
Thursday 07 June 2018

- 10:00 - 12:00 **Arrival and Registration**
ATC Registration Desk
- 12:00 - 12:15 **Opening Remarks**
ATC Auditorium
- 12:15 - 13:15 **Keynote Lecture: Unravelling the biology of normal and malignant hematopoietic stem and progenitor cells at the single cell level** 1

Sten Eirik Jacobsen
Karolinska Institutet, Karolinska University Hospital and University of Oxford, Sweden
- 13:15 - 14:30 **Session 1: Hematopoietic Stem Cells in the Embryo**
ATC Auditorium
- 13:15 - 13:45 **Single-cell transcriptomics reveal the dynamic of hematopoietic stem cell emergence and maturation in the aorta of the mouse embryo** 2

Catherine Robin
Hubrecht Institute, The Netherlands
- 13:45 - 14:00 **An ubiquitin-proteasome pathway controls drosophila hematopoiesis** 3

Michèle Crozatier
Centre de Biologie du Developpement, France
- 14:00 - 14:30 **Analysis of hematopoietic cell formation in the major arteries of the mouse embryo** 4

Nancy Speck
University of Pennsylvania, United States of America
- 14:30 - 15:00 **Coffee Break and Meet the Speakers**
ATC Auditorium Foyer
- 15:00 - 17:15 **Session 1: Hematopoietic Stem Cells in the Embryo (continued)**
ATC Auditorium

EMBL Conference: Hematopoietic Stem Cells: From the Embryo to the Aging Organism

- 15:00 - 15:15 **A conserved endothelial enhancer in the *gata2a* locus reveals non-redundant roles for *Gata2a* and *Gata2b* in embryonic and adult haematopoietic stem cells** 5
Rui Monteiro
University of Birmingham, United Kingdom
- 15:15 - 15:45 **Notch ligands shape the nascent hematopoietic stem cell niche in the embryonic aorta** 6
Anna Bigas
Institut Hospital del Mar d'Investigacions Mèdiques (IMIM), Spain
- 15:45 - 16:00 **Somite-derived stromal cells, a key component of the HSC expansion/differentiation niche in zebrafish: first insights in the molecular mechanisms of their emergence from the somite** 7
Emi Murayama
Institut Pasteur, France
- 16:00 - 16:30 **From blood vessels to hematopoietic stem cells** 8
Christophe Lancrin
EMBL Rome, Italy
- 16:30 - 17:00 **Extrinsic regulation of hematopoiesis** 9
Trista North
Boston Children's Hospital and Harvard Medical School, United States of America
- 17:00 - 17:15 **Flash Talk Session I – abstract no. 38, 43, 44, 79, 92**
ATC Auditorium
- 17:15 - 18:45 **Poster Session I (odd numbers)**
ATC Helix A
- 18:45 - 20:15 **Dinner**
EMBL Canteen
- 20:15 - 21:30 **Speed Networking Session**
EMBL Canteen

20:15 - 22:00 **After Dinner Drinks with Live Music**
ATC Rooftop Lounge

Friday 08 June 2018

09:00 - 10:30	Session 2: Hematopoietic Stem Cells in the Adult Animal	
	ATC Auditorium	
09:00 - 09:30	Metabolism meets the epigenome in AML stem cells	10
	Andreas Trumpp <i>German Cancer Research Center (DKFZ) and HI-STEM, Germany</i>	
09:30 - 09:45	Restriction of myelo-lymphoid lineage potential occurs within the human haematopoietic stem cell pool	11
	Emily Calderbank <i>University of Cambridge, United Kingdom</i>	
09:45 - 10:15	Cross-talk between embryonic and adult hematopoiesis	12
	Claudia Waskow <i>Leibniz Institute on Aging, Germany</i>	
10:15 - 10:30	Apelin-positive endothelial cells control hematopoiesis and bone marrow transplantation	13
	Qi Chen <i>Max Planck Institute for Molecular Biomedicine, Germany</i>	
10:30 - 11:00	Coffee Break and Meet the Speakers	
	ATC Auditorium Foyer	
11:00 - 12:30	Session 2: Hematopoietic Stem Cells in the Adult Animal (continued)	
	ATC Auditorium	
11:00 - 11:30	Exploring hematopoietic stem cell emergence during ontogeny	14
	Shannon McKinney-Freeman <i>St. Jude Children's Research Hospital, United States of America</i>	

11:30 - 11:45	Investigating the role of bone marrow stroma in the response of haematopoietic stem cells to <i>Plasmodium berghei</i> infection	15
	Myriam Haltali <i>Imperial College London, United Kingdom</i>	
11:45 - 12:15	Tracking human hematopoietic stem cell clonal dynamics using somatic mutations	16
	David Kent <i>University of Cambridge, United Kingdom</i>	
12:15 - 12:30	Flash Talk Session II – abstract no. 41, 46, 50, 58, 56, 97	
	ATC Auditorium	
12:30 - 13:30	Lunch and Meet the Editors	
	ATC Auditorium Foyer	
13:30 - 15:15	Session 2: Hematopoietic Stem Cells in the Adult Animal (continued)	
	ATC Auditorium	
13:30 - 14:00	Deconstructing stem cell niche contributions to bone marrow failure and leukemogenesis	17
	Marc Raaijmakers <i>Erasmus MC, The Netherlands</i>	
14:00 - 14:15	Decoding the regulatory circuit by epigenetic regulator MOF in haematopoiesis	18
	Cecilia Rodrigues <i>Max Planck Institute of Immunobiology and Epigenetics, Germany</i>	
14:15 - 14:45	Metabolic regulation of blood and bone forming stem cells: The role of ROS, mitochondria transfer, nitric oxide and melatonin	19
	Tsvee Lapidot <i>Weizmann Institute, Israel</i>	
14:45 - 15:15	Functional heterogeneity and aging of blood vessels in the skeletal system	20
	Ralf Adams <i>Max Planck Institute for Molecular Biomedicine, Germany</i>	

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- 15:15 - 15:45 **Coffee Break and Meet the Speakers**
ATC Auditorium Foyer
- 15:45 - 18:15 **Session 3: Hematopoietic Stem Cells Aging**
ATC Auditorium
- 15:45 - 16:15 **To be announced** 21
Emmanuelle Passegué
Columbia University Medical Center, United States of America
- 16:15 - 16:30 **Oncogene-induced senescence in hematopoietic progenitors leads to myeloid restricted hematopoiesis, chronic inflammation and aggressive histiocytosis** 22
Raffaella Di Micco
SR-TIGET, Italy
- 16:30 - 17:00 **Stress hematopoiesis and ageing** 23
Michael Milsom
HI-STEM, Germany
- 17:00 - 17:15 **Normal and malignant splicing in hematopoietic stem cells** 24
Roi Gazit
Ben-Gurion University of the Negev, Israel
- 17:15 - 17:45 **Intrinsic and extrinsic signals regulating stem cell aging** 25
Amy Wagers
Harvard University, United States of America
- 17:45 - 18:00 **Neogenin-1 defines the myeloid-biased fraction of long-term Hoxb5+ hematopoietic stem cells (HSC) that expands during mobilization and aging** 26
Krzysztof Szade
Stanford University, United States of America
- 18:00 - 18:15 **Flash Talk Session III – abstract no. 55, 76, 84, 91**
ATC Auditorium
- 18:15 - 19:45 **Poster Session II (even numbers)**
ATC Helix A

19:45 - 21:00 **Conference Dinner**
EMBL Canteen

21:00 - 00:00 **Conference Party with DJ**
EMBL Canteen

Saturday 09 June 2018

09:00 - 10:15	Session 4: New Technologies for Hematopoietic Stem Cells Research ATC Auditorium	
09:00 - 09:30	Clonal analysis of native hematopoiesis Fernando Camargo <i>Boston Children's Hospital, United States of America</i>	27
09:30 - 09:45	A human ips model implicates embryonic b-myeloid fate restriction as a developmental susceptibility to ETV6-RUNX1 Charlotta Böiers <i>Lund University, Sweden</i>	28
09:45 - 10:00	Insights into the biological characteristics of hemogenic endothelium Valerie Kouskoff <i>University of Manchester, United Kingdom</i>	29
10:00 - 10:15	Uncovering the origin of Down syndrome-associated leukemia Sara Martina Maffioletti <i>SR-TIGET, Italy</i>	30
10:15 - 10:45	Coffee Break and Meet the Speakers ATC Auditorium Foyer	
10:45 - 12:00	Session 4: New Technologies for Hematopoietic Stem Cells Research (continued) ATC Auditorium	
10:45 - 11:15	Hematopoiesis under steady state and under challenge dissected by fate mapping and Polylox barcoding Hans-Reimer Rodewald <i>German Cancer Research Center (DKFZ), Germany</i>	31
11:15 - 11:30	Somatic mutations reveal lineage relationships and age-related mutagenesis in human hematopoiesis Ruben van Boxtel <i>Princess Máxima Center, The Netherlands</i>	32

- 11:30 - 12:00 **Retracing the in vivo haematopoietic tree using cellular barcoding methods** 33
 Leila Perie
Institut Curie, France
- 12:00 - 13:30 **Lunch**
 EMBL Canteen
- 13:30 - 14:00 **Session 4: New Technologies for Hematopoietic Stem Cells Research (continued)**
 ATC Auditorium
- 13:30 - 13:45 **Multi-layered single-cell transcriptional profiling of all bone and bone marrow populations provides a systems view of the mesenchymal and hematopoietic stem cell niche** 34

 Jude Al-Sabah
German Cancer Research Center (DKFZ) and HI-STEM, Germany
- 13:45 - 14:00 **GF11B molecular function in megakaryocytes from induced pluripotent stem cells** 35
 Marten Hansen
Sanquin, The Netherlands
- 14:00 - 15:00 **Keynote Lecture: Young and old HSC niches** 36
 Paul Frenette
Albert Einstein College of Medicine, United States of America
- 15:00 - 15:15 **Closing Remarks and Poster Prize**
 ATC Auditorium
- Poster removal. Please remember to collect your poster. Posters which have not been collected will be disposed of after the meeting.
- Feedback questionnaire. Check your inbox when the meeting ends. You will find an email with the link to the online feedback questionnaire. Please take time to complete it.