

2030 SENESCENCE



Dipartimento di Scienze Mediche Traslazionali
Università degli Studi di Napoli Federico II



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SENESCENCE2030 INTERNATIONAL SYMPOSIUM

Cellular Senescence in Metabolic Disorders:
from Mechanisms to Clinical Consequences
in Complex Disease

8-9 September 2026

Royal Continental Hotel, Naples, Italy

Scientific Organizers

Rosa Spinelli • Aniello Cerrato • Francesco Beguinot • Ulf Smith



SYMPOSIUM PROGRAMME | Tuesday, 8 September 2026

08:30 – 09:00 Registration

09:00 – 09:30 Opening Session

Welcome and Introduction by **Dr. Aniello Cerrato**, Action Chair

09:30 – 10:30 KEYNOTE LECTURE by Prof. James L. Kirkland (USA)

Chair: **Prof. Ulf Smith**

10:30 – 11:00 Coffee Break

11:00 – 12:15 SENESCENCE ACROSS METABOLICALLY ACTIVE TISSUES: MECHANISMS, DYSFUNCTION, AND CONSEQUENCES

Chair: **Prof. Ulf Smith**

11:00 – 11:25 **Prof. Davis Englund (USA)** - *From aging to injury: cellular senescence as a driver of skeletal muscle dysfunction*

11:25 – 11:50 **Prof. Georgina Ellison-Hughes (UK)** - *Targeting cell senescence to rejuvenate the heart*

11:50 – 12:15 **Dr. Rosa Spinelli (Italy)** - *Shared senescence programs across metabolically active tissues*

12:15 – 13:05 SENESCENT CELL BURDEN AND VULNERABILITIES

Chair: **Prof. Marco Demaria**

12:15 – 12:40 **Prof. Valery Krizhanovsky (Israel)** - *Cell type-specific senescence burden across organs in aging*

12:40 – 13:05 **Prof. Juan-Carlos Acosta (UK)** - *Discovering and targeting senescent cell vulnerabilities*

13:05 – 15:00 Lunch Break

15:00 – 16:40 MECHANISMS, HETEROGENEITY, AND CONTEXT-DEPENDENCE OF SENESCENCE

Chair: **Prof. Francesco Beguinot**

15:00 – 15:25 **Dr. Francesca Castoldi (Sweden)** - *Polyamine catabolism as a central regulator of cellular senescence*

15:25 – 15:50 **Prof. Marco Demaria (Netherlands)** - *Purinergic signalling reinforces an inflammatory SASP and promotes senescence-associated dysfunctions*

15:50 – 16:15 **Prof. Cleo Bishop (UK)** - *Exploring pro-senescence mechanisms and therapeutic strategies for cancer*

16:15 – 16:40 **Prof. Vassilis G. Gorgoulis (Greece)** - *Immune cell senescence and response to immunotherapy*

16:40 – 18:00 ROUND TABLE DISCUSSION

Chair: **Prof. Marco Demaria**

SYMPOSIUM PROGRAMME | Wednesday, 9 September 2026

09:00 – 10:40 SENESCENCE IN COMPLEX DISEASE: FROM METABOLIC DYSFUNCTION TO MULTIMORBIDITY

Chair: **Prof. Francesco Beguinot**

09:00 – 09:25 **Prof. Valérie Schini-Kerth (France)** - *Endothelial senescence: a novel target to improve cardiovascular health*

09:25 – 09:50 **Prof. Pasquale Maffia (UK)** - *Premature cardiovascular aging in Africa: linking infection, immune activation, and cellular senescence*

09:50 – 10:15 **Prof. Ana Guerrero (Spain)** - *Senolytics in Alzheimer's disease: insights from preclinical models* (Virtual Participation)

10:15 – 10:40 **Prof. Gregory A. Raciti (Italy)** - *Innovative tools for predicting incident cardiovascular events in patients with type 2 diabetes*

10:40 – 11:10 Coffee Break

11:10 – 12:25 TARGETING SENESCENCE IN COMPLEX DISEASE

Chair: **Prof. Pasquale Maffia**

11:10 – 11:35 **Dr. Mariantonietta D'Ambrosio (UK)** - *A covalent fragment screen identifies GPX4-dependent ferroptosis as a novel senescence vulnerability*

11:35 – 12:00 **Dr. Stijn Meijnikman (Netherlands)** - *Senolytics dasatinib plus quercetin reduce liver fibrosis in metabolic dysfunction-associated steatohepatitis: a phase 2 randomized trial: the TRUTH study*

12:00 – 12:25 **Prof. Carlo Gaetano (Italy)** - *Targeting inflammaging and cellular senescence: a translational Italian experience in senolytic drug development*

12:25 – 13:25 SELECTED YOUNG INVESTIGATOR PRESENTATIONS

Chair: **Dr. Rosa Spinelli**

12:25 – 12:40 **Dr. Haoqun Jack Zhan (UK)** - *Nuclear integrity influences the dynamic range of inflammation*

12:40 – 12:55 **Dr. Antonella Desiderio (Italy)** - *TNF- α -PANDAR axis drives epigenetic propagation of adipocyte precursor cell senescence in obesity and type 2 diabetes*

12:55 – 13:10 **Dr. Cláudia M. Deus (Portugal)** - *miRNAs in metabolic disorders: miRNA-642-3p as a protector of β -cell function under glucolipotoxic stress*

13:10 – 13:25 **Dr. Merve Yildirim (Turkey)** - *Senescent IPF myofibroblasts exhibit anti-fibrotic proteostatic remodeling and immune-like features*

13:25 – 14:00 CLOSING REMARKS — FUTURE DIRECTIONS FOR SENESCENCE2030

Chairs: **Prof. Ulf Smith** and **Prof. Francesco Beguinot**

14:00 – 15:30 Networking Lunch



LOCAL ORGANIZERS

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