

SCNAC '20/22 Tentative Programme – Lectures

Day	From	To	Org. No.	Name	Surname	Title	Ser. No.	
Monday, June 6	08:45	09:00	Opening					
	09:00	09:40	PL-1	Tom	Brown	Artificial nucleic acid backbones	68	
	09:40	10:00	OC-01	Afaf	El-Sagheer	Artificial nucleic acid backbones: applications in Synthetic Biology	233	
	10:00	10:20	OC-02	Jean-Louis	Mergny	Quadruplexes & Infectious diseases	14	
	10:20	10:50	Coffee Break					
	10:50	11:20	EYIL-1	Hana	Cahova	Non-canonical RNA caps – their discovery and role	104	
	11:20	11:40	OC-03	Anais	Depaix	Mono and dual labeling of RNA: application to mRNA as a biological tool	47	
	11:40	12:00	OC-04	Marcin	Warminski	Quick access to nucleoside phosphoramidites with N-substituted nucleobases for the synthesis of RNA fragments containing post-transcriptional modifications and epitranscriptomic marks.	159	
	12:00	12:20	OC-05	Adam	Mamot	Chemical and chemoenzymatic modification of RNA – an elegant synthesis of dually labeled mRNA probes	167	
	12:20	12:40	OC-06	Masayuki	Tera	Ligand stabilization of G-quadruplex increases sensitivity to S1 nuclease	157	
	12:40	14:30	Lunch					
	14:30	15:10	PL-2	Ronald	Micura	A natural riboswitch scaffold with methyltransferase activity	11	
	15:10	15:30	OC-07	Claudia	Höbartner	RNA-catalyzed RNA methylation by the methyltransferase ribozyme MTR1	44	
	15:30	15:50	OC-08	Thomas	Carell	The prebiotic origin of the RNA nucleosides and translation	163	
	15:50	16:10	OC-09	Enrico	Cadoni	From G-Quadruplex to I-Motif Photo-alkylation, exploiting photosensitizer and ligand co-localization		
	16:10	16:40	Coffee Break					
	16:40	17:20	PL-3	Oliver	Seitz	Achieving true catalysis in nucleic acid-templated reactions	154	
	17:20	17:40	OC-10	Michael	Smietana	EXPANDING DNA-BASED ASYMMETRIC CATALYSIS	16	
17:40	18:00	OC-11	Chiara	Figazzolo	Synthesis and characterization of a vancomycin-modified uridine to be included in aptamer selection	162		
18:00	18:20	OC-12	Marek	Ondruš	Enzymatic synthesis of hypermodified DNA polymers from DNA or RNA template	79		
19:00	22:00	Jena Bioscience Beer-party and Dinner						
Tuesday, June 7	09:00	09:40	PL-4	Tomas	Cihlar	Antiviral Nucleosides for the Treatment of COVID-19	232	
	09:40	10:00	OC-13	Suzanne	Peyrottes	Beta-hydroxyphosphonate Acyclonucleosides: A Series Of Anp With In Vitro Antiplasmodial Activity And In Vivo Efficacy	19	
	10:00	10:20	OC-14	Françoise	Debart	Synthesis of adenine dinucleosides 2',5'-bridged by various linkers as bisubstrate SAM analogues for targeting RNA methyltransferases from emerging viruses	21	
	10:20	10:50	Coffee Break					
	10:50	11:20	EYIL-2	Ralph	Kleiner	Activity-based profiling of RNA modifying enzymes	2	
	11:20	11:40	OC-15	Michal	Hocek	Reactive Modifications of DNA and RNA for Cross-linking with Proteins	230	
	11:40	12:00	OC-16	Srivatsan	Seergazhi Gopalan	Chemo-enzymatic technology to visualize RNA and displaying functional small molecules on gene targets	18	
	12:00	12:20	OC-17	Aaron	Fleming	Nanopore dwell-time analysis identifies stress-dependent rRNA modifications	170	
	12:20	12:40	OC-18	Kane	McQuaid	Ruthenium Polypyridyl Complex Bound to a Unimolecular Chair-Form G quadruplex	224	
	12:40	14:30	Lunch					
	14:30	15:10	PL-5	Christa	Müller	Players in nucleotide and nucleoside signaling as drug targets	227	
	15:10	15:30	OC-19	Radim	Nencka	SARS-CoV-2 methyltransferases as targets for modified nucleosides	160	
	15:30	15:50	OC-20	Ondrej	Baszczynski	Self-immolation on Phosphorus: Way to Controlled Drug Delivery	161	
	15:50	16:10	OC-21	Ondřej	Páv	Novel phosphonate-based cyclic dinucleotides as activators of the cGAS-STING pathway.	158	
	17:00	22:00	Poster session + Dinner					
Wednesday, June 8	09:00	09:40	PL-6	Hans-Achim	Wagenknecht	Nucleic acid chemistry with light	180	
	09:40	10:00	OC-22	Hoang Ngoan	Le	Stealth labelling for live-cell imaging of oligonucleotide-based therapeutics	231	
	10:00	10:20	OC-23	Mathias	Gruen	CLICK labeling: Pyrimidyl Tetrazines make unreactive alkenes get a move on	29	
	10:20	10:50	Coffee Break					
	10:50	11:20	EYIL-3	Stephanie	Kath-Schorr	Nucleic acid functionalization via an expanded genetic alphabet	226	
	11:20	11:40	OC-24	Clemens	Richert	Peptido RNA and the Origin of Translation	203	
	11:40	12:00	OC-25	Petr	Spacek	Synthesis and evaluation of photocaged 5' cap derivatives inhibiting binding to eIF4E	172	
	12:00	12:20	OC-26	Andrea	Rentmeister	Chemo-enzymatic modifications of the 5' cap to control mRNAs	20	
	12:20	12:40	OC-27	Benjamin	Lunstad	Improving the Synthesis, Purification, Analysis and Performance of Extended Length Guide RNAs for CRISPR	156	
	12:40	14:30	Lunch					
	14:30	20:00	Free afternoon					
20:00	23:00	Conference Dinner						
Thursday, June 9	09:00	09:40	PL-7	Annemieke	Madder	Nucleic acid constructs for biosensing devices: a story of reactive PNA and frozen aptamers	134	
	09:40	10:00	OC-28	Courtney	Aldrich	Promising approaches for the synthesis of 1'-modified C-Nucleoside derivatives	234	
	10:00	10:20	OC-29	Byron	Purse	Bright Fluorescent Nucleoside Analogues for Single-Molecule Applications	38	
	10:20	10:50	Coffee Break					
	10:50	11:20	EYIL-4	Petra	Hájková			
	11:20	11:40	OC-30	Dipankar	Sen	A new paradigm: "Socket-plug" complementarity for specific DNA-DNA recognition and binding.	150	
	11:40	12:00	OC-31	Elmar	Weinhold	DNA Methyltransferase-directed Fluorescence Barcoding and Optical DNA Mapping by Single-Molecule Fluorescence Microscopy	54	
	12:00	12:20	OC-32	Pradeepkumar	Pi	Translesion DNA synthesis across N2-dG and N6-dA adducts by TLS polymerases and PrimPols	151	
	12:20	12:40	OC-33	Marcin Krzysztof	Chmielewski	Thermo-sensitive fluorescent dye and their thermocontrolled released in nucleic acid labeling	164	
	12:40	14:30	Lunch					
	14:30	14:50	OC-34	Andrew	Kellett	Targeting Metallodrug-DNA Interactions with Click Chemistry	235	
	14:50	15:10	OC-35	Poul	Nielsen	Double-headed nucleotides – DNA with condensed information	24	
	15:10	15:30	OC-36	David	Hodgson	Chemo-enzymatic preparation of nucleoside 5'-triphosphates	56	
	15:30	15:50	OC-37	Ciara	O'Sullivan	Solid-phase isothermal primer elongation using ferrocene-labelled dNTPs for electrochemical detection of single nucleotide polymorphisms	206	
	15:50	16:10	OC-38	Lajos	Kovács	Higher-order structures of xanthine analogues	165	
16:10	16:40	Coffee Break						
16:40	17:00	OC-39	Eylon	Yavin	FIT-PNA probes detect a point mutation associated with artemisinin resistance in malaria	30		
17:00	17:40	PL-8	Marvin	Caruthers	Synthesis and Biological Activity of Thiomorpholino Oligonucleotides	43		
19:00	20:30	Dinner						