

Synthetic glycobiology

8 – 9 October 2018

Organised by Professor Bruce Turnbull, Dr Anne Imberty and Professor Ola Blixt

Monday 8 October

SESSION 1 Synthetic glycobiology building blocks from proteins to protocells Chair: Bruce Turnbull		SESSION 2 Engineering novel polysaccharide biomaterials Chair: Ola Blixt	
09.00	Welcome by the Royal Society and Bruce Turnbull		
09.10	Jun Hirabayashi Lectin engineering: possibilities and perspectives	14.10	Christina Schäffer Nanoglycobiology based on the S-layer system
09.35	Discussion	14.35	Discussion
09.45	Isabelle André Computer-aided engineering of reprogrammed carbohydrate-active enzymes for biotechnological applications	14.45	Jochen Zimmer <i>In vitro</i> complex carbohydrate synthesis by membrane-embedded processive glycosyltransferases
10.10	Discussion	15.10	Discussion
10.20	Coffee	15.20	Tea
10.50	Birgit Wiltschi Non-canonical amino acids as building blocks for lectins	15.50	Tom Wennekes Getting a grip on glycans in guts and roots with chemical probes
11.15	Discussion	16.15	Discussion
11.25	Winfried Römer Lectin-mediated protocell crosslinking and fusion	16.25	Ralf Richter Bespoke glycan-presenting surfaces for molecular, supramolecular and cellular interaction studies
11.50	Discussion	16.50	Discussion
12.00	LUNCH, followed by poster session	17.00	Poster session
		18.00	CLOSE

Tuesday 9 October			
SESSION 3 Remodelling glycosylation from model systems to living cells Chair: Anne Imberty		SESSION 4 Synthetic Glycobiology for diagnostic and therapeutic applications therapeutic applications Chair: Bruce Turnbull	
09.00	Ola Blixt	13.10	Speaker tbc
09.25	Discussion	13.35	Discussion
09.35	Frederic Bard A glycosylation programme activated via membrane trafficking controls tissue invasion and remodelling	13.45	Jan Tkac Specific lectin-based protein glycoprofiling for diagnostics
10.00	Discussion	14.10	Discussion
10.10	Coffee	14.20	Bazbek Davletov Targeting gangliosides using synthetic toxins for pain management
10.40	Kamil Godula Chemical tools for engineering glycan interactions at the cell-matrix interface		
11.05	Discussion	14.55	Tea
11.15	Jennifer Kohler Revealing glycan-mediated interactions through photocrosslinking	15.25	Rita Gerardy-Schahn Targeting cancer with modified viruses
11.40	Discussion	16.00	Discussion
11.50	LUNCH	16.15	Panel discussion/Overview (future directions)
		17.00	CLOSE

Draft programme – correct as of 17 August 2018 – subject to change