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, “Inflamming” 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.

Abstract Deadline: Feb 2, 2016
Discounted Registration Deadline: Mar 1, 2016

For additional details, visit www.keystonesymposia.org/16E1.
SUNDAY, MAY 1
Arrival and Registration

MONDAY, MAY 2
Welcome and Keynote Address
Linda Partridge, Max Planck Institute for Biology of Ageing, Germany
Manipulating Nutrient-Sensing Signaling to Improve Health During Ageing

Epigenetic Regulation of Aging
Shelley L. Berger, University of Pennsylvania, USA
Profound Nuclear and Chromatin Alterations in Senescence and Aging
Andrew G. Dillin, University of California, Berkeley, USA
Epigenetic Integration of Longevity by Mitochondrial Defects
Peter D. Adams, Beatson Institute for Cancer Research, UK
Epigenetics of Cancer and Aging: From Mechanisms to Therapies

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
Biogenesis and Mechanism of Action of enhancer RNAs
Ali Shilatifard, Northwestern University, Feinberg School of Medicine, USA
Enhancer Malfunction in Cancer

Short Talk Chosen from Abstracts

Poster Session 1

TUESDAY, MAY 3
Epigenetic and Metabolic Regulation of Aging Stem Cells
Thomas A. Rando, Stanford University School of Medicine, USA
Epigenetic Mechanisms of Stem Cell Aging and Rejuvenation
Leanne Jones, University of California, Los Angeles, USA
"Mechanisms Underlying Loss of Intestinal Homeostasis with Age"
David A. Sinclair, Harvard Medical School, USA
Is Loss of Epigenetic Resilience a Driver of Aging?
Sean J. Morrison, University of Texas Southwestern Medical Center, USA
Proteostasis and Metabolism in Aging Stem Cells

Short Talk(s) Chosen from Abstracts

Poster Session 2

Workshop 1: New Animal Models
Short Talks Chosen from Abstracts

THURSDAY, MAY 5
Epigenetics of Age-Related Diseases
J. Andrew Pospisilik, Max-Planck-Institute for Immunobiology and Epigenetics, Germany
Epigenetic Determinants of Phenotypic Variation and Metabolic Disease: Intergenerational and Stochastic Effects
Tony Kouzarides, University of Cambridge, UK
Role of ncRNAs in Transcription and Cancer
Li-Huei Tsai, Massachusetts Institute of Technology, USA
Genomic Mechanisms Regulating Synapse Function and Memory Formation
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
Epigenetic Prediction of Aging and Aging Acceleration for HIV+ Individuals

Cynthia Kenyon, Calico, USA
Pathways Affecting Aging in C. elegans

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

FRIDAY, MAY 6

Departure