

KEYSTONE SYMPOSIA

on Molecular and Cellular Biology

Transcriptional and Epigenetic Influences on Stem Cell States (C9)

March 23-28, 2015 • Sheraton Steamboat Resort • Steamboat Springs, Colorado, USA

Scientific Organizers: Thomas P. Zwaka, Rudolf Jaenisch and Joanna Wysocka

Supported by the Directors' Fund

Abstract & Scholarship Deadline: November 20, 2014 / Abstract Deadline: December 19, 2014 / Discounted Registration Deadline: January 22, 2015

MONDAY, MARCH 23

Registration

TUESDAY, MARCH 24

Keynote Address

M. Azim Surani, University of Cambridge, UK
Lessons from Germ Cells

Transcriptional Control of Stemness

Richard A. Young, Whitehead Institute for Biomedical Research, USA
Interface Between Enhancers and Transcriptional Control
Jacob Hanna, Weizmann Institute of Science, Israel
Molecular Mechanisms for Inducing and Maintaining Pluripotent States
Kristian Helin, University of Copenhagen, Denmark
Novel Approaches to Identify Genes Controlling Stem Cell Function
Short Talk(s) Chosen from Abstracts

Epigenetic Memories in the Germline

Wolf Reik, Babraham Institute, UK
The Role of DNA Modifications in Epigenetic Reprogramming and Signaling
Bradley R. Cairns, HHMI/University of Utah, USA
Germ Cell Chromatin
Alexander Meissner, Harvard University, Broad Institute, USA
Epigenome in Early Development
Short Talk Chosen from Abstracts

Poster Session 1

WEDNESDAY, MARCH 25

Chromatin Features and Stem Cell Identity

Joanna Wysocka, Stanford University School of Medicine, USA
Epigenetic Regulation of Differentiation
Laurie A. Boyer, Massachusetts Institute of Technology, USA
Role of the Histone Variants in Mammalian Development
Wendy A. Bickmore, MRC Human Genetics Unit, UK
Spatial Organization of the Stem Cell Genome
Kathrin Plath, University of California, Los Angeles, USA
Epigenetic Basis of Pluripotency
Short Talk(s) Chosen from Abstracts

Modeling Stem Cell States

Ihor R. Lemischka†, Mount Sinai School of Medicine, USA
Transcriptional Complexity in Stem Cells
Alexander van Oudenaarden, Hubrecht Institute, Netherlands
Stochastic Gene Expression
Speaker to be Announced
Short Talk Chosen from Abstracts

Poster Session 2

THURSDAY, MARCH 26

Signaling in Stem Cells

Speaker to be Announced
Lorenz Studer, Memorial Sloan Kettering Cancer Center, USA
Neural Differentiation of Embryonic Stem Cells
Margaret T. Fuller, Stanford University, USA
Regulation of Stem Cell Behavior
Austin G. Smith, University of Cambridge, UK
Mechanisms Governing the Self-Renewal and Differentiation
Short Talk(s) Chosen from Abstracts

Workshop: Functional Chromatin Domains in Stem Cells

Short Talks Chosen from Abstracts

Cell Cycle and Growth Regulation

Peter W. Reddien, Whitehead Institute, USA
Planarians as a Model System for Stem Cell Biology
Thomas P. Zwaka, Icahn School of Medicine at Mount Sinai, USA
Stem Cell Growth Control
Amanda G. Fisher, MRC Clinical Sciences Centre, UK
Reprogramming Mediated by Stem Cell Fusion
Short Talk Chosen from Abstracts

Poster Session 3

FRIDAY, MARCH 27

Challenging Fate: Reprogramming and Transdifferentiation

Rudolf Jaenisch, Whitehead Institute for Biomedical Research, USA
Epigenetic Mechanisms of Reprogramming
Konrad Hochedlinger, Massachusetts General Hospital, USA
Mechanisms of Pluripotency and Cellular Reprogramming
Marius Wernig, Stanford School of Medicine, USA
Mechanisms that Determine Cell Fate Identity
George Q. Daley, HHMI/Children's Hospital Boston, USA
Assessing Cellular Identity
Short Talk(s) Chosen from Abstracts

Mechanisms of Differentiation and Identity Choice

Margaret A. Goodell, Baylor College of Medicine, USA
Epigenetic Regulation of Stem Cells
Kenneth S. Zaret, University of Pennsylvania, USA
Mechanisms of Cell Fate Specification in Embryonic Development and Reprogramming
Daniel A. Lim, University of California, San Francisco, USA
Epigenetic Determinants of Neural Stem Cells
Short Talk Chosen from Abstracts

SATURDAY, MARCH 28

Departure