
Wednesday 03 October 2018

- 15:00 - 17:45 **Arrival and Registration**
ATC Registration Desk
- 17:45 - 19:00 **Welcome Dinner**
EMBL Canteen
- 19:00 - 20:45 **Session 1: Keynote Session**
ATC Auditorium
- 19:00 - 19:15 **Welcome Remarks**
ATC Auditorium
- 19:15 - 20:00 **Keynote Talk 1: Novel mechanistic insights into the inner workings of the human spliceosome by combined biochemical and Cryo-EM studies** 1

Reinhard Lührmann
Max Planck Institute for Biophysical Chemistry, Germany
- 20:00 - 20:45 **Keynote Talk 2: Regulation of RNA granule dynamics by intrinsically-disordered proteins** 2

Geraldine Seydoux
Johns Hopkins University School of Medicine, United States of America
- 20:45 - 23:00 **Drinks and Poster "Sneak Preview"**
ATC Auditorium Foyer and ATC Helices A & B

Thursday 04 October 2018

09:00 - 12:35	Session 2: Splicing and RNPs Chair: Kathi Zarnack ATC Auditorium	
09:00 - 09:25	Complex Interactions between Transcription, Splicing and Chromatin Jean Beggs <i>University of Edinburgh, United Kingdom</i>	3
09:25 - 09:50	Splicing-dependent regulation of transcription start sites Christopher B. Burge <i>Massachusetts Institute of Technology, United States of America</i>	4
09:50 - 10:15	CryoEM snapshots of the spliceosome provide insights into the molecular mechanism of pre-mRNA splicing Kiyoshi Nagai <i>MRC Laboratory of Molecular Biology, United Kingdom</i>	5
10:15 - 10:45	Coffee Break ATC Auditorium	
10:45 - 11:10	Quantitative activity profile and context dependence of all human 5' splice sites Andrian R. Krainer <i>Cold Spring Harbor Laboratory, United States of America</i>	6
11:10 - 11:25	Global two-step pre-mRNA splicing kinetics in human cells Leonhard Wachutka <i>Technical University of Munich, Germany</i>	7
11:25 - 11:40	Self-regulatory network of the core spliceosome Malgorzata Ewa Rogalska <i>Centre for Genomic Regulation, Universitat Pompeu Fabra, Spain</i>	8

11:40 - 11:55	Systematic identification and quantitative measurement of RNA-Protein interactions by incPRINT Alena Shkumatava <i>Institut Curie, France</i>	9
11:55 - 12:20	Hidden treasures of the RNA world: RBPs from moonlighting to riboregulation Matthias Hentze <i>EMBL Heidelberg, Germany</i>	10
12:20 - 12:35	Flash Talks: talks selected from abstracts (1 slide/2 min each) ATC Auditorium	
12:35 - 14:00	Lunch ATC Foyer	
14:00 - 16:00	Poster Session I (odd numbers) ATC Helices A & B	
16:00 - 19:00	Session 3: RNA modifications and features determining transcript fate Chair: John Gross ATC Auditorium	
16:00 - 16:25	RNA methylation in gene expression regulation Chuan He <i>The University of Chicago, United States of America</i>	11
16:25 - 16:50	The regulatory potential of cytosine-5 RNA methylation in translation Michaela Frye <i>University of Cambridge, United Kingdom</i>	12
16:50 - 17:15	Pseudouridine synthases modify human pre-mRNA co-transcriptionally and affect splicing Wendy Gilbert <i>Yale University, United States of America</i>	13

EMBO|EMBL Symposium: The Complex Life of RNA

- 17:15 - 17:30 **Methylation of structured RNA by the m6A writer METTL16 is essential for mouse embryonic development** 14
Mateusz Mendel
University of Geneva, Switzerland
- 17:30 - 18:00 **Coffee Break**
ATC Auditorium Foyer
- 18:00 - 18:15 **Unraveling the link between translation termination and nonsense-mediated mRNA decay** 15
Oliver Mühlemann
University of Bern, Switzerland
- 18:15 - 18:30 **Codon and amino acid use is a major determinant of mRNA stability in humans** 16
Olivia Rissland
University of Colorado, United States of America
- 18:30 - 18:45 **Post-transcriptional regulation in T cell responses to infection and tumors is time- and context-dependent** 17
Monika Wolkers
Sanquin Research, Landsteiner Laboratory, The Netherlands
- 18:45 - 19:00 **Identification of a cyclin-dependent kinase coupling global protein synthesis rates with cell proliferation and growth** 18
Katharina Haneke
CBTM, DKFZ-ZMBH Alliance, Germany
- 19:00 - 21:00 **Pre-Dinner Drinks and Dinner**
ATC Auditorium Foyer and EMBL Canteen
- 21:00 - 23:00 **After Dinner Drinks**
ATC Rooftop Lounge

Friday 05 October 2018

09:00 - 13:00	Session 4: RNA localization and translation Chair: Nicola Gray ATC Auditorium	
09:00 - 09:45	Keynote Talk 3: Watching single mRNAs form memories Robert H. Singer <i>Albert Einstein College of Medicine, United States of America</i>	19
09:45 - 10:10	EMBO Young Investigator Lecture: Imaging the life and death of mRNAs in single cells Jeffrey Chao <i>Friedrich Miescher Institute for Biomedical Research, Switzerland</i>	20
10:10 - 10:35	Uncovering rules and dynamics of nonsense-mediated mRNA decay using single molecule imaging Marvin Tanenbaum <i>Hubrecht Institute, The Netherlands</i>	21
10:35 - 10:50	Revealing features of mRNP organization using super-resolution microscopy Srivathsan Adivarahan <i>Université de Montréal, Canada</i>	22
10:50 - 11:20	Coffee Break ATC Auditorium Foyer	
11:20 - 11:45	A subcellular compartment defined by TIS granules and the ER enables 3'UTR-mediated protein-protein interactions Christine Mayr <i>Memorial Sloan Kettering Cancer Center, United States of America</i>	23
11:45 - 12:00	Identification and functional dissection of differentially localized mRNA isoforms in mESC-derived neurons Marina Chekulaeva <i>BIMSB MDC, Germany</i>	24

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12:00 - 12:15	RNA-directed activation of cytoplasmic dynein-1 in reconstituted transport RNPs Mark A. McClintock <i>MRC Laboratory of Molecular Biology, United Kingdom</i>	25
12:15 - 12:40	<i>oskar</i> mRNA transport in the <i>Drosophila</i> germline Anne Ephrussi <i>EMBL Heidelberg, Germany</i>	26
12:40 - 12:55	Flash talks: talks selected from abstracts (1 slide / 2 min each) ATC Auditorium	
13:00 - 14:00	Lunch ATC Auditorium Foyer	
14:00 - 16:00	Poster Session II (even numbers) ATC Helices A & B	
16:00 - 19:00	Session 5: Noncoding RNAs and decay Chair: Torben Heck Jensen ATC Auditorium	
16:00 - 16:25	Circular RNAs in innate immunity Ling-Ling Chen <i>Shanghai Institute of Biochemistry and Cell Biology, CAS, China</i>	27
16:25 - 16:50	lncRNAs and circRNAs in cell differentiation and disease Irene Bozzoni <i>Sapienza University of Rome, Italy</i>	28
16:50 - 17:15	Molecular and physiological functions of circRNAs Sebastian Kadener <i>Brandeis University, United States of America</i>	29
17:15 - 17:45	Coffee Break ATC Auditorium Foyer	

17:45 - 18:10	The structural basis for mRNA synthesis by influenza RNA-dependent RNA polymerase Stephen Cusack <i>EMBL Grenoble, France</i>	30
18:10 - 18:25	Molecular mimicry in the complex life of the non-coding RNA Odil Porrua <i>CNRS, France</i>	31
18:25 - 18:40	Nuclear RNA decay is functionally linked to Polycomb-mediated transcriptional control in embryonic stem cells William Garland <i>Aarhus University, Denmark</i>	32
18:40 - 18:55	Structures of ykkC riboswitches bound to ppGpp and PRPP reveal a novel principle of ligand recognition Alla Peselis <i>New York University School of Medicine, United States of America</i>	33
19:00 - 20:45	Pre-Dinner Drinks and Dinner ATC Auditorium Foyer and EMBL Canteen	
20:45 - 23:00	Poster Viewing and After Dinner Drinks ATC Helices A & B and ATC Rooftop Lounge	

Saturday 06 October 2018

09:00 - 13:10	Session 6: RNA processing machinery Chair: Eva Kowalinski ATC Auditorium	
09:00 - 09:25	EMBO Young Investigator Lecture: mRNA Deadenylation Is Coupled to Translation Rates by the Differential Activities of Ccr4-Not Nucleases Lori Passmore <i>MRC Laboratory of Molecular Biology, United Kingdom</i>	34
09:25 - 09:50	EMBO Young Investigator Lecture: Structural basis of AAUAAA polyadenylation signal recognition by the human CPSF complex Martin Jinek <i>University of Zurich, Switzerland</i>	35
09:50 - 10:05	Cryo-EM structure of a poly(A)-Pab1 ribonucleoprotein bound to the Pan2-Pan3 deadenylase Ingmar Schäfer <i>Max Planck Institute for Biochemistry, Germany</i>	36
10:05 - 10:20	MKRN1 is a Minder of Poly(A) in Ribosome-associated Quality Control Andrea Hildebrandt <i>Institute of Molecular Biology, Germany</i>	37
10:20 - 10:35	Structural basis of MLE-UNR-roX2 complex assembly during early steps of Drosophila dosage compensation Janosch Hennig <i>EMBL Heidelberg, Germany</i>	38
10:35 - 11:05	Coffee Break ATC Auditorium Foyer	
11:05 - 11:30	tRNAs and neuronal function Susan Ackerman <i>University of California, San Diego/ HHMI, United States of America</i>	39

11:30 - 11:55	Assembly of yeast ribosome Keqiong Ye <i>Institute of Biophysics, Chinese Academy of Sciences, China</i>	40
11:55 - 12:10	Unveiling (Class III) Gene Transcription Alessandro Vannini <i>The Institute of Cancer Research, United Kingdom</i>	41
12:10 - 12:25	The diverse roles of RNA helicases in driving structural transitions and compositional changes in RNA-protein complexes Markus Bohnsack <i>University Medical Center Göttingen, Germany</i>	42
12:25 - 12:40	Structure of a nucleolar precursor of the ribosome - the small subunit processome Jonas Barandun <i>The Rockefeller University, United States of America</i>	43
12:40 - 12:55	Structural insight of precursor tRNA processing by RNase P Pengfei Lan <i>Shanghai Jiao Tong University School of Medicine, China</i>	44
12:55 - 13:10	Flash Talks: talks selected from abstracts (1 slide / 2 min each) ATC Auditorium	
13:10 - 14:00	Lunch ATC Auditorium Foyer	
14:00 - 16:30	Poster Session III (all numbers) ATC Helices A & B	
16:30 - 19:15	Session 7: Small RNAs and RNA tails Chair: Ramesh Pillai ATC Auditorium	
16:30 - 16:55	Understanding the roles and regulation of Dicer in antiviral defense Brenda Bass <i>University of Utah, United States of America</i>	45

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- 16:55 - 17:10 **A zygotic small RNA feedback loop triggered by maternal small RNAs in Paramecium has implications for trans-generational epigenetic inheritance** 46
Sarah Allen
IZB Universität Bern, Switzerland
- 17:10 - 17:35 **Regulators of mRNA tails** 47
V. Narry Kim
Seoul National University, Republic of Korea
- 17:35 - 18:05 **Coffee Break**
ATC Auditorium Foyer
- 18:05 - 18:20 **RNA polymerase I regulation by RNA interference in cellular quiescence relies on a novel class of long non-coding RNAs** 48
Benjamin Roche
Cold Spring Harbor Laboratory, United States of America
- 18:20 - 18:35 **CRISPR knockout studies show that uridylation by TUTase 7 and the 3' to 5' exonuclease 3'hExo are required both for maintaining normal histone mRNA structure and for histone mRNA degradation** 49
Christopher Holmquist
University of North Carolina at Chapel Hill, United States of America
- 18:35 - 18:50 **High-throughput biochemical analyses reveal miRNA-specific binding preferences that markedly improve miRNA target predictions.** 50
Sean McGeary
HHMI, MIT, and Whitehead Institute, United States of America
- 18:50 - 19:15 **Principles of RNA regulation by single sequencing in space and time** 51
Nikolaus Rajewsky
Max Delbrück Center for Molecular Medicine, Germany
- 19:15 - 19:45 **Closing remarks and poster prize**
ATC Auditorium

Programme

- 19:45 - 21:45 **Conference Dinner**
EMBL Canteen
- 21:45 - 00:00 **Conference Party**
ATC Auditorium Foyer