

# Cancer and Aging Interest Group – CAIG Home

[Registration](#)

## Age-Dependent Changes in Cancer Biology

October 26-27, 2020

Virtual Conference

## CANCER AND AGING INTEREST GROUP

The Cancer and Aging Interest Group (CAIG) organizes activities designed to promote interest, information exchange and interactions among NIH scientists interested in understanding aging, cancer and related co-morbidities.

Topics of interest include, but are not limited to:

- Recent science advances in understanding the mechanisms associated with aging, which facilitate cancer development.
- Clinical trials of novel drugs and anti-aging agents, which may play a role in the prediction or prevention of tumor formation.
- Public health, drug development, and new diagnosis methods.
- Oncology and co-morbidities, risk stratification, gerontology and geriatric medicine, internal medicine, neurodegenerative diseases and potential trade-off, respiratory medicine, epidemiology, rehabilitation, critical care medicine, physiology, and psychology.

Interactions among scientists are facilitated via webinars and quarterly meetings on current topics as well as an annual CAIG workshop.

The CAIG is open to NIH intramural and extramural scientists, as well as to academia.

Chair:

Luigi Ferrucci M.D., Ph.D., National Institute on Aging

Co-chairs:

Gabriela Riscuta M.D., C.N.S., National Cancer Institute

Konstantin Salnikow Ph.D., National Cancer Institute

The purpose of this conference is to increase awareness of the impact of aging, in cancer risk, with special considerations of cancer in the elderly. The invited experts will provide input regarding existing gaps in knowledge, discuss the overlap and divergent paths of cancer and aging biology, and facilitate the prioritization of the scientific areas for further research efforts.

This conference is organized in collaboration with the National Cancer Institute, the National Institute on Aging, and the National Institute of Environmental Health Sciences. This conference was originally scheduled for April 2-3, 2020 but was postponed due to the ongoing COVID-19 pandemic.

### Draft Agenda

#### Day 1, October 26, 2020

10:00 am – 10:05 am	<b>Introduction and Overview</b> Gabriela Riscuta, M.D., C.N.S., NCI
10:05 am - 10:20 am	<b>Opening Remarks:</b> Ned Sharpless, M.D., NCI
10:20 am - 10:35 am	<b>Opening Remarks:</b> Richard Hodes, M.D., NIA
10:35 am - 11:05 am	<b>Keynote Speaker:</b> Luigi Ferrucci, M.D., Ph.D., NIA/IRP
11:05 am - 11:45 am	<b>Session I : Understanding the Molecular Biology of Cancer in Elderly</b> Moderator: Max Guo, Ph.D., NIA
11:05 am - 11:25 am	<b>Anticancer mechanisms in long-lived mammals</b> Vera Gorbunova, Ph.D., University of Rochester (DAB/NIA)
11:25 am - 11:45 am	<b>Connecting cancer to aging – an evolutionary perspective</b> James V. Degregori, Ph.D., University of Colorado (DAB/NIA)
11:45 am - 12:05 pm	Panel Discussion
12:05 pm - 12:25 pm	Lunch

Useful Links:

[Click here to subscribe to CAIG listserv](#)

National Institute on Aging: <https://www.nia.nih.gov/research/labs>

For information on Clinical Trials, please visit:

<https://www.nia.nih.gov/research/clinical-trials>

For information on the Baltimore Longitudinal Study of Aging (BLSA), please visit:

<https://www.nia.nih.gov/research/labs/blsa/join-blsa>

If interested in participating in a clinical trial, please contact the NIA recruitment line at 410-350-3941 or email [NIASStudiesRecruitment@mail.nih.gov](mailto:NIASStudiesRecruitment@mail.nih.gov)

NIH corner (restricted access for NIH people using their PIV card and password).

12:25 pm - 1:05 pm	<b>Session II : Cellular Senescence in Cancer and Aging</b>  Moderator: Basil Eldadah, M.D., Ph.D., NIA/ERP  <b>Mechanisms of immunosenescence and Immune response to vaccines in elderly</b>  Nan-Ping Weng, M.D., Ph.D., Laboratory of Molecular Biology and Immunology (LMBI), NIA/IRP  <b>Cellular senescence in aging and cancer</b>  Darren Baker, Ph.D., Mayo Clinic
12:45 pm - 1:05 pm	
1:05 pm – 1:25 pm	Panel Discussion
1:25 pm - 2:05 pm	<b>Session III : Implication of Oxidative Stress Towards Cancer Biology</b>  Moderator: Konstantin Salnikow, Ph.D., NCI  <b>Gender effects in cancer and aging</b>  Vadim Gladyshev, Ph.D., Brigham and Women's Hospital, Harvard Medical School  <b>Dysregulation of iron metabolism in cancer and aging</b>  Suzy Torti, Ph.D., University of Connecticut
1:45 pm – 2:05 pm	
2:05 pm - 2:25 pm	Panel Discussion
2:25 pm - 2:30 pm	Coffee break
2:30 pm – 3:10 pm	<b>Session IV : Senescence, Immune Response and Cancer in the Elderly</b>  Moderators: Matt Young, Ph.D., and Anil Wali, Ph.D., NCI  <b>Telomere and genome integrity in cancer and aging</b>  Patricia Opresko, Ph.D., University of Pittsburgh (NCI)  <b>Inter-relationship between microbiota diversity, obesity and race in endometrial cancer</b>  Victoria Lin Bae-Jump, M.D., Ph.D., University of North Carolina, Chapel Hill
2:30 pm - 2:50 pm	
2:50 pm - 3:10 pm	

3: 10 pm - 3: 30 pm	Panel Discussion
3: 30 pm - 4: 30 pm	<p><b>Session V : Environmental Factors: the Overlap of Carcinogens/Gerontogens</b></p> <p>Moderator: Les Reinlib, Ph.D., NIEHS</p> <p><b>Environmental genomics of breast and prostate cancer</b></p> <p>Susan Neuhausen, Ph.D., City of Hope ( NIEHS)</p> <p><b>Breast Cancer in young &amp; older women</b></p> <p>Lead, Carolina Breast Cancer Study; co-I, African American Breast Cancer Epidemiology and Risk (AMBER); Cancer Genome Atlas Melissa Troester, UNC CH (NIEHS)</p>
3: 30 pm - 3:50 pm	
3:50 pm - 4:10 pm	
4:10 pm - 4: 30 pm	Panel Discussion
4:30 pm	Adjourn

#### Day 2, October 27, 2020

10:00 am - 10: 10 am	<p><b>Goals and Objectives</b></p> <p>Konstantin Salnikow Ph.D. NCI</p>
10:10 am - 10:40 am	<p><b>Keynote: Epigenetic linkage of aging, cancer and nutrition</b></p> <p>Trygve Tollefsbol, Ph.D., University of Alabama (DCP/NCI)</p>
10:40 am - 11:50 am	<p><b>Session VI : Potential Impact of Nutrition on Cancer Prevention</b></p> <p>Moderator: Gabriela Riscuta, M.D., C.N.S., and Pat Prasanna, Ph.D., NCI</p>
10:40 am - 11:00 am	<p><b>Senolytic bioactive food components and their biological pathway for action</b></p> <p>Simmin Meydani, D.V.M., Ph.D., Tufts University (DCP /NCI)</p>
11:00 am - 11:20 am	<p><b>Cancer prevention in elderly and particularities for mechanisms of action</b></p> <p>Chengguo Xing, Ph.D., University of Florida (DCP/NCI)</p>
11:20 am - 11:50 am	<p><b>The mechanisms of fasting and advanced glycation end products in cancer prevention in elderly</b></p> <p>Sebastian Brandhorst, Ph.D., University of Southern California (DCP/NCI)</p>
11:50 am -12: 10 pm	Panel Discussion

12:10 pm - 12:30 pm	Lunch Break
12:30 pm - 1: 00 pm	<b>Keynote speaker: Melanoma metastasis to lymph nodes; mechanisms and contributing factors.</b> Sean Morrison, Ph.D., UT Southwestern
1:00 pm - 2: 00 pm	<b><i>Session VII : Cancer Therapeutics and Treatment Optimization for the Elderly</i></b>  Moderators: Weiwei Chen, Ph.D., and Christina Liu, Ph.D., PE, NCI
1:00 pm - 1: 20 pm	<b>Age against the machine: How the aging microenvironment governs tumor progression and response to therapy</b>  Ashani Weeraratna Ph.D., Johns Hopkins University (DCTD /NCI)
1:20 pm - 1: 40 pm	<b>VLA4-nanoparticles hijack cell adhesion mediated drug resistance to target refractory myeloma cells and prolong survival</b>  Greg Lanza M.D., Ph.D., Washington University at St. Louis (DCTD/NCI)
1:40 pm - 2: 00 pm	<b>Treatment Optimization for the elderly with comorbidities</b>  Heidi Klepin, M.D., Wake Forest School of Medicine (DCTD /NCI)
2:00 pm - 2: 20 pm	Panel Discussion
2:20 pm - 2: 30 pm	Wrap Up and Adjourn

Planning Committee:

Luigi Ferrucci, M.D., Ph.D., (NIH/NIA/IRP) Chair

Gabriela Riscuta, M.D., C.N.S. (NIH/NCI/DCP); co-chair

Konstantin Salnikow, Ph.D., (NIH/NCI/DCB); co-chair

Nelson Aguila, D.V.M., (NIH/NCI)

Weiwei Chen, Ph.D., (NIH/NCI)

Basil Eldadah, M.D., Ph.D., (NIH/NIA/ERP)

Max Guo, Ph.D., (NIH/NIA/ERP)

Christina Liu, Ph.D., (NIH/NCI)

Pat Prasanna, Ph.D., (NIH/NCI/DCTD)

Leslie Reinlib, Ph.D., (NIH/NIEHS)

Sudhir Srivastava, Ph.D., M.P.H., (NIH/NCI/DCP)

Anil Wali, Ph.D., (NIH/NCI)

Matthew Young, Ph.D., (NIH/NCI/DCP)

- Past events
- News
- Recent publications