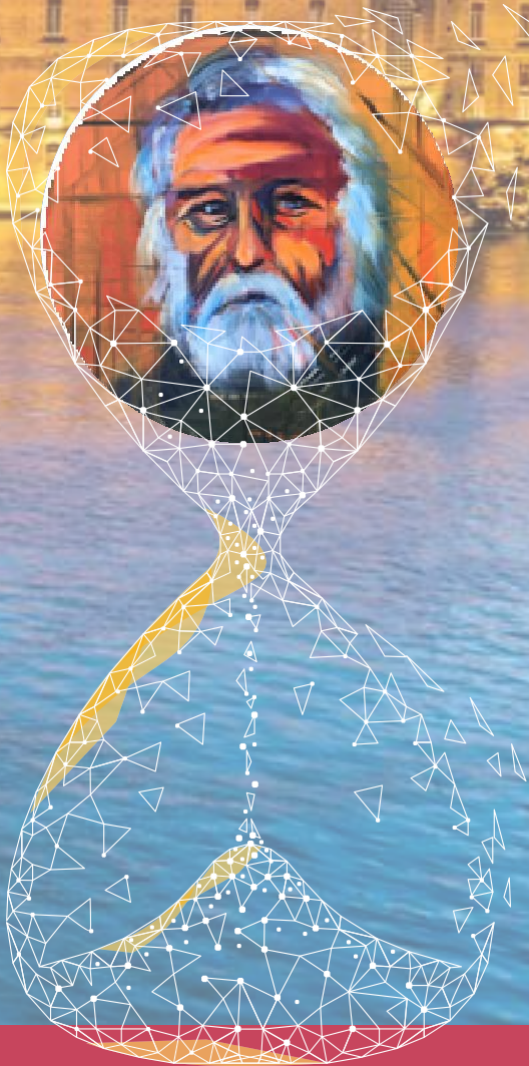


2nd EURO GEROSCIENCE

CONFERENCE

Toulouse 2022 - FRANCE



March
24-25,
2022

Hôtel
Dieu



Thursday,
MARCH 24

8.00 a.m **SESSION 1: What can the biology of aging offer Geroscience?**

8.00 a.m **Session Chair:**

Gerotherapeutic potential of targeting proteostasis

Ana Maria Cuervo, Einstein Institute for Aging Research, Albert Einstein College of Medicine, Bronx, NY (USA)

8.30 a.m *Linda Partridge, Partridge Lab, University College London, London (UK)*

8.50 a.m **Understanding and modeling aging and age-related diseases**

Anne Brunet, Stanford University, Stanford, CA (USA)

9.10 a.m **Oral communications**

9:10 a.m **OC1 Exploiting Metabolic Reprogramming in Cellular Senescence as a Therapeutic Target**

José Américo Nabuco L F De Freitas¹, Khaled Tighanimine², Yvan Nemazanyy², Yara Bou Saada¹, Delphine Benarroch-Popivker³, Aaron Mendez-Bermudez³, Stefano Fumagalli², Bertrand Friguet¹, Eric Gilson³, Mario Pende², Oliver Bischof⁴

¹Sorbonne Université, Cnrs, Inserm, Institut De Biologie Paris-Seine, Biological Adaptation And Ageing, B2a-lbbs - Paris (France), ²Institut Necker-Enfants Malades, Université Paris Descartes, Sorbonne Paris Cité - Paris (France), ³School Of Medicine, Cnrs, Inserm, Ircan, Université Côte D'azur - Nice (France), ⁴Cnrs Délégation Ile De France - Villejuif (France)

9:20 a.m **OC2 TIME-Seq enables inexpensive and scalable epigenetic age predictions for large studies in mice and humans**

Patrick Griffin¹, Alice Kane¹, Alexandre Trapp², Jien Li¹, Maeve Mcnamara¹, Margarita Meer³, Michael Macarthur⁴, Sarah Mitchell⁴, Amber Mueller¹, Colleen Carmody¹, Daniel Vera¹, Csaba Kerepesi², Nicole Noren Hooten⁵, James Mitchell⁴, Michele Evans⁵, Vadim Gladyshev², David Sinclair¹

¹Blavatnik Institute, Dept. Of Genetics, Paul F. Glenn Center For Biology Of Aging Research At Harvard Medical School - Boston (United States), ²Brigham And Women's Hospital, Division Of Genetics, Department Of Medicine, Harvard Medical School - Boston (United States), ³Yale University School Of Medicine, Department Of Pathology - New Haven (United States), ⁴Department Of Health Sciences And Technology, Eth Zurich - Zürich (Switzerland), ⁵Laboratory Of Epidemiology And Population Science, National Institute On Aging, National Institutes Of Health - Bethesda (United States)

9:30 a.m **OC3 A single short reprogramming early in life improves fitness and increases lifespan in old age**

Quentin Alle¹, Enora Le Borgne², Paul Bensadoun¹, Camille Lemey², Nelly Bechir², Melissa Gabanou², Fanny Estermann¹, Christelle Bertrand-Gaday³, Laurence Pessemesse³, Karine Toupet⁴, Jerome Vialaret⁵, Christophe Hirtz⁶, Daniele Noel⁴, Christian Jorgensen⁴, Francois Casas³, Ollivier Milhavet¹, Jean-Marc Lemaître¹

¹Inserm/IRMB - Montpellier (France), ²UM/IRMB - Montpellier (France), ³Metamus/INRAE - Montpellier (France), ⁴Ecell France/IRMB - Montpellier (France), ⁵PPC/CHU - Montpellier (France), ⁶PPC/UM - Fort Worth (United States)

9:40 a.m **OC4 Novel approaches for single-cell and cost-effective epigenetic age profiling**

Alexandre Trapp¹, Csaba Kerepesi¹, Vadim Gladyshev¹

¹Harvard Medical School - Boston (United States)

09.50 a.m **Coffee Break and poster sessions** ☕

- 10.20 a.m **SESSION 2: What can Geroscience offer to the biology of aging?**
- 10.20 a.m **Session Chair:** James L. Kirkland, Mayo Clinic, Rochester, MN (USA)
- 10.50 a.m Laura Niedernhofer, University of Minnesota, Minneapolis, MN (USA)
- 11.10 a.m Brian Kennedy, University of Singapore (Singapore)
- 11.30 a.m Oral communications
- 11:30 a.m **OC5 Necroptosis inhibition counteracts axonal degeneration, cognitive decline and key hallmarks of aging, promoting brain rejuvenation**
Macarena Arrázola^{1,2}, *Matías Lira*³, *Gabriel Quiroz*², *Somya Iqbal*⁴, *Rachel A. Kline*⁴, *Waldo Cerpa*³, *Thomas M. Wishart*^{4,5}, *Felipe Court*^{1,2,6}
¹Center For Integrative Biology, Universidad Mayor - Santiago (Chile), ²Geroscience Center for Brain Health and Metabolism (GERO) - Santiago (Chile), ³Departamento de Biología Celular y Molecular, Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile, - Santiago (Chile), ⁴The Roslin Institute, University of Edinburgh - Edinburgh (United Kingdom), ⁵Centro de Excelencia en Biomedicina de Magallanes (CEBIMA), Universidad de Magallanes, - Punta Arenas (Chile), ⁶Buck Institute for Research on Aging, - Novato, CA (United States)
- 11:40 a.m **OC6 Single-Cell Analysis reveals senescent cells clusters associated to optimal muscle regeneration**
*Cheng Chen*¹, *Coralie Cazin*¹, *Jeremy Chantel*¹, *Sebastien Mella*¹, *Aurelie Chiche*¹, *Han Li*¹
¹Institut Pasteur - Paris (France)
- 11:50 a.m **OC7 Short senolytic or senostatic interventions rescue progression of radiation-induced frailty and premature ageing in mice**
*Edward Fielder*¹, *Satomi Miwa*¹, *Thomas Von Zglinicki*¹
¹Newcastle University - Newcastle Upon Tyne (United Kingdom)
- 12:00 p.m **OC8 Selective targeting of senescent cell mitochondria by mitochondrial uncouplers enhances specificity and sensitivity of senolytics**
*Satomi Miwa*¹, *Edward Fielder*¹, *Abbas Ishaq*¹, *Thomas Von Zglinicki*¹
¹Newcastle University - Newcastle Upon Tyne (United Kingdom)
- 12.10 p.m Lunch and poster sessions 🍴🍴🍴
- 1.10 p.m **ROUNDTABLE 1: Molecular, cellular and physiological hallmarks of aging**
Guido Kroemer, Sorbonne University, Paris (France)
Lujgi Ferrucci, National Institute of Aging, Baltimore, MD (USA)
Vadim Gladyshev, Brigham & Women's Hospital, Boston, MA (USA)
Rafael de Cabo, National Institute of Aging, Baltimore, MD (USA)
- 2.10 p.m **ROUNDTABLE 2: Regulatory framework for geroprotectors**
Anna Lönnroth, European Commission, Brussels (Belgium)
Nir Barzilai, Albert Einstein College of Medicine, Bronx, NY (USA)
Alexander Fleming, Kinexum, Harpers Ferry, WV (USA)
William K. Smith, Uniformed Services University of Health Sciences, and University of South Carolina, SC (USA)
- 3.10 p.m Coffee Break and poster sessions ☕





Thursday,
MARCH 24

3.40 p.m **SESSION 3: Involving new blood into geroscience**

3.40 p.m **Session Chair:** *Jamie N. Justice, Wake Forest School of Medicine, Winston-Salem, NC (USA)*

4.10 p.m *Benoit Lehallier, PhD, Director of Data Science, Alkahest, San Carlos, CA (USA)*

4.30 p.m *Irene Martinez de Toda, Professor, Universidad Complutense de Madrid, Madrid (Spain)*

4.50 p.m **Oral communications**

4:50 p.m **OC9 The NAD⁺-mitophagy axis in ageing and Alzheimer's disease and artificial intelligence-based drug development**
Evandro Fei Fang *University of Oslo And Akershus University Hospital - Oslo (Norway)*

5:00 p.m **OC10 The effect of Methionine Restriction on endurance performance in mice**
*Charlotte G. Mann*¹, *Thomas Agius*², *Alban Longchamp*², *Michael R. Mac Arthur*¹, *Katrien De Bock*¹, *Sarah J. Mitchell*¹
¹*Eidgenössische Technische Hochschule - Zürich (Switzerland)*, ²*École Polytechnique Fédérale De Lausanne - Lausanne (Switzerland)*

5:10 p.m **OC11 Metabolic implications on neuroinflammation in the pathological aging context. Dietary restriction, glial autophagy and metformin in Alzheimer's disease**
*Juan Beauquis*¹, *Carlos Pomilio*¹, *Angeles Vinuesa*¹, *Amal Gregosa*¹, *Nicolas Gonzalez-Perez*¹, *Flavia E. Saravia*¹
¹*Conicet & Uba - Buenos Aires (Argentina)*

5:20 p.m **OC12 Differences in blood-based inflammatory profile according to longitudinal intrinsic capacity trajectories in community-dwelling older adults**
*Wan-Hsuan Lu*¹, *Emmanuel Gonzalez-Bautista*¹, *Philipe De Souto Barreto*¹
¹*Toulouse University Hospital (chu Toulouse) - Toulouse (France)*



Friday,
MARCH 25

8.00 a.m. SESSION 4: New models in geroscience

8.00 a.m. Session Chair: Steven N. Austad, University of Alabama, Birmingham, AL (USA)

8.30 a.m. Dario Riccardo Valenzano, Leibniz Institute on Aging, FLI, Jena, (Germany)

8.50 a.m. Alex Zhavoronkov, Insilico Medicine, Hong Kong (Hong Kong)

9.10 a.m. Oral communications

9.10 a.m. OC13 Epigenetic clocks reveal reversible changes in biological age in response to stress
Jesse Poganik¹, Vadim Gladyshev¹
¹Brigham And Women's Hospital, Harvard Medical School - Boston (United States)

9.20 a.m. OC14 Cryptic Nature-Phenomenal Animal-like Human Torpor: Forever-Young Inner Fountain-of-Youth?
Sébastien Murat¹
¹Charles Sturt University - Bathurst (Australia)

9.30 a.m. OC15 Sexual identity of enterocytes regulates rapamycin-mediated intestinal homeostasis and lifespan extension
Yu-Xuan Lu¹, Jennifer C. Regan^{2,3}, Enric Ureña², Ralf Meilenbrock¹, James H. Catterson², Disna Kibbler¹, Linda Partridge¹
¹Max Planck Institute For Biology Of Ageing - Cologne (Germany), ²Institute Of Healthy Ageing, Department Of Genetics, Evolution And Environment, University College London - London (United Kingdom)³ University of Edinburgh - Edinburgh (United Kingdom)

9.40 a.m. OC16 Exploring the Interplay of Sex, Immunity and Ageing using *Drosophila melanogaster*
Mary-Kate Corbally¹, Nahian Majlish², Chitarbanova-Rudloff Stanislava², Jenny Regan¹
¹University Of Edinburgh - Edinburgh (United Kingdom), ²University of Alabama - Tuscaloosa, AL (United States)

09.50 a.m. Coffee Break and poster sessions ☕

10.10 a.m. SESSION 5: Geroscience and Biotech in Europe

10.10 a.m. Session Chair: Ann Beliën, Rejuvenate Biomed, Heusden-Zolder (Belgium)

10.40 a.m. Nichola Conlon, Nuchido, Newcastle (UK)

11.00 a.m. Peter L.J. de Keizer, Cleara Biotech B.V., Utrecht (The Netherlands)

11.20 a.m. Oral communications

11:20 a.m. OC17 Targeting cellular senescence with novel senotherapeutics by design to extend healthspan
Lei Zhang University of Minnesota - Minneapolis (United States)

11:30 a.m. OC18 Precise machine learning suggests that brain cells facing a neurodegenerative insult are the subject of molecular decompensation and aging
Lucile Mégret¹, Barbara Gris², Satish Sasidharan Nair¹, Jasmin Cevost¹, Mary Wertz³, Jeff Aaronson⁴, Jim Rosinski⁴, Thomas F. Vogt⁴, Hilary Wilkinson³, Myriam Heiman³, Christian Néri¹
¹Sorbonne Université, Centre National de la Recherche Scientifique UMR 8256, INSERM ERL U1164, Brain-C Lab - Paris (France) ² Sorbonne Université, Centre National de la Recherche Scientifique, Laboratoire Jacques-Louis Lyons (LJLL- Paris (France) ³ MIT, Broad Institute, Cambridge, MA (United States) ⁴CHDI Foundation, Princeton, NJ, (United States)

11:40 a.m. OC19 Development of transformative oral drugs to regenerate aging muscles
Stan Watowich Ridgeline Therapeutics - Houston (United States)

11:50 a.m. OC20 Longitudinal analysis of aging trajectories in big biomed data reveals progressive loss of resilience and predicts human lifespan limit
Peter Fedichev Gero.ai - Singapore (Singapore)





Friday,
MARCH 25

- 12.00 p.m **ROUNDTABLE 3: Funding and communication**
Stephanie Lederman, American Federation for Aging Research, New York, NY (USA)
Mehmood Kahn, Life Biosciences, Boston, MA (USA)
Viviana Perez Montes, National Institute of Aging, Baltimore, MD (USA)
- 1.00 p.m **Lunch and poster sessions** 🍴🍴
- 2.00 p.m **ROUNDTABLE 4: Establishing research priorities**
Felipe Sierra, Gerontopole, Toulouse University, Toulouse (France)
Linda Fried, Columbia University Medical Center, New York, NY (USA)
Matt Kaerberlein, Memory and Brain Wellness Center, Seattle, WA (USA)
Ronald A. Kohanski, National Institute on Aging, Baltimore, MD (USA)
- 3.00 p.m **SESSION 6: Designing clinical trials in Geroscience**
- 3.00 p.m **Session Chair:** *Stephen Kritchevsky, Wake Forest School of Medicine, Winston-Salem, NC (USA)*
- 3.30 p.m *John Newman, University of California at San Francisco (UCSF), San Francisco, CA (USA)*
- 3.50 p.m *Joan Mannick, Life Biosciences, Boston, MA (USA)*
- 4.10 p.m **Coffee Break and poster sessions** ☕
- 4.30 p.m **Oral communications**
- 4:30 p.m **OC21 Counteracting age-related VEGF signaling insufficiency promotes healthy aging and extends life span**
Myriam Grunewald, The Hebrew University - Jerusalem (Israel)
- 4:40 p.m **OC22 Nutrition as a tool to counteract inflammaging: results and challenges from the NU-AGE project**
Aurelia Santoro¹, Claudio Franceschi¹
¹University Of Bologna - Bologna (Italy)
- 4:50 p.m **OC23 Lomecel-B as a Geroscience Therapeutic Candidate: Clinical Trial Results**
Joshua Hare¹, Kevin Ramdas¹, Dan Gincel¹, Lisa McClain-Moss¹, Jorge Ruiz², Anthony Oliva¹
¹Longeveron Inc. - Miami (United States), ²Bruce W. Carter Miami Vamc - Miami (United States)
- 5:00 p.m **OC24 Exercise rejuvenates the skeletal muscle methylome and transcriptome in humans**
Sarah Voisin¹, Macsue Jacques¹, Shanie Landen¹, Nicholas Harvey², Larisa Haupt³, Lyn Griffiths³, Kevin Ashton², Vernon Coffey², Jamie-Lee Thompson², Thomas Doering⁴, Malene Lindholm⁵, Ola Hansson⁶, Olof Asplund⁶, Sara Blocquiaux⁷, Martine Thomis⁷, Adam Sharples⁸, Steve Horvath⁹, Nir Eynon¹⁰
¹Victoria University - Melbourne (Australia), ²Bond University - Gold Coast (Australia), ³Queensland University Of Technology - Brisbane (Australia), ⁴Central Queensland University - Rockhampton (Australia), ⁵Stanford University - Stanford (United States), ⁶Lund University - Lund (Sweden), ⁷Ku Leuven - Leuven (Belgium), ⁸School Of Sport Sciences - Oslo (Norway), ⁹Ucla - Los Angeles (United States), ¹⁰Victoria University - Footscray (Australia)
- 5.10 p.m **END OF CONFERENCE**

POSTER PRESENTATIONS

ARTIFICIAL INTELLIGENCE AND AGING

- P1** **New biomarkers for Alzheimer diagnosis and early detection of mild cognitive impairment**
Aurora Román-Domínguez¹, Mar Dromant¹, Consuelo Borrás¹
¹University Of Valencia - València (Spain)
- P2** **Technological development and clinical applicability of wearable devices for remote monitoring of older adults health: the Senior Mobile Health Platform**
Álvaro Maciel¹, Eujessika Silva¹, Daniella Carvalho¹, Paulo Barbosa²
¹Universidade Federal Do Rio Grande Do Norte - Natal (Brazil), ²Universidade Estadual Da Paraiba - Campina Grande (Brazil)
- P3** **Heart rate variability remote monitoring using wearable devices**
Álvaro Maciel¹, Eujessika Silva¹, Jose Marmol², Jose Bullejos², Paulo Barbosa³
¹Universidade Federal Do Rio Grande Do Norte - Natal (Brazil), ²Universidad De Granada - Granada (Spain), ³Universidade Estadual Da Paraiba - Campina Grande (Brazil)
- P4** **A Multi-Tissue Meta-Analysis of Methylation Variability: Uncovering Robust Markers for Biological Ageing**
Kirsten Seale¹, Namitha Mohandas¹, Nir Eynon¹, Sarah Voisin¹
¹Victoria University - Melbourne (Australia)
- P5** **Infrared spectroscopy as a diagnostic tool for osteosarcopenic women**
Ricardo Guerra¹, Raysa Freitas¹, Daniel Freitas¹, Igor Oliveira¹, Gerlane Guerra¹, Gustavo Duque², Kassio Lima¹
¹Federal University Of Rio Grande Do Norte - Natal (Brazil), ²University Of Melbourne - Melbourne (Australia)
- P6** **The discovery and characterization of a new premature aging disease**
Daniela Bakula¹, Morten Scheibye-Knudsen¹
¹Center For Healthy Aging, University of Copenhagen - Copenhagen (Denmark)
- P7** **Scallop: a novel computational method for the quantification of age-related increase in transcriptional noise at the single-cell level**
Olga Ibáñez-Solé¹, Alex M. Ascensión¹, Marcos J. Araúzo-Bravo¹, Ander Izeta¹
¹Biodonostia Health Research Institute - Donostia-San Sebastián (Spain)

CELLULAR SENESCENCE AND SENOLYTICS

- P8** **Using *C. elegans* for β -Gal staining in-vivo screening reveals endoribonuclease Regnase-1 as a suppressor of senescence**
Collin Ewald, Eth Zurich - Schwerzenbach (Switzerland)
- P9** **Transcriptome analysis reveals senescence pathways driven by EGR1, DDX11L1 and miR454 associated with frailty**
Ander Matheu¹, Ander Saenz-Antoñanas¹
¹Biodonostia Institute - San Sebastian (Spain)
- P10** **Ribosome heterogeneity by rRNA methylation in skin cell senescence**
Markus Schosserer, University of Natural Resources and Life Sciences, Vienna - Vienna (Austria)
- P11** **sEVs from young ADSCs improve healthspan and prevent frailty in old mice**
Jorge Sanz-Ros¹, Cristina Mas-Bargues¹, Aurora Roman-Dominguez¹, Mar Dromant¹, Nekane Romero-Garcia¹, Jose Viña¹, Consuelo Borrás¹
¹University Of Valencia - Valencia (Spain)
- P12** **Exploring the role of arginine-rich peptides and the nucleolus in ageing and neurodegeneration**
Oleksandra Sirozh¹, Vanesa Lafarga¹, Oscar Fernández-Capetillo¹
¹Cnio Spanish National Cancer Research Centre - Madrid (Spain)



POSTER PRESENTATIONS

CELLULAR SENESCENCE AND SENOLYTICS (continued)

- P13** Relationship between sarcopenia and water cellular profile in community-dwelling older people: Results from PRO-EVA Study
Álvaro Maciel¹, Sabrina Fernandes¹, Rafaella Gonçalves¹, Dimitri Guedes¹, Saionara Camara¹, Philippe Barreto²
¹Universidade Federal Do Rio Grande Do Norte - Natal (Brazil), ²Gérontopôle De Toulouse - Toulouse (France)
- P14** Endothelial-derived circulatory miR34 reinforces senescence in progeria
Selma Osmanağić-Myers¹, Christina Manakanatas², Santhosh Kumar Ghadge², Roland Foisner², Viviane Fleischhacker¹, Eleonora Nardini¹
¹Institute of Medical Chemistry, Center For Pathobiochemistry and Genetics, Medical University of Vienna - Vienna (Austria), ²Max Perutz Labs, Center For Medical Biochemistry, Medical University Of Vienna - Vienna (Austria)
- P15** Senescent Cells: Role in Countering Pulmonary Hypertension Development and Progression
Emmanuelle Born¹, Marielle Breau², Larissa Lipskaia¹, Amal Houssaini¹, Delphine Beaulieu¹, Elisabeth Marcos¹, Rémi Pierre³, Marcio Do Cruzeiro³, Geneviève Dérumeaux¹, Dmitry Bulavin⁴, Jesùs Gil⁵, David Bernard⁶, Jean-Michel Flamand⁶, Shariq Abid¹, Serge Adnot¹
¹Inserm U955 - Créteil (France), ²CRCM - Marseille (France), ³Inserm U1016 - Paris (France), ⁴CNRS - Nice (France), ⁵MRC - London (United Kingdom), ⁶UMR Inserm U1052/CNRS 5286 - Lyon (France)
- P16** Glyoxal induces senescence in primary human keratinocytes through oxidative stress and activation of the AKT/FOXO3a/p27KIP1 signaling pathway
Rym Halkoum¹, Virginie Salnot², Christophe Capallere³, Christelle Plaza³, Aurore L'honoré⁴, Karl Pays⁵, Bertrand Friguet⁴, Carine Nizard⁵, Isabelle Petropoulos⁴
¹Sorbonne Université (biological Adaptation And Ageing, B2a-lbbs) And LYMH Recherche (life Science Department) - Paris (France), ²3p5 Proteom'ic Facility, Université De Paris, Institut Cochin, Inserm, CNRS - Paris (France), ³Ashland, Global Skin Research Center, Advanced Skin Research & Bioengineering Dept - Sophia Antipolis (France), ⁴Sorbonne Université, Cnrs, Inserm, Institut De Biologie Paris-Seine, Biological Adaptation And Ageing, B2a-lbbs - Paris (France), ⁵Lvmh Recherche. Life Science Department - Saint-Jean-De-Braye (France)
- P17** Using the p21-mTert bypassing senescence model to study the role of telomeres in age-related osteoarthritis
Christina Fissoun¹, Margot Milano¹, Laura Braud², Marielle Breau², Yves-Marie Pers¹, Christian Jorgensen¹, Vincent Geli², Jean-Marc Brondello¹
¹IRMB UMR1183 - Montpellier (France), ²CRCM U1168 - Marseille (France)
- P18** Modification of the levels of sulfated steroid hormones by STX64 as a possible geroprotector
Mercedes Perez-Jimenez¹, Angel Carrion¹, Manuel Muñoz¹
¹University Pablo De Olavide - Sevilla (Spain)
- P19** E4F1-mediated control of pyruvate dehydrogenase is essential for p53-dependent senescence
Pierre-François Roux¹, Jean-Marc Lemaitre², Matthieu Lacroix¹, Claude Sardet¹, Laurent Le Cam¹
¹Ircm, Institut de Recherche en Cancérologie De Montpellier, Inserm U1194, Université de Montpellier, Institut Régional du Cancer de Montpellier - Montpellier (France), ²IRMB, Institute for Regenerative Medicine and Biotherapy, Inserm U1183, CHRU Montpellier Saint-Eloi Hospital - Montpellier (France)
- P20** Senolytics rejuvenate the reparative activity of human cardiomyocytes and endothelial cells
Piotr Sunderland¹, Lulwah Alshammari¹, Emily Ambrose¹, Georgina Ellison-Hughes¹
¹Centre For Human And Applied Physiological Sciences & Centre For Stem Cells And Regenerative Medicine, School Of Basic And Medical Biosciences, Faculty Of Life Sciences & Medicine, King's College London - London (United Kingdom)

POSTER PRESENTATIONS

GEROSCIENCE OF COVID

- P21 SARS-COV-2 infection causes massive lung-cell senescence**
*Larissa Lipskaia*¹, *Emmanuelle Born*¹, *Pauline Maisonnasse*², *Fouillade Charles*³, *Pascal Quantin*², *Elisabeth Marcos*¹, *Arturo Londono-Vallejo*³, *Roger Le Grand*³, *David Bernard*⁴, *Serge Adnot*⁵
¹Université Paris Est Creteil - Créteil (France), ²CEA - Fontenay-Aux-Roses (France), ³Institut Curie - Paris (France), ⁴Université De Lyon - Lyon (France), ⁵APHP Hopital Henri Mondor - Creteil (France)

INFLAMMATION AND IMMUNOSENESCENCE

- P22 AP-1 complex activation is a conserved signature of immune system aging and a potential regulator of inflammaging in human and mice**
Duygu Ucar Jackson Laboratory - Farmington (United States)
- P23 Numtogenesis affecting chromosome segregation: insights for a novel approach to understand immunosenescence in mice**
*Mónica González-Sánchez*¹, *Victor García-Martínez*¹, *Sara Bravo*¹, *Hikaru Kobayashi*¹, *Irene Martínez De Toda*¹, *Blanca González-Bermúdez*¹, *Gustavo R Plaza*², *Mónica De La Fuente*¹
¹Complutense University of Madrid - Madrid (Spain), ²Polytechnic University of Madrid - Madrid (Spain)
- P24 Circulating cell-free DNA in plasma as a potential biomarker of biological age. Relationship with the redox state and function of immune cells. Influence of gender**
*Estefanía Díaz-Del Cerro*¹, *Mónica González-Sánchez*¹, *Irene Martínez De Toda*¹, *Manuel Lambea*¹, *Jaime Bartolomé*¹, *Mónica De La Fuente*¹
¹Complutense University Of Madrid - Madrid (Spain)
- P25 Identification of a blood microRNAs-based signature of ageing in Down Syndrome**
*Cristina Morsiani*¹, *Salvatore Collura*¹, *Maria Giulia Bacalini*², *Claudio Franceschi*³, *Miriam Capri*¹
¹Department Of Experimental, Diagnostic and Specialty Medicine, University of Bologna - Bologna (Italy), ²Irccs Istituto Delle Scienze Neurologiche Di Bologna - Bologna (Italy), ³Laboratory of Systems Medicine Of Healthy Aging and Department of Applied Mathematics, Lobachevsky University - Nizhny Novgorod (Russian Federation)
- P26 Allostatic load and Physical Performance: findings from IMIAS Study**
*Ricardo Guerra*¹, *Matheus Germano*¹, *Crisitiano Gomes*¹, *Juliana Fernandes*²
¹Federal University of Rio Grande Do Norte - Natal (Brazil), ²Federal University of Pernambuco - Recife (Brazil)
- P27 Unravel immunosenescence role in response to kidney injury: a first step immune landscaping**
*Snigdha Nitin Rao*¹, *Audrey Casemayou*¹, *Marie Buléon*¹, *Guylène Feuillet*¹, *Elodie Riant*¹, *Alexia Zakaroff-Girard*¹, *Frédéric Martins*¹, *Ignacio Gonzalez-Fuentes*¹, *Jean Sébastien Saulnier Blache*¹, *Joost Peter Schanstra*¹, *Julie Belliere*¹
¹Institute of Cardiovascular and Metabolic Diseases - Toulouse (France)
- P28 Leukocyte-derived ratios are associated with early-onset dementia and functional frailty**
*Yu Na Kim*¹, *Saleena Arif*¹
¹Dothousehealth - Boston (United States)
- P29 Does inflammation contribute to cancer incidence and mortality during aging? A conceptual review**
*Florent Guerville*¹, *Maël Lemoine*¹, *Victor Appay*¹
¹Immunoconcept Lab, Bordeaux University - Bordeaux (France)
- P30 Associations of Adverse Childhood Experiences with Executive Function and Brain-Derived Neurotrophic Factor in Older Adults**
*Cindy Tsotsoros*¹, *Misty Hawkins*¹
¹Oklahoma State University - Stillwater (United States)



POSTER PRESENTATIONS

MICROBIOME OF AGING

- P31** Late onset pharmacological or dietary interventions in mice improve healthspan and lifespan in male and female mice
Mitchell Sarah¹, Michael Macarthur¹, Alice Kane², David Sinclair², Mehmet Huseyin³, Vath James³, Manning Brendan⁴, Mitchell James¹
¹ETH Zurich - Zurich (Switzerland), ²Harvard University - Boston (United States), ³Zafgen - Boston (United States), ⁴Harvard - Boston (United States)

MITOCHONDRIAL METABOLISM AND AGING

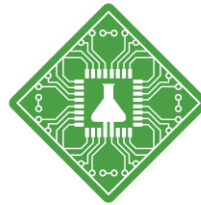
- P32** Metabolomics-based biomarkers for aging in Chinese adults
Yiming Pan Department of Geriatrics, Xuanwu Hospital, Capital Medical University - Beijing (China)
- P33** The Relevance of Oxytosis/Ferroptosis to Aging and Alzheimer's Disease
Pamela Maher¹, Antonio Currais¹
¹Salk Institute - La Jolla (United States)
- P34** Functional transcriptomic analysis of centenarians' offspring reveals a specific genetic footprint that may explain that they are less frail than age-matched non-centenarians' offspring.
Consuelo Borrás¹, Marta Ingles², Jose Vina¹
¹Freshage Research Group, Department of Physiology, Faculty of Medicine, University of Valencia, Centro De Investigación Biomédica En Red Fragilidad Y Envejecimiento Saludable-Instituto De Salud Carlos Iii (ciberfes-Isciii) - Valencia (Spain), ²Freshage Research Group, Department of Physiotherapy, Faculty of Physiotherapy, University of Valencia, Ciberfes-Isciii - Valencia (Spain)
- P35** Bcl-xL mice: facing frailty during aging
Aurora Román-Domínguez¹, Cristina Mas-Bargues¹, Consuelo Borrás¹
¹University Of Valencia - Valencia (Spain)
- P36** Genistein in the control of AD progression. From molecular mechanisms to clinical improvement: The GENIAL clinical trial (NCT01982578)
Jose Viña¹, Consuelo Borrás¹
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- P37** BCL-xL overexpression protects T cells during aging: balancing apoptosis and autophagy
Cristina Mas-Bargues¹, Aurora Román-Domínguez¹, Jorge Sanz-Ros¹, Mar Dromant¹, Nekane Romero-García¹, Jose Viña¹, Consuelo Borrás¹
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- P38** Reconstruction of functional human epidermis equivalent containing 5 %IPS-derived keratinocytes treated with mitochondrial stimulating plant extracts.
Anne-Laure Bulteau¹, Mariele Moreau¹, Christophe Capallere¹, Christelle Plaza¹, Carine Nizard¹
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- P39** Inhibition of de novo ceramide synthesis promotes skeletal muscle hypertrophy in young mice but does not prevent sarcopenia in old mice
Benjamin Lair¹, Geneviève Tavernier¹, Virginie Bourlier¹, Aline Mairal¹, Camille Bergoglio¹, Diane Beuzelin¹, Deborah Carper¹, Claire Laurens¹, Cedric Moro¹
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- P40** Models of mechanosensitive amyloid channels involved in mitochondria swelling
H. Robert Guy¹
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*Maria Paulina Correa*¹, *Raquel Burrows*¹, *Cecilia Albala*¹, *Felipe Salech*², *Guillermo Sanhueza*³, *Gonzalez-Billault Christian*⁴
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- P42** **Diet during tissue regeneration in aging and disease**
*Manuel Alejandro Fernandez Rojo*¹, *Luis Vicente Herrera*¹, *Maria P. Ikonopoulou*¹, *Javier Moral-Sanz*¹, *Marta Garrido Novelle*², *Jesus Balsinde*³, *Ana Cuenda*⁴, *Roberto Martin*¹
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Camille Champigny^{1,2}, *Djamaa Atamena*¹, *Marlène Botella*¹, *Sébastien Bullich*¹, *Bruno Guiard*¹, *Marie-Christine Miquel*¹, *Corentin Coustham*^{1,3}, *Pascale Belenguer*¹, *Noélie Davezac*¹
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*Eva Brigos*¹, *Carlos Morcillo-Suárez*¹, *Gerard Muntané*¹, *Arcadi Navarro*¹
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- P45** **Metabolic reprogramming of skin by novel mitochondria-targeted sulfide delivery molecules prevents UV-induced photoageing in vivo**
*Uraiwan Panich*¹, *Jinapath Lohakul*¹, *Saowanee Jeayeng*¹, *Anyamanee Chairprasongsuk*², *Roberta Torregrossa*³, *Mark E. Wood*³, *Matthew Whiteman*³
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- P46** **Differential expression of Perilipin family proteins in human brain during aging and Alzheimer's disease**
*Maria Conte*¹, *Valentina Medici*², *Antonio Chiariello*¹, *Isidre Ferrer*³, *Giuseppe Legname*⁴, *Emanuele Poloni*², *Antonio Guaita*², *Claudio Franceschi*⁵, *Stefano Salvioli*¹
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- P47** **Expression pattern of the mitokine GDF15 in human brain in healthy aging and in Alzheimer's disease**
*Antonio Chiariello*¹, *Maria Conte*², *Valentina Medici*³, *Tino Emanuele Poloni*³, *Antonio Guaita*³, *Stefano Salvioli*¹
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- P48** **Novel mitochondria-targeted sulfide delivery molecules attenuate age-induced muscle decline in C. Elegans models of ageing and accelerated ageing**
*Timothy Etheridge*¹, *Adriana Vintila*², *Luke Slade*², *Roberta Torregrossa*¹, *Rebecca Ellwood*³, *Nathaniel Szewczyk*⁴, *Matthew Whiteman*¹
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