



# RNA biochemistry



04.10.2018-07.10.2018

Location:  
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## Schedule

Thursday, 4.10.2018		
15:00	Registration opens	
18:00	Dinner	
19:00	Welcome	
	<b>Session I Regulation</b>	
19:15	<b>Isabella Moll</b>	Alternative splicing in Bacteria?
19:35	<b>Sven Diederichs</b>	Proteome-wide and quantitative identification of RNA-dependent proteins
19:55	<b>Cynthia Sharma</b>	Campylobacter jejuni Cas9 can bind and cleave endogenous RNAs
20:15	<b>Elena Evguenieva-Hackenberg</b>	Gene regulation in trans by a bacterial attenuator RNA and leader peptide
20:30	Get-together	

## Friday, 5.10.2018

Session II RNA structure and folding		
9:00	<b>Eric Westhof</b>	Three flavours of GoU pairs control translational fidelity
9:20	<b>Zasha Weinberg</b>	Discovery of novel classes of non-coding RNAs in bacteria with bioinformatics
9:40	<b>Henning Urlaub</b>	tba
10:00	<b>Stephanie Kath-Schorr</b>	RNA functionalization via an expanded genetic alphabet
10:30	Coffee break	
Session III RNA processing		
11:00	<b>Roland Hartmann</b>	Studies on bacteria that encode two types of RNase P, the classical RNA-based and a novel RNA-free RNase P
11:20	<b>Markus Bohnsack</b>	The diverse roles of RNA helicases in driving structural transitions and compositional changes in RNA-protein complexes
11:40	<b>Claus Kuhn</b>	Planarians rebrand piRNAs to control mRNA turnover during regeneration
12:00	<b>Agamemnon J. Carpousis</b>	Cell biology of RNA processing and degradation in <i>Escherichia coli</i> : functional significance of RNA degradosome attachment to the inner cytoplasmic membrane
12:30	Lunch	
Workshop „Synthetic RNA Biology“		
13:30	<b>Beatrix Süß</b>	RNA aptamers as genetic control devices – the potential of riboswitches as synthetic elements for regulating gene expression
14:00	<b>Philipp Holliger</b>	Replicating RNA with RNA
14:30	<b>Oliver Rossbach</b>	Artificial circular RNA sponges as a novel tool in molecular biology and medicine
15:00	Coffee break	
15:30	<b>Mario Mörl</b>	A synthetic riboswitch controlling tRNA processing
16:00	<b>Claudia Höbartner</b>	N6-Methyladenosine-sensitive RNA-cleaving deoxyribozymes
16:30	<b>Günter Mayer</b>	Optoribogenetics for the light-dependent control of RNA function in cells
17:00	<b>Julia Weigand</b>	Identification of new cis-regulatory elements based on structural conservation
17:20	Poster Intro	
18:00	Dinner	
19:00	Poster A & Drinks	

## Saturday, 6.10.2018

Session IV Ribonucleoproteins		
9:00	<b>Finn Werner</b>	Transcription and histone-based chromatin in archaea
9:20	<b>Dina Grohmann</b>	SLAM-FRET provides insights into the conformational landscape of human Argonaute 2
9:40	<b>Martin Hengesbach</b>	Single molecule FRET analysis of archaeal and eukaryotic H/ACA complexes
10:00	<b>Jan Diesend</b>	Mapping of the rRNA methylation pattern and identification of 28 novel box C/D snoRNAs in Dictyostelium discoideum
10:30	Coffee break	
11:00	<b>Jernej Ule</b>	Transcriptome-wide profiling of mammalian spliceosome and branchpoints with iCLIP
11:20	<b>Dorothee Staiger</b>	Catch me if you can: Ribonomics to identify RNA-binding protein targets in Arabidopsis
11:40	<b>Jan-Philip Wurm</b>	Conformational landscape and active conformation of the Dcp1:Dcp2 mRNA decapping complex
12:00	<b>Thorsten Stafforst</b>	tba
12:30	Lunch	
Session V Regulation 2		
13:30	<b>Cindy Meyer</b>	The role of RNA-binding protein families and post-translation modifications in the regulation of post-transcriptional gene expression and cellular response to stress
13:50	<b>Jan Medenbach</b>	Flipping the switch on sexual development: Competition between two RNA-binding proteins controls alternative splicing and sex determination in Drosophila
14:10	<b>Sutapa Chakrabarti</b>	Isoform-specific catalytic activity of the NMD RNA helicase UPF1: how alternative splicing introduces structural changes to differentially regulate an enzyme
14:30	<b>Dagmar Klostermeier</b>	The mRNA 5'-untranslated region determines the helicase activity of the eukaryotic translation initiation factor eIF4A by modulating its conformational cycle
15:00	Coffee break	
15:30	<b>Maude Guillier</b>	Translation activation by mRNA secondary structures revealed by small RNA regulation
15:50	<b>Udo Bläsi</b>	Concerted action of Hfq and Crc in Hfq-dependent translational regulation in Pseudomonas aeruginosa
16:10	<b>Benedikt Beckmann</b>	Cell-wide purification of RNA-bound proteins in human and bacteria
16:30	Organizational meeting GBM Study group "RNA Biochemistry	
18:00	Dinner	
19:00	Poster B & Drinks	

## Sunday, 7.10.2018

Session VI CRISPR		
9:00	<b>Chase Beisel</b>	Accelerating CRISPR discovery and application
9:20	<b>Thandi Schwarz</b>	The tRNA Splicing Endonuclease of <i>Haloferax volcanii</i> - Transcription Repression and Potential Substrates
9:40	<b>Hanna Müller-Esparza</b>	Assembly of Class I CRISPR surveillance complexes
10:00	<b>Marius Rutkauskas</b>	tba
10:30	Coffee break	
Session VII Chemical Biology		
11:00	<b>Mark Helm</b>	A pipeline for total tRNA composition analysis broken down to isoacceptors and differential modification content
11:20	<b>Stefanie Kellner</b>	A novel RNA modification in bacteria – damage product or functional entity?
11:40	<b>Johannes Leufken</b>	pyRNAMs enables automated omics scale nucleoside mass spectrometry data analysis for the common user
12:00	<b>Andrea Rentmeister</b>	A Chemical Biology Approach for Mapping Methyltransferase Target Sites in RNA
12:20	Announcement of poster prizes (2 x 100€ sponsored by NAR)	
12:30	Lunch	
Have a safe trip home!		