

CNIO - CaixaResearch Foundation Frontiers Meeting
Molecular and Cellular Hallmarks in Aging: 3rd edition
November 17th- 19th, 2025

Venue:

Spanish National Cancer Research Centre – CNIO Auditorium, Madrid, Spain

Organizing committee:

Maria Blasco, Spanish National Cancer Research Centre – CNIO, Spain

Alejo Efeyan, Spanish National Cancer Research Centre – CNIO, Spain

Pura Muñoz-Cánoves, Altos Labs, San Diego Institute of Science, US

Thomas Rando, University of California Los Angeles, US

Molecular and Cellular Hallmarks in Aging: 3rd edition

Rationale:

This meeting would be the third version of an Aging meeting at the CNIO, covering parallel and convergent approaches to disentangle the complexity of human aging. We will bring together disciplines that only marginally connect to one another experimentally, while totally overlapping in the study of aging. We intend to integrate aging research from molecular, cellular and organismal levels and approaches, with a comprehensive scope. In other words, we intend to foster discussions and interactions among mouse and invertebrate model geneticists, molecular biologists, biochemists; and from topics ranging from metabolism to regeneration, from chromatin to senescence, from cellular energetics to telomeres.

SPEAKERS' LIST

Dr. **Adam Antebi**, MPI for the Biology of Aging, Cologne, Germany

Dr. **Mary Armanios**, Johns Hopkins, Baltimore, US

Dr. **Steve Artandi**, Stanford Cancer Institute, California, US

Dr. **Salvador Aznar-Benitah**, IRB Barcelona, Barcelona, Spain

Dr. **Shelley Berger**, Perelman School of Medicine, University of Pennsylvania, US (Zoom)

Dr. **Anne Brunet**, Stanford University School of Medicine, California, US

Dr. **Ana Maria Cuervo**, Albert Einstein College of Medicine, NY, US

Dr. **Jesús Gil**, Medical Research Council (MRC), London, UK

Dr. **Vera Gorbunova**, University of Rochester, NY, US

Dr. **Pekka Katajisto**, Helsinki University, Helsinki, Finland

Dr. **Laura Niedernhofer**, Institute on the Biology of Aging & Metabolism (iBAM); Univ. of Minnesota, US

Dr. **Lenhard Rudolph**, Leibniz Institute Aging, Jena, Germany

Dr. **Manuel Serrano**, Altos Labs, Cambridge, UK

Dr. **Sheila Stewart**, Washington University in St Louis, St. Louis, US

Dr. **Ashley Webb**, Buck Institute for Research on Aging, Novato, US

Dr. **Eileen White**, Rutgers Cancer Institute, Ludwig Institute for Cancer Research, New Jersey, US

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Monday November 17th, 2025

08:30-09:15 Registration - main hall

09:15-09:30 Welcome address

09:30-12:30 Session 1. Aging Pathways

09:30 – 10:00 Modeling and targeting aging

Anne Brunet, Stanford University School of Medicine, California, US

10:00 – 10:30 Late-life dietary interventions improving metabolism, stem cell function, and lifespan in old mice

Lenhard Rudolph, Leibniz Institute Aging, Jena, Germany

10:30-11:00 Poster session - coffee break – social room

11:00 – 11:15 *short talk*

11:15 – 11:30 *short talk*

11:30 – 12:00 Title tba

Pura Munoz Canoves, Altos Labs, San Diego Institute of Science, US

12:00 – 12:30 Multi-omics analysis of longevity mechanisms across species

Vera Gorbunova, University of Rochester, NY, US

12:30-13:45 Lunch break – Canteen

13:45-15:45 Session 2. Cancer and Aging I

13:45 – 14:15 Epigenetic reprogramming cellular age

Thomas Rando, University of California Los Angeles, US

14:15 – 14:30 *short talk*

14:30 – 15:00 Dissecting the biology of time-restricted feeding

Alejo Efeyan, Spanish National Cancer Research Centre, Madrid, Spain

15:00 – 15:15 *short talk*

15:15 – 15:45 Cancer as a Systemic Disease

Eileen White, Rutgers Cancer Institute, Ludwig Institute for Cancer Research, New Jersey, US

15:45-16:15 Poster session - coffee break – social room

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16:15-17:30 Session 3. Regulation of aging

16:15 – 16:45 Metabolic regulation of regeneration

Pekka Katajisto, Helsinki University, Helsinki, Finland

16:45 – 17:00 *short talk*

17:00 – 17:30 Systemic coordination of physiology by circadian rhythms:
Impact on health and aging

Salvador Aznar-Benitah, IRB Barcelona, Barcelona, Spain

17:30-19:00 Poster session – refreshments for all participants – social room

Tuesday November 18th, 2025

09:30-12:30 Session 4. Cancer and Aging II

09:30 – 10:00 Selective Autophagy in the fight against aging and age-related diseases

Ana Maria Cuervo, Albert Einstein College of Medicine, NY, US

10:00 – 10:15 *short talk*

10:15 – 10:45 The cellular and pathophysiological effects of endogenous DNA damage,
a primary hallmark of aging

Laura Niedernhofer, Institute on the Biology of Aging & Metabolism (iBAM);
University of Minnesota, US

10:45-11:30 Group picture CNIO main entrance / poster session & coffee break – social room

11:30 – 12:00 Transcriptional and epigenetic mechanisms of brain aging and neurodegeneration

Ashley Webb, Buck Institute for Research on Aging, Novato, CA, US

12:00 – 12:15 *short talk*

12:15 – 12:30 *short talk*

12:30-13:45 Lunch break – Canteen

13:45-17:15 Session 5. Telomeres and Aging Diseases

13:45 – 14:15 Targeting telomeres in aging and age-related diseases

Maria Blasco, Spanish National Cancer Research Centre, Madrid, Spain

14:15 – 14:30 *short talk*

14:30 – 15:00 Title tba

Mary Armanios, Johns Hopkins, Baltimore, US

15:00 – 15:15 *short talk*

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15:30-16:00 Poster session - coffee break – social room

16:00 – 16:30 Title tba

Steven Artandi, Stanford Cancer Institute, California, US

16:30 – 16:45 *short talk*

16:45 – 17:15 TBA

17:15-18:30 Poster session – refreshments for all participants – social room

Wednesday, November 19th, 2025

09:30-10:30 Session 6. Senescence, reprogramming and Aging

09:30 – 10:00 Insights into resilience, restoration and senescence from diapause

Adam Antebi, MPI for the Biology of Aging, Cologne, Germany

10:00 – 10:15 *short talk*

10:15 – 10:30 *short talk*

10:30 – 11:00 Stromal senescence in tumor progression and therapy-induced comorbidities

Sheila Stewart, Washington University in St Louis, St. Louis, US

11:00-11:30 Poster session - coffee break – social room

11:30 – 12:00 Cellular senescence as a therapeutic target

Jesus Gil, Medical Research Council (MRC), London, UK

12:00 – 12:30 Reprogramming-based cellular rejuvenation

Manuel Serrano, Altos Labs, Cambridge, UK

12:30 Poster/talk prizes

Wrap up and closing