

KEYSTONE SYMPOSIA

on Molecular and Cellular Biology

Cancer: Aging in the Driver's Seat (C1)

March 7-10, 2021 • Fairmont Empress Victoria • Victoria, BC, Canada

Scientific Organizers: Sheila A. Stewart, Judith Campisi, Manuel Serrano and Eiji Hara

Supported by the Directors' Fund

Scholarship Deadline: November 12, 2020 / Abstract Deadline: December 8, 2020 / Discounted Registration Deadline: January 6, 2021

SUNDAY, MARCH 7

Arrival and Registration

MONDAY, MARCH 8

Aging in the Tumor Microenvironment

Sheila A. Stewart, Washington University School of Medicine, USA
Age-Related Changes in the Tumor Microenvironment Drive Tumorigenesis

Marco Demaria, European Research Institute for the Biology of Aging, Netherlands
Role of Cellular Senescence in Tumor Progression and Therapy-Induced Side Effects

Ashani Weeraratna, Johns Hopkins University, USA
Age and Tumor Initiation, Understanding the Drivers

Derek A. Wainwright, Northwestern University Feinberg School of Medicine, USA
Aging-Dependent Changes in the Brain Stroma Drive Incurable Glioblastoma

Short Talk(s) Chosen from Abstracts

The Aging Immune Response, Cancer Sneaks In

Jing-Dong Jackie Han, Peking University, China
Heterogeneity of Human Aging

Arne N. Akbar, University College London, UK
Senescent Non Lymphoid Cells Inhibit Immunity in the Skin

Andrea Ablasser, Ecole Polytechnique Fédérale de Lausanne, Switzerland
The Role of cGAS/STING and the Immune Response in Senescence

Short Talk(s) Chosen from Abstracts

Poster Session 1

TUESDAY, MARCH 9

Stem Cells, Reprogramming and Cancer, How Is It All Related

Manuel Serrano, Institute for Research in Biomedicine, Spain
Cell States that Drive Reprogramming

Amy J. Wagers, Harvard University, USA
Programming and Reprogramming Stem Cells for Regenerative Medicine

Anne Brunet, Stanford University, USA
Epigenetic and Metabolism Crosstalk, Implications in Aging and Cancer

Nathaniel Eames David, UNITY Biotechnology, USA
Leveraging Anti-Cancer Mechanisms to Target Diseases of Aging

Short Talk(s) Chosen from Abstracts

Inflammaging, What Does it Mean?

Jennifer Elisseeff, Johns Hopkins University, USA
Impact of Senescence on the Immune System in Wound Healing, Cancer and Immunotherapy

Ana O'Loughlin, Queen Mary University of London, UK
Exosomes and Cytokines in Senescent Cells, how do they Communicate?

Eiji Hara, Osaka University, Japan

Roles and Mechanisms of Cellular Senescence in Inflammation and Cancer

Short Talk(s) Chosen from Abstracts

Poster Session 2

WEDNESDAY, MARCH 10

Paracrine Signaling in the TME

Sandra S. McAllister, Brigham & Women's Hospital/Harvard Medical School, USA

Systemic Aging and Tumorigenesis

Naoko Ohtani, Osaka City University Graduate School of Medicine, Japan

The Microbiota and Cancer, is Senescence Important?

Meng C. Wang, Baylor College of Medicine/HHMI, USA
Microbe-Mitochondria Crosstalk in Healthy Aging

Short Talk(s) Chosen from Abstracts

Paracrine Signaling: What Drives Tumor Progression

Peter Croucher, Garvan Institute, Australia

The Bone Niche and Tumor Cell Dormancy, Lessons from Multiple Myeloma

Tamara Tchkonja, Mayo Clinic, USA
Obesity and Aging and Cancer

David J. Glass, Regeneron Pharmaceuticals, Inc., USA
Age-Related Gene and Signaling Perturbations that Increase the Probability of Oncogenesis

Short Talk(s) Chosen from Abstracts

Targeting the Systemic Environment

Ana Maria Cuervo, Albert Einstein College of Medicine, USA
Autophagy, Eating your Way to Cancer

Jan M. van Deursen, Mayo Clinic, USA
Senescence-Based Cancer Immunotherapy

Peter L. J. de Keizer, UMC Utrecht, Netherlands
Therapy-Induced Senescence-Risks to Cancer Progression

Pura Munoz Canoves, Universitat Pompeu Fabra, Spain
Muscle Wasting in Aging

Closing Keynote Address

Judith Campisi, Buck Institute for Research on Aging, USA
Cancer and Aging: Rival Demons or Dysfunctional Cousins?

Meeting Wrap-Up: Outcomes and Future Directions (Organizers)

THURSDAY, MARCH 11

Departure