

CSI 2022 New Investigator Award Congratulations / Félicitations



Dr. Matthew Macauley, *Assistant Professor, Department of Chemistry, Faculty of Science, University of Alberta*

Dr. Matthew Macauley obtained a BSc in Biochemistry from UBC (2003) and PhD from Simon Fraser University (2010). During his PhD, working with Prof. David Vocadlo, Dr. Macauley became fascinated in carbohydrates. For his postdoctoral studies, supported by a Human Frontiers Fellowship to support cross-disciplinary training, Dr. Macauley studied at The Scripps Research Institute with Prof. James Paulson and developed expertise in immunology. After a brief stint as an Assistant Professor at

Scripps, Dr. Macauley obtained his first fully independent position at the University of Alberta. Dr. Macauley's primary appointment is within the Department of Chemistry, and holds an adjunct position in the Department of Medical Microbiology and Immunology. Since joining UAlberta, Dr. Macauley has quickly established an internationally recognized program of research that focuses primarily on a family of immunomodulatory carbohydrate-binding proteins called the Siglecs, studying their role in controlling immune cells. A large focus of the Macauley lab is the develop and implementation of new biochemical approaches to Siglecs. Supported by a Canada Research Chair in Chemical Glycoimmunology and the Lemieux Chair of Carbohydrate Chemistry, Dr. Macauley's program of research is ultimately aimed at applying insights into the immunological roles of Siglecs to develop new approaches to skew immune cell responses in the areas of neurodegeneration, autoimmunity, and cancer.