

# Blood disorders: models, mechanisms and therapies

## Provisional programme

Sunday 29 September 2019

09:00 **Registration & coffee**

10:00 Welcome – **Monica Justice** (Editor-in-Chief, Disease Models & Mechanisms)

### Blood development: mechanisms and pathology

10:15 **Nancy Speck** - University of Pennsylvania, USA  
TBC

10:45 **George Daley** - Harvard Medical School, USA  
Blood from a Petri dish

11:15 Short talk 1 (selected from abstracts)

11:30 Short talk 2 (selected from abstracts)

11:45 Short talk 3 (selected from abstracts)

12:00 **Lunch**

13:00 **Trista North** - Harvard University, USA  
Extrinsic regulation of vertebrate hematopoietic stem cell formation

13:30 **David Traver** - University of California, San Diego, USA  
TBC

### Epigenetic regulation of blood development

14:00 **Maria Figueroa** - University of Miami, USA  
Epigenetic deregulation in aging HSC: clues to the pathogenesis of AML and MDS

14:30 **Merav Socolovsky** - University of Massachusetts Medical School, USA  
The early hematopoietic and erythroid hierarchies through the lens of single-cell RNA-seq

14:45 **Coffee break & group photo**

15:30 **Margaret Goodell** - Baylor College of Medicine, USA  
Mechanisms of HSC competition leading to clonal hematopoiesis

## Erythropoiesis and red cell disorders

- 16:00 **Stuart Orkin** - Dana-Farber Cancer Institute, USA  
TBC
- 16:30 **Vijay Sankaran** - Harvard Stem Cell Institute, USA  
Genetic insights into human hematopoiesis in health and disease
- 17:00 **Poster session with drinks and hors d'oeuvres**
- 19:00 **Depart**

## Monday 30 September 2019

- 09:00 **Giuliana Ferrari** - San Raffaele University Medical School, Italy  
Gene therapy for transfusion dependent beta-thalassemia: a lesson from patients

## Targeting blood cancers

- 09:30 **Paresh Vyas** - University of Oxford, UK  
Mechanisms of initiation and transformation in Acute Myeloid Leukaemia
- 10:00 Short talk 4 (selected from abstracts)
- 10:15 Short talk 5 (selected from abstracts)
- 10:30 **Coffee break**
- 11:00 **Kimberly Stegmaier** - Dana-Farber Cancer Institute, USA  
Application of functional genomic screens to discover new therapeutic targets in AML
- 11:30 **Scott Armstrong** - Dana-Farber Cancer Institute, USA  
Targeting epigenetic mechanisms in leukemia
- 12:00 Short talk 6 (selected from abstracts)
- 12:15 Short talk 7 (selected from abstracts)
- 12:30 **Lunch**
- 13:30 **Panel discussion**
- 15:00 **Coffee break**
- 15:30 **John Dick** - University Health Network, Canada  
Fate regulation of human LT-HSC: insights from epigenetics

## Clonal hematopoiesis

- 16:00 **Ben Ebert** - Brigham and Women's Institute, USA  
Genetics and biology of clonal hematopoiesis
- 16:30 **Neal Young** - National Institutes of Health, USA  
Animal models of immune marrow failure
- 17:00 Short talk 8 (selected from abstracts)
- 17:15 **Posters and pre-dinner drinks**
- 19:00 **Conference dinner**

## Tuesday 1 October 2019

- 09:00 **Peter Campbell** - Wellcome Trust Sanger Institute, UK  
Somatic mutations in normal blood cells
- 09:30 **Fernando Camargo** - Boston Children's Hospital, USA  
Lineage, fate and heterogeneity in native hematopoiesis

## Manipulating the stem cell niche

- 10:00 **Emmanuelle Passegué** - Columbia University Medical Center, USA  
Hematopoietic stem cell in stress, disease and aging
- 10:30 **Coffee**
- 11:00 Short talk 9 (selected from abstracts)
- 11:15 **Tannishtha Reya** - University of California, San Diego, USA  
Stem cell signals in cancer heterogeneity and therapy resistance
- 11:45 **Leonard Zon** - Harvard University, USA  
Pathways regulating hematopoietic stem cell self-renewal and migration
- 12:15 **Meeting overview**
- 12:30 **Lunch**
- 13:30 **Depart**