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 1 workings of the human spliceosome by combined biochemical and Cryo-EM studies

Reinhard Lührmann Max Planck Institute for Biophysical Chemistry, Germany

20:00 - 20:45 Keynote Talk 2: Regulation of RNA granule dynamics by 2 intrinsically-disordered proteins

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	3
	Jean Beggs University of Edinburgh, United Kingdom	
09:25 - 09:50	Splicing-dependent regulation of transcription start sites	4
	Christopher B. Burge Massachusetts Institute of Technology, United States of America	
09:50 - 10:15	CryoEM snapshots of the spliceosome provide insights into the molecular mechanism of pre-mRNA splicing	5
	Kiyoshi Nagai MRC Laboratory of Molecular Biology, United Kingdom	
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 Cold Spring Harbor Laboratory, United States of America	6
11:10 - 11:25	Global two-step pre-mRNA splicing kinetics in human cells Leonhard Wachutka Technical University of Munich, Germany	7
11:25 - 11:40	Self-regulatory network of the core spliceosome Malgorzata Ewa Rogalska Centre for Genomic Regulation, Universitat Pompeu Fabra, Spain	8

11:40 - 11:55	Systematic identification and quantitative measurement of RNA-Protein Interactions by incPRINT	9
	Alena Shkumatava Institut Curie, France	
11:55 - 12:20	Hidden treasures of the RNA world: RBPs from moonlighting to riboregulation Matthias Hentze EMBL Heidelberg, Germany	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 Yale University, United States of America	13

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17:15 - 17:30	Methylation of structured RNA by the m6A writer METTL16 is essential for mouse embryonic development Mateusz Mendel University of Geneva, Switzerland	14
17:30 - 18:00	Coffee Break ATC Auditorium Foyer	
18:00 - 18:15	Unraveling the link between translation termination and nonsense-mediated mRNA decay Oliver Mühlemann University of Bern, Switzerland	15
18:15 - 18:30	Codon and amino acid use is a major determinant of mRNA stability in humans Olivia Rissland University of Colorado, United States of America	16
18:30 - 18:45	Post-transcriptional regulation in T cell responses to infection and tumors is time- and context-dependent Monika Wolkers Sanquin Research, Landsteiner Laboratory, The Netherlands	17
18:45 - 19:00	Identification of a cyclin-dependent kinase coupling global protein synthesis rates with cell proliferation and growth Katharina Haneke <i>CBTM, DKFZ-ZMBH Alliance, Germany</i>	18
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 Albert Einstein College of Medicine, United States of America	19
09:45 - 10:10	EMBO Young Investigator Lecture: Imaging the life and death of mRNAs in single cells Jeffrey Chao Friedrich Miescher Institute for Biomedical Research, Switzerland	20
10:10 - 10:35	Uncovering rules and dynamics of nonsense-mediated mRNA decay using single molecule imaging Marvin Tanenbaum Hubrecht Institute, The Netherlands	21
10:35 - 10:50	Revealing features of mRNP organization using super-resolution microscopy Srivathsan Adivarahan Université de Montréal, Canada	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 Memorial Sloan Kettering Cancer Center, United States of America	23
11:45 - 12:00	Identification and functional dissection of differentially Iocalized mRNA isoforms in mESC-derived neurons Marina Chekulaeva BIMSB MDC, Germany	24

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12:00 - 12:15	RNA-directed activation of cytoplasmic dynein-1 in reconstituted transport RNPs Mark A. McClintock MRC Laboratory of Molecular Biology, United Kingdom	25
12:15 - 12:40	<i>oskar</i> mRNA transport in the <i>Drosophila</i> germline Anne Ephrussi EMBL Heidelberg, Germany	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 Heick Jensen ATC Auditorium	
16:00 - 16:25	Circular RNAs in innate immunity Ling-Ling Chen Shanghai Institute of Biochemistry and Cell Biology, CAS, China	27
16:25 - 16:50	IncRNAs and circRNAs in cell differentiation and disease Irene Bozzoni Sapienza University of Rome, Italy	28
16:50 - 17:15	Molecular and physiological functions of circRNAs Sebastian Kadener Brandeis University, United States of America	29
17:15 - 17:45	Coffee Break ATC Auditorium Foyer	

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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 New York University School of Medicine, United States of America	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	34
	Lori Passmore MRC Laboratory of Molecular Biology, United Kingdom	
09:25 - 09:50	EMBO Young Investigator Lecture: Structural basis of AAUAAA polyadenylation signal recognition by the human CPSF complex	35
	Martin Jinek University of Zurich, Switzerland	
09:50 - 10:05	Cryo-EM structure of a poly(A)-Pab1 ribonucleoprotein bound to the Pan2-Pan3 deadenylase	36
	Ingmar Schäfer Max Planck Institute for Biochemistry, Germany	
10:05 - 10:20	MKRN1 is a Minder of Poly(A) in Ribosome-associated Quality Control	37
	Andrea Hildebrandt Institute of Molecular Biology, Germany	
10:20 - 10:35	Structural basis of MLE-UNR-roX2 complex assembly during early steps of Drosophila dosage compensation	38
	Janosch Hennig EMBL Heidelberg, Germany	
10:35 - 11:05	Coffee Break ATC Auditorium Foyer	
11:05 - 11:30	tRNAs and neuronal function Susan Ackerman University of California, San Diego/ HHMI, United States of America	39

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11:30 - 11:55	Assembly of yeast ribosome Keqiong Ye	40
	Institute of Biophysics, Chinese Academy of Sciences, China	
11:55 - 12:10	Unveiling (Class III) Gene Transcription Alessandro Vannini	41
	The Institute of Cancer Research, United Kingdom	
12:10 - 12:25	The diverse roles of RNA helicases in driving structural transitions and compositional changes in RNA-protein complexes	42
	Markus Bohnsack	
	University Medical Center Göttingen, Germany	
12:25 - 12:40	Structure of a nucleolar precursor of the ribosome - the small subunit processome	43
	Jonas Barandun	
	The Rockefeller University, United States of America	
12:40 - 12:55	Structural insight of precursor tRNA processing by RNase P	44
	Pengfei Lan Shanghai Jiao Tong University School of Medicine, China	
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	45
	Brenda Bass	
	University of Utah, United States of America	

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16:55 - 17:10 A zygotic small RNA feedback loop triggered by maternal 46 small RNAs in Paramecium has implications for trans-generational epigenetic inheritance

> Sarah Allen IZB Universität Bern, Switzerland

- 17:10 17:35 **Regulators of mRNA tails** 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 48 quiescence relies on a novel class of long non-coding RNAs

Benjamin Roche Cold Spring Harbor Laboratory, United States of America

18:20 - 18:35 CRISPR knockout studies show that uridylation by TUTase 49 7 and the 3' to 5' exonuclease 3'hExo are required both for maintaining normal histone mRNA structure and for histone mRNA degradation

> Christopher Holmquist University of North Carolina at Chapel Hill, United States of America

18:35 - 18:50High-throughput biochemical analyses reveal50miRNA-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 51 and time

Nikolaus Rajewsky Max Delbrück Center for Molecular Medicine, Germany

19:15 - 19:45 Closing remarks and poster prize ATC Auditorium 47

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

21:45 - 00:00 Conference Party ATC Auditorium Foyer