**Glycoscience funded-investigators are presenting at American Chemical Society (ASC)**

**ACS Award Lectures**

**Advances in Metabolic Labeling & Profiling:** Orthogonal enzyme/substrate engineering to profile biological substrates of glycosyltransferases. **C.R. Bertozzi**

               **Isabell Award:** Stereospecific and site-selective glycosylation reactions catalyzed by bis-thioureas. **E.N. Jacobsen**

               **Gin New Investigator Award:** Glyco-immune modulation in the tumor microenvironment. **C.R. Bertozzi**

**Carbohydrate Division Sessions**

**Chemical Biology of Glycoproteins - N-Linked Glycosylation:**

                              Streamlining the chemoenzymatic synthesis of complex *N*-glycans by a stop-and-go strategy. **G. Boons**

                              Machine-driven chemoenzymatic synthesis of oligosaccharides and glycopeptides by a peptide synthesizer. **P.G. Wang**

               **Exploration of Carbohydrate/Protein Interactions/Recognition: The Latest Techniques & Achievements:**

                              Defining the specificity of carbohydrate–protein interactions by quantifying functional group contributions. A. Sood, O.O. Gerlits, Y. Ji, N.V. Bovin, L. Coates, **R.J. Woods**

                              Fast and high-throughput detection of glycan-binding proteins. **P.G. Wang**

**Opportunities and Challenges in Carbohydrate Synthesis B:**

                              Synthesis of heparan sulfate oligosaccharides and glycopeptides. X. Huang, W. Yang, J. Gao, Y. Xu**, J. Liu**

                              Total synthesis of bacterial polysaccharide PS A1 with alternating charges on adjacent monosaccharides. **P.R. Andreana**

                              Stereocontrolled glycosylations in the absence of directing groups. **C. Bennett**

**Exploration of Carbohydrate/Protein Interactions/Recognition: The Latest Techniques & Achievements**

                              Adapting N-glycan MALDI imaging mass spectrometry workflows to create new chemo-enzymatic glycan profiling strategies for tissues, cells, and slide arrays. **R.R. Drake**

                              From stereocontrolled glycosylation to automated oligosaccharide synthesis. **A. Demchenko**

               Chemical approaches to exploration of protein-glycan interactions of natural glycans. **X. Song**

                              Synthesis and development of peptidoglycan fragment microarray and probes to investigate innate immune signaling. J. Zhou, K. Lazor, **C.L. Grimes**

                              Automated identification of gradations in determinant fine-specificities from glycan array data. Z. Klamer, **B. Haab**

                              Development of high-affinity glycan analog ligands of siglecs and galectins**. C. Nycholat**, S. Duan, S. Willis, E. Wamhoff, C. Arthur, R. McBride, C. Rademacher, S. Stowell, J.C. Paulson

                              Bacterial derived peptidoglycans and their role in the regulation of immune responses in the human microbiome. S. Mashayekh, J. Burch, W. Drake, D. Wykoff, **C.L. Grimes**