



Join Keystone Symposia
for the 2016 conference on:

Epigenetic and Metabolic Regulation of Aging and Aging-Related Diseases

May 1–5, 2016

Hilton Santa Fe Historic Plaza Hotel | Santa Fe, New Mexico | USA

Scientific Organizers:

Anne Brunet, David M. Sabatini and Shelley L. Berger

Aging is one of the greatest fundamental mysteries in biology, and arguably its next frontier. Long thought to be inexorable, aging has in fact been shown to be malleable due to specific changes in genes or environment. This meeting will cover the most exciting questions at the forefront of the field: How can external stimuli delay aging in a long-lasting, yet reversible, manner? Does the integration of external stimuli to modulate aging differ among cells with vastly diverse functions – somatic maintenance, tissue regeneration and the “immortal” germline? Is aging a synchronous process, and how do the different cells and systems communicate? How do diseases of aging develop, and what can be done to prevent or reverse them? To address these questions, the symposium gathers investigators from completely different areas to bring an interdisciplinary approach to aging. The meeting will focus on the emerging nexus between two key aging regulators – epigenetic states of the genome and metabolic status – and will highlight innovative technologies and the newest discoveries in aging and diseases. It will address questions from different perspectives, taking advantage of model organisms with drastically divergent lifespans and aging strategies.

Session Topics:

- Epigenetic Regulation of Aging
- Workshop 1: New Animal Models
- Transcriptional and Noncoding RNA Networks in Aging
- Autophagy, ‘Inflammaging’ and Metabolism
- The Immortal Germline: Reprogramming and Transgenerational Inheritance
- Epigenetic and Metabolic Regulation of Aging Stem Cells
- Systemic Regulation of Aging
- Epigenetics of Age-Related Diseases
- Workshop 2: Therapeutic Approaches
- Human Aging and Therapeutics



Submitting an abstract is a great way of participating in the conference through poster presentation and possible selection for a short talk.

Scholarship & Discounted Abstract Deadline: Jan 5, 2016

Abstract Deadline: Feb 2, 2016

Discounted Registration Deadline: Mar 1, 2016

For additional details, visit www.keystonesymposia.org/16E1.

KEYSTONE SYMPOSIA™
on Molecular and Cellular Biology

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SUNDAY, MAY 1

Arrival and Registration

MONDAY, MAY 2

Welcome and Keynote Address

Linda Partridge, Max Planck Institute for Biology of Ageing, Germany
Epigenetic Regulation of Aging in Drosophila and Mice

Epigenetic Regulation of Aging

Shelley L. Berger, University of Pennsylvania, USA
Chromatin Remodelers in Longevity

Andrew G. Dillin, University of California, Berkeley, USA
Epigenetic Integration of Longevity by Mitochondrial Defects

Short Talk(s) Chosen from Abstracts

Transcriptional and Noncoding RNA Networks in Aging

Coleen T. Murphy, Princeton University, USA
Insulin Signaling and Tissue-Specific Transcriptional Control of Aging

Ramin Shiekhattar, University of Miami, USA
Mediator and Noncoding RNAs in Aging

Ali Shilatifard, Northwestern University Feinberg School of Medicine, USA
Enhancer Malfunction in Cancer

Short Talk Chosen from Abstracts

Poster Session 1

TUESDAY, MAY 3

Autophagy, "Inflammaging" and Metabolism

Malene Hansen, Sanford-Burnham Medical Research Institute, USA
On How the Recycling Process of Autophagy Contributes to Aging

Vishva M. Dixit, Genentech, Inc., USA
Inflammation and Aging

David M. Sabatini, Whitehead Institute for Biomedical Research, USA
mTOR Pathway in Metabolism and Aging

Marcia C. Haigis, Harvard Medical School, USA
Mitochondrial Activation in T Cells

Short Talk(s) Chosen from Abstracts

Poster Session 2

Workshop 1: New Animal Models

Short Talks Chosen from Abstracts

The Immortal Germline: Reprogramming and Transgenerational Inheritance

Adam Antebi, Max Planck Institut Fur Biologie des Alterns, Germany
New Modes of Communication between Germline and Soma

Anne Brunet, Stanford University, USA
Long-Lasting Epigenetic Regulation of Aging in Germline and Soma

Steven E. Artandi, Stanford University, USA
Telomerase in the 'Immortal' Germline

Short Talk Chosen from Abstracts

WEDNESDAY, MAY 4

Epigenetic and Metabolic Regulation of Aging Stem Cells

Thomas A. Rando, Stanford University School of Medicine, USA
Epigenetic Integration of Rejuvenation in Aged Muscle Stem Cells

Leanne Jones, University of California, Los Angeles, USA
Histone Variants in Stem Cell Aging

David A. Sinclair, Harvard Medical School, USA
Sirtuins in Health and Diseases

Sean J. Morrison, HHMI/University of Texas Southwestern Medical Center, USA

Proteostasis and Metabolism in Aging Stem Cells

Short Talk(s) Chosen from Abstracts

Systemic Regulation of Aging

Amy J. Wagers, Harvard University, USA

Reversing Dysfunction in Aging Tissues through Systemic Mediators

Tony Wyss-Coray, Stanford University School of Medicine, USA
Systemic Regulation of Brain Aging and Neurodegeneration

Amita Sehgal, University of Pennsylvania Perelman School of Medicine, USA

Sleep and Aging

Danny F. Reinberg, HHMI/New York University, USA
Epigenetic Changes Associated with Vast Lifespan Differences in Eusocial Insects

Short Talk Chosen from Abstracts

Poster Session 3

THURSDAY, MAY 5

Epigenetics of Age-Related Diseases

Peter D. Adams, Beatson Institute for Cancer Research, UK
Cancer as an Age-Related Disease

J. Andrew Pospisilik, Max-Planck-Institute for Immunobiology and Epigenetics, Germany

Epigenetic Control of Complex Age-Related Diseases

Tony Kouzarides, University of Cambridge, UK
Chromatin-Based Therapeutics of Age-Dependent Cancers

Li-Huei Tsai, Massachusetts Institute of Technology, USA
Chromatin-Based Therapeutics for Alzheimer's Disease

Margaret A. Goodell, Baylor College of Medicine, USA
Chromatin Signatures of Aging Blood Stem Cells

Short Talk(s) Chosen from Abstracts

Workshop 2: Therapeutic Approaches

Short Talks Chosen from Abstracts

Human Aging and Therapeutics

P. Eline Slagboom, Leiden University Medical Centre, Netherlands
Determinants of Human Lifespan

Trey Ideker, University of California, San Diego, USA
Human Biomarkers: An Epigenetic Clock for Aging

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Cynthia Kenyon, Calico, USA

Pathways Affecting Aging in C. elegans

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

FRIDAY, MAY 6

Departure