# 56<sup>th</sup> ESBOC Chemical Biology in Europe

## Friday 19<sup>th</sup> May 2023

14:30	Tea / Coffee		
15:30		Introduction	
15:35 – 16:05	Plenary – Manuela Tosin	Adventures in Chemical Probing	
	(University of Warwick)	of Natural Product Biosynthesis	
16:05 – 16:25	Michael Webb	New reagents for protein	
	(University of Leeds)	modification	
16:25 Tea / Coffee			
16:55 – 17:15	Richard Doveston	Molecular Glues for the 14-3-3	
	(University of Leicester)	Interactome	
17:15 – 17:45	Plenary – Stephan Hacker	Towards Covalent Inhibitors	
	(Leiden University)	Addressing Diverse Amino Acids	
		– Profiling the Proteome-Wide	
		Selectivity	
17:45 – 18:05	Jonathan Dolan	In silico docking, screening, and	
	(Keele University)	identification of small molecule	
		GDP mannose dehydrogenase	
		inhibitors	
18:05 – 18:25	Joseph Sharratt	Homospermidine synthase	
	(University of Manchester)	facilitated N-cross coupling and	
		applications in N-heterocycle	
		synthesis	
18:30 Dinner			
20:00 – 20:30	Plenary – Ali Tavassoli	Platforms for the generation and	
	(University of Southampton)	high-throughput screening of	
		cyclic peptide libraries	
20:30 - 21:00	Plenary – Pedro Gois	Engineering New Stimuli-	
	(Lisbon University)	Responsive Bioconjugates	

# Saturday 20<sup>th</sup> May 2023

08:00	Breakfast	-
08:50 – 09:10	Yi Jin (University of Manchester)	Can MgF3 <sup>-</sup> transition state analogue tell us more about GTPase/GAP complex without the arginine finger
09:10 – 09:30	Shantanu Sen (IIT Kanpur)	Overcoming Insulin's Thermolability: Pushing the Boundaries
09:30 – 10:00	Plenary – Annemieke Madder (Ghent University)	Furan- and TAD-based click and (photo)-click reactions for bio- orthogonal targeting and decoration of proteins and nucleic acids
10:00	Tea / Coffee	
10:30 - 11:00	Plenary – Sébastien Papot (Université de Poitiers)	The answer is blowin' in the wind
11:00 - 11:20	Stephen Cochrane (Queen's University Belfast)	Bacterial polyprenyls: A rich source of underexploited antibiotic targets
11:20 – 11:50	Plenary – Dominique Guianvarc'h (Université Paris-Saclay)	Chemical tools to study unusual protein and DNA modifications in pathogens
11:50 – 12:10	Sarah Barry (King's College London)	A Bioinspired Route to Natural Product Antibiotic Libraries
12:10 - 12:30	Sonia Khemaissa (Sorbonne Université)	Towards a better understanding of the internalisation mechanisms of cell penetrating peptides
12:45	LUNCH	AFTERNOON FREE
15:45	Tea / Coffee	
16:45 – 17:15	Plenary – Francesco Peri (University of Milano-Bicocca)	Pharmacological modulation of Toll-Like Receptor 4 by small molecules: a new generation of therapeutics
17:15 – 17:35	Daniela Verga (Institut Curie)	Covalent selective G4 ligands for trapping G-quadruplex structures
17:35 – 18:05	Plenary – Marina Rubini (University College Dublin)	Semisynthetic approaches for studying post-translational modifications: lessons learnt from cytokines
18:05 – 18:25	Peter 't Hart (Max Planck Institute for Molecular Physiology)	Rationally designed stapled peptides inhibit cooperative RNA binding of Polypyrimidine tract- binding protein 1
18:45	Reception	1
19:15	Dinner	Followed by Poster Viewings

## Sunday 21<sup>st</sup> May 2023

08:00	Breakfast	
09:00 – 09:30	Plenary – Kathrin Lang (ETH Zürich)	Expanding the genetic code - new chemistries for biology
09:30 – 09:50	Laura Rodríguez Pérez (University of Manchester)	Enzymatic acylation of peptides
09:50 – 10:10	Li Zhen (Francis Crick Institute)	Engineering Human Xylosyltransferases to reveal proteoglycans by chemical proteomics
10:10	Tea / Coffee	
10:40 - 11:10	Plenary – Megan Wright (University of Leeds)	Stay on target? Developing chemical probes and defining their protein targets in living cells
11:10 - 11:30	Lydia Barber (University of York)	Investigating Current Strategies for N-Terminal Protein Modification
11:30 - 12:00	Plenary – Robin Bon (University of Leeds)	Chemical biology and structural pharmacology to support drug discovery
12:00 - 12:20	Nicholas Yates (University of York)	Incorporation and bioconjugation of aldehyde motifs into proteins and peptides
12:30	Lunch and Departure	

#### Posters

Anti-cancer Activity of Nitric Oxide-releasing 2,6-Disubstituted Purine Derivatives in HepG2 Cells, <u>Rakhi Bormon</u>, Ekta Srivastava, Rafat Ali, Ashok Kumar, Sandeep Verma

*Chemical activation for the thiol-ene labelling of deubiquitinases*, <u>André Campaniço</u>, Joanna F. McGouran

Derivatized amino acids as a promising tool in chemical proteomic profiling exploiting biorthogonal reactions in studies of tubulin PTMs, <u>Dmytro Makarov</u>

*Silicateins as Model Biocatalysts in Organosiloxane Chemistry*, <u>Yuqing Lu</u>, Chisom S. Egedeuzu, H. Tanvir Imam, Matteo Trande, Lu Shin Wong

A chemical proteomic method to quantify protein S-acylation, Chloé Freyermuth, Emmanuelle Thinon

*Towards novel chemical tools to study base-excision DNA repair*, <u>Eka Putra Gusti Ngurah Putu</u>, Laurent Cattiaux, Sophie Bombard, Anton Granzhan

Homospermidine synthase facilitated N-cross coupling and applications in N-heterocycle synthesis, Joseph W. Sharratt, Sabine L. Flitsch

*Engineering Human Xylosyltransferases to reveal proteoglycans by chemical proteomics*, <u>Zhen Li</u> Lucia Di Vagno, Douglas Sammon, David Briggs, Erhard Hohenester, Ben Schumann

Palmitoylated Peptide Conjugate – A solution to combat insulin fibrillation, <u>Shantanu Sen</u>, Prerana Singh, Narendra Kumar Mishra, Subramaniam Ganesh, Sri Sivakumar, Sandeep Verma

*Towards a better understanding of the internalisation mechanisms of cell penetrating peptides*, <u>Sonia</u> <u>Khemaissa</u>, Astrid Walrant, Sandrine Sagan

*Investigating Current Strategies for N-Terminal Protein Modification*, <u>L. J. Barber</u>, P. Genever, C. D. Spicer

*Tissue-specific Labelling of Glycoproteins in Drosophila melanogaster*, <u>Sophie Schmidt</u>, Anna Cioce, Ben Schumann

*Enzymatic acylation of peptides*, <u>Laura Rodríguez Pérez</u>, Christian Schnepel, Antonio Angelastro, William Goundry, Sabine Flitsch

Sponsors

