

Monday, 19 June

12:00 - 13:00 *Registration in IMB's foyer*

Welcome Address

13:00 - 13:15	René Ketting, Executive Director	IMB, Mainz, DE	<i>Welcome</i>
	Vijay Tiwari, Group Leader	IMB, Mainz, DE	<i>Introduction to the conference</i>

Keynote Lecture

Chair: Stefan Legewie, IMB, Mainz

13:15 - 14:00	Amos Tanay <i>BIS Anniversary Keynote Lecture</i>	Weizmann Institute, Rehovot, IL	<i>Single cell approaches to study epigenetic memory</i>
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Session 1: Dynamic models of signalling to gene regulation

Chair: Stefan Legewie

14:00 - 14:30	Thomas Höfer	DKFZ, Heidelberg, DE	<i>Differential gene regulation by a non-equilibrium mechanism</i>
14:30 - 15:00	Felix Naef	EPFL, Lausanne, CH	<i>Transcriptional bursting and promoter cycles in mammalian cells</i>
15:00 - 15:15	Florian Uhlitz <i>BIS Anniversary Short Talk</i>	IRI Life Sciences, Berlin, DE	<i>Immediate late genes decode ERK signal duration</i>
15:15 - 15:45	<i>Coffee Break</i>		

Session 2: Functional epigenomics in uncovering gene regulatory principles

Chair: Stefan Legewie

15:45 - 16:15	Anja Groth	BRIC, Copenhagen, DK	<i>Chromatin replication and epigenome maintenance</i>
16:15 - 16:45	Dirk Schübeler	FMI, Basel, CH	<i>Visualization of transcription initiation genome-wide at single molecule resolution</i>
16:45 - 17:00	Borbala Mifsud <i>BIS Anniversary Short Talk</i>	QMUL, London, UK	<i>Dynamic promoter-enhancer regulatory network in early germ cell differentiation</i>
17:00 - 19:00	<i>Welcome Reception</i>		

Tuesday, 20 June

Session 3: Inference of gene-regulatory networks and quantitative analysis of single cell behaviour

Chair: Vijay Tiwari, IMB, Mainz

09:00 - 09:30	Michael Snyder	Stanford University, USA	<i>Long-range interactions and gene expression in humans</i>
09:30 - 10:00	Sarah Teichmann	Sanger Institute, Cambridge, UK	<i>Understanding cellular heterogeneity</i>
10:00 - 10:15	Robert Zinzen	MDC, Berlin, DE	<i>The Drosophila embryo at single cell transcriptome resolution</i>
10:15 - 10:30	Denis Thieffry	ENS, Paris, FR	<i>Qualitative dynamical modelling of the regulatory network controlling blood cells specification and reprogramming</i>
10:30 - 11:00	<i>Coffee Break</i>		
11:00 - 11:30	Alexander van Oudenaarden	Hubrecht Institute, Utrecht, NL	<i>Revealing novel cell types, cell-cell interactions, and cell lineages by single-cell sequencing</i>
11:30 - 11:45	Florian Halbritter <i>BIS Anniversary Short Talk</i>	CeMM, Vienna, AT	<i>Identification of functional enhancers in human embryonic stem cells using ChIP-STARR-seq</i>
11:45 - 12:00	Guillaume Filion	CNAG/CRG, Barcelona, ES	<i>How does the genomic context contribute to gene expression?</i>
12:00 - 12:30	Nikolaus Rajewsky	MDC, Berlin, DE	<i>Loss of a circular RNA causes a neuro psychiatric phenotype: Advances in single cell sequencing</i>
12:30 - 14:30	<i>Lunch & Poster Session I</i>		
14:30 - 20:30	<i>Excursion to Eberbach Monastery with wine tasting and dinner</i>		

Wednesday, 21 June

Keynote Lecture

Chair: Julian König, IMB, Mainz

09:00 - 09:45	Eileen Furlong <i>BIS Anniversary Keynote Lecture</i>	EMBL, Heidelberg, DE	<i>Functional insights into chromatin topology and gene expression during embryonic development</i>
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Session 4: Fine-tuned control of transcription machinery function and post-transcriptional regulation

Chair: Julian König

09:45 - 10:15	Ana Pombo	MDC, Berlin, DE	<i>RNA polymerase II primes Polycomb-repressed developmental genes throughout terminal cell specification</i>
10:15 - 10:45	Patrick Cramer	MPIBPC, Göttingen, DE	<i>Structure-function studies of chromatin transcription</i>
10:45 - 11:00	Mattia Pelizzola	IIT, Genoa, IT	<i>Dynamics of transcriptional regulation following Myc activation</i>

11:00 - 11:30 *Coffee Break*

11:30 - 12:00	Jernej Ule	UCL, London, UK	<i>Regulation of gene expression by proteins bound to LINE-derived RNA elements</i>
12:00 - 12:15	Sarah Carl <i>BIS Anniversary Short Talk</i>	FMI, Basel, CH	<i>Two distinct transcription termination modes dictated by promoters</i>
12:15 - 12:30	Kathi Zarnack	BMLS, Frankfurt, DE	<i>High-throughput screening for splicing regulatory elements</i>

12:30 - 14:30 *Lunch & Poster Session II*

Session 5: Evolutionary dynamics and genetic variation

Chair: Bertil Schmidt, JGU, Mainz

14:30 - 15:00	Ben Lehner	CRG, Barcelona, ES	<i>Mutations and their interactions in individuals</i>
15:00 - 15:30	Martha Bulyk	Harvard Medical School, Boston, USA	<i>Survey of coding variation in human transcription factors reveals prevalent DNA binding changes</i>
15:30 - 16:00	Laurence Hurst	University of Bath, UK	<i>How commonly do exonic mutations disrupt splicing?</i>

16:00 - 16:30 *Coffee Break*

Session 6: Upcoming challenges in data analysis and integration

Chair: Bertil Schmidt

16:30 - 17:00	Vera Pancaldi	Barcelona Supercomputing Centre, ES	<i>Networks based approaches for the study of epigenomics</i>
17:00 - 17:30	Judith Zaugg	EMBL, Heidelberg, DE	<i>Using variation in gene regulatory elements across individuals to gain insights in disease mechanisms</i>
17:30 - 18:00	Wolfgang Huber	EMBL, Heidelberg, DE	<i>Better multiple testing: using co-data to for hypothesis weighting</i>

Closing Remarks

18:00 - 18:15	Julian König	IMB, Mainz, DE	
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