

Departmental Seminar Announcement

Divide and Conquer Strategies for Glycan Structural Determinations

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Glycans, glycoproteins and glycolipids have a wide range of important biological activities that are dependent on their detailed structures. However, since the molecules of interest generally occur as components of complex mixtures of closely-related structures, often contain branches and labile modifications, and change with time, their determinations present more challenges than biopolymers with linear structures. Pre- and post-ionization methods, alone or in succession, can help to resolve the mixtures. In addition, the combination of Ion Mobility with MS/MS can generate conformational and structural information. Further details must be gained by dissociation of selected precursor ions. However, CID often results in only partial structure definition, whereas electron-based dissociation methods (ExD) generate peptide, protein and glycan sequence information while preserving labile modifications, and provide much more extensive glycan linkage information than CID. In this lecture, we will consider how various combinations of these approaches on time-of-flight, Orbitrap and FT-ICR MS instruments can contribute to the success of structural studies, in the context of ongoing biological investigations

Date: Friday, April 14, 2017

Time: 11:00 am to 12:00 pm

Location: PG5 - 153 MMC (Live)

Marine Sciences Building Room 105 (MSB-105) – BBC (via Polycom)



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