Carbohydrate chemistry and biochemistry are fast moving topics, attracting many new and accomplished young scientists. In this first of new series of features, Carbohydrate Research is highlighting a number of recent Faculty appointees who are embarking on their independent research careers.

Ben Swarts obtained a B.A. in chemistry from the College of Wooster in 2004. In 2010, he received a Ph.D. in organic chemistry from Wayne State University for his work on the chemical synthesis of glycosylphosphatidylinositol (GPI) anchors, which was supervised by Prof. Zhongwu Guo. After 3 years as a post-doctoral fellow at UC Berkeley in Prof. Carolyn Bertozzi’s lab studying mycobacterial glycoconjugates, Ben joined the faculty at Central Michigan University in 2013. At CMU, Ben’s group focuses on the development of synthetic methods and chemical biology tools that facilitate the investigation and targeting of the unique glycans and lipids of mycobacteria. Within this research area, his group created a chemoenzymatic method to synthesize trehalose-based probes (ChemBioChem, 2014, 15, 2066–2070) that is being used to pursue PET probes for imaging bacterial infections (Org. Biomol. Chem., 2016, 14, 8598–8609), as well as a new class of bioorthogonal chemical reporters that have been deployed to study the composition and dynamics of the mycobacterial outer membrane (Angew. Chem. Int. Ed., 2016, 55, 2053–2057; Chem. Commun., DOI: 10.1039/C6CC07143K). Further information on this research can be found on the Swarts lab website ([http://people.cst.cmich.edu/swart1bm/swartslab/index.html](http://people.cst.cmich.edu/swart1bm/swartslab/index.html)). Since starting his independent career, Ben has received a Research Corporation Cottrell College Scholar Award and the International Carbohydrate Organization Young Researcher Award.

Jiaoyang Jiang received her Ph.D. from Brown University in 2009, working under the supervision of Prof. David E. Cane on natural product biosynthesis. Following the postdoctoral training with Prof. Suzanne Walker on protein glycosylation at Harvard Medical School, she started her independent research program at University of Wisconsin-Madison School of Pharmacy in August 2013. The primary research interest of her group is to develop novel chemical biology tools to study the function of protein O-GlcNAcylation and related enzymes in normal and disease states. She was awarded Sigma Xi Award for Excellence in Graduate Research (2008), Potter Prize for Most Outstanding Ph.D. Thesis (2009), Vilas Research Investigator Award (2014), and Young Chemical Biologist Award from International Chemical Biology Society (2014).

Kamil Godula is an Assistant Professor of Chemistry at UC San Diego. Born and raised in the Czech Republic, he earned his MSc in organic chemistry with William A. Donaldson at Marquette University and his PhD with Dalibor Sames at Columbia University in the area of C–H bond activation. He trained as a postdoctoral fellow with Carolyn Bertozzi at UC Berkeley in bio-nanomaterials and chemical glycobiology. Since 2013, he has led his own research lab at UCSD focused on developing chemical and nanomaterials-based approaches to study the role of cell-surface glycans in host-pathogen interactions and to harness the regulatory functions of glycans to control stem cell differentiation. He is the recipient of the NIH Pathway to Independence and the Director’s New Innovator Awards. Most recently, he has been named a 2017 New Investigator by the Polymeric Materials: Science and Engineering Division of the American Chemical Society.
Maciej Walczak was born in Poland and received his undergraduate degree (maxima cum laude) from Adam Mickiewicz University in Poznań, Poland. In 2003 he moved to the University of Pittsburgh, where he worked on the reactions of strained carbocycles and total synthesis bioactive alkaloids. After graduating in 2009, he moved to New York as a Terri Brodeur Breast Cancer Foundation post-doctoral fellow at Memorial Sloan-Kettering Cancer Center, where he was involved in the synthesis of glycoproteins, anticancer vaccines, and antimetastatic agents. In August 2013 he started his independent career at the University of Colorado, Boulder as an Assistant Professor of Chemistry and Biochemistry. His research group focuses on the development of new tools and strategies to address present-day problems in chemistry and biology of saccharides and glycoconjugates.

Martin Fascione received his Ph.D. from the University of Leeds in 2009, working under the supervision of W. Bruce Turnbull on the stereoselective synthesis of 1,2-cis-glycosides. Following a post-doctoral period in Leeds, he was awarded a Marie Curie International Outgoing Fellowship to study the mechanisms of carbohydrate processing enzymes with Prof. Steve Withers, FRS, at the University of British Columbia in Vancouver, Canada (2012–2013) and Prof. Gideon Davies, FRS, FMedSci, at the University of York, UK (2013–2014). In August 2014 he took up a lectureship within the Department of Chemistry at the University of York, where the overarching aim of his research program is to develop novel chemical biology tools to investigate the roles of carbohydrates in the etiology of disease using an interdisciplinary toolkit of techniques including synthetic carbohydrate chemistry, site-selective protein chemistry and molecular enzymology.

Sarah Allman completed her D.Phil in Organic Chemistry at the University of Oxford in 2008 in the laboratory of Prof. Ben Davis. Her work focused upon carbohydrate synthesis and functional studies of interactions between synthetic oligosaccharides and carbohydrate binding proteins. Following the completion of her doctorate, she joined the laboratory of Dr. Terry Butters at the Oxford Glycobiology Institute as a post-doctoral researcher in Biochemistry, working on glycoprotein trafficking and carbohydrate analysis.

She joined the School of Life, Health and Chemical Sciences at The Open University as a Lecturer in Chemistry in 2013. Combining her experience in carbohydrate synthesis, cell biology and analytical methodology, her laboratory is interested in the design of chemical biology tools to probe cellular carbohydrate processing, and the development of integrated workflows to facilitate the structural and functional analysis of carbohydrates.

We look forward to introducing further New Investigators in future issues. Enquiries and suggestions may be directed to rob.field@jic.ac.uk.