

## **Introduction to BioF:GREAT (the NSF BioFoundry focused on Glycoscience Research, Education, and Training)**

Chair: Lance Wells

### **Summary:**

Glycobiology is understudied at the research bench and undertaught in the science classroom. The NSF BioFoundry: Glycoscience Research, Education, and Training (BioF:GREAT) at the University of Georgia is designed to address these shortcomings. Co-PIs will discuss tools being developed as well as opportunities to interact with the BioF:GREAT team in the areas of MS-based glycoanalytics, glycoenzyme expression, AI/ML of glycoenzymes and glycoproteins, and glycoeducation and training. The Users-in-Residence program will be elaborated on that allows investigators to come to the Complex Carbohydrate Research Center and work with the team on their specific glyco-related research problems. Efforts underway to educate the larger community will be discussed that will include opportunities to collaborate on education materials such as the 5<sup>th</sup> edition of Essentials of Glycobiology.

### **Workshop Schedule (1 hour):**

Lance Wells, Introduction to BioF:GREAT and Glycoproteomics (8 min)  
Parastoo Azadi, Glycomics and Users-In-Residence Program (8 min)  
Kelley Moremen, Glycosyltransferase Production and Manipulation (8 min)  
Bree Urbanowicz, Glycosylhydrolases Cataloging and Manipulation (8 min)  
Natarajan Kannan, AI/ML for Glycoenzymes and Glycoproteins (8 min)  
Erin Dolan, Glycoscience Education Tools and Collaborations (8 min)  
Open Discussion with Panel (12 minutes)