

KEYSTONE SYMPOSIA

on Molecular and Cellular Biology

Hematopoiesis (B6)

February 22-27, 2015 • Keystone Resort • Keystone, Colorado, USA

Scientific Organizers: Timm Schroeder, Hanna K.A. Mikkola and Patricia Ernst

Sponsored by Regeneron Pharmaceuticals, Inc.

Abstract & Scholarship Deadline: October 22, 2014 / Abstract Deadline: November 20, 2014 / Discounted Registration Deadline: December 18, 2014

SUNDAY, FEBRUARY 22

Registration

MONDAY, FEBRUARY 23

Keynote Address

John E. Dick, Princess Margaret Cancer Centre, University Health Network, Canada
Human HSC are Uniquely Wired to Maintain Clonal Purity

Architecture of the Hematopoietic System

Connie J. Eaves, British Columbia Cancer Agency, Canada
Molecular Control of Fetal and Adult HSC Behavior
E. Camilla Forsberg, University of California, Santa Cruz, USA
Hematopoietic Stem and Progenitor Differentiation Pathways
Irving L. Weissman, Stanford University School of Medicine, USA
Normal and Malignant Hematopoiesis
Short Talk(s) Chosen from Abstracts

Workshop 1

Short Talks Chosen from Abstracts

Development of the Hematopoietic System

Nancy A. Speck, University of Pennsylvania, USA
Hematopoietic Stem Cell Formation
David Traver, University of California, San Diego, USA
Pathways Controlling the Emergence of Hematopoietic Stem Cells
Leonard I. Zon, HHMI/Children's Hospital Boston, USA
Molecular Regulators of HSC Specification and Engraftment
Short Talk Chosen from Abstracts

Poster Session 1

TUESDAY, FEBRUARY 24

Transcriptional Cell Fate Control

Stuart H. Orkin, Dana-Farber Cancer Institute, USA
Molecular Identification and Control of Hematopoietic Cell Types
Claus Nerlov, University of Oxford, UK
Transcription Factors in Normal and Malignant Lineage Choice
Timm Schroeder, ETH Zürich, Switzerland
Intrinsic and Extrinsic Regulation of Hematopoietic Lineage Choice
Gerd A. Blobel, Children's Hospital of Philadelphia, USA
Maintaining Lineage Stability through Mitosis
Short Talk(s) Chosen from Abstracts

Directed Development of Hematopoietic Cells

Gordon M. Keller, University Health Network, MaRS Centre, Canada
Recreating the Hematopoietic System from Pluripotent Stem Cells
Hanna K. A. Mikkola, University of California, Los Angeles, USA
Establishment of Self-Renewal during HSC Development
Kateri Ann Moore, Mount Sinai School of Medicine, USA
Reprogramming Cells into Blood
Short Talk Chosen from Abstracts

Poster Session 2

WEDNESDAY, FEBRUARY 25

Microenvironment

Sean J. Morrison, HHMI/University of Texas Southwestern Medical Center, USA
Dissecting Hematopoietic Niches
Paul S. Frenette, Albert Einstein College of Medicine, USA
Role of the Niche in Supporting HSC Function and Migration
Utpal Banerjee, University of California, Los Angeles, USA
Hematopoietic Niche Signals in Drosophila
Louise E. Purton, St. Vincent's Institute of Medical Research, Australia
Normal and Neoplastic Bone Marrow Niches
Short Talk(s) Chosen from Abstracts

Systemic Signals Controlling HSC Behavior

Andreas Trumpp, German Cancer Research Center, Germany
Control of HSC Dormancy
Markus G. Manz, University Hospital Zurich, Switzerland
HSC Homeostasis in Inflammation
Margaret A. Goodell, Baylor College of Medicine, USA
Epigenetic Control of HSC Function
Short Talk Chosen from Abstracts

Poster Session 3

THURSDAY, FEBRUARY 26

Self-Renewal in Normal and Malignant Hematopoietic Cells

Guy Sauvageau, IRIC/Université de Montréal, Canada
Pharmacological Manipulation of HSC Self-Renewal
Patricia Ernst, Dartmouth Medical School, USA
Chromatin Regulators in Normal and Malignant HSC Self-Renewal
Koichi Akashi, Kyushu University, Japan
Molecular Recognition of Normal and Malignant Hematopoietic Differentiation
Anthony R. Green, Cambridge Institute for Medical Research, UK
Myeloproliferative Neoplasms – Tweaking the Hematopoietic Rheostat
Short Talk(s) Chosen from Abstracts

Hematopoiesis in Aging and Stress

Gerald de Haan, University Medical Center Groningen, Netherlands
Molecular Changes in Aging HSCs
Iannis Aifantis, HHMI/New York University School of Medicine, USA
Notch Signaling in Normal and Neoplastic Hematopoiesis
Emmanuelle Passegué, University of California, San Francisco, USA
DNA Repair and Stress Control in HSCs
Short Talk Chosen from Abstracts

FRIDAY, FEBRUARY 27

Departure