

Presentation title: How sweet it is!: Glycoinformatic for glycomics research

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Abstract

The rapidly expanding glycomics field (structural and functional analysis of the cellular glycosylation profile produced by the genome) is being increasingly recognized as an important component of life science research. It is acknowledged that the attachment of sugars to proteins is a structurally elaborate post-translational modification that enhances the functional diversity of the relatively limited number of proteins translated from the genome. Glycomics has been proven to be challenging when compared to other 'omics' disciplines, but similar to the other -omics, advances in glycomic discovery will be dependent upon the availability of a specific integrated bioinformatic knowledgebase and tools. Glycobioinformatics is slowly expanding and benefiting from developments in genomics and proteomics fields but it is in its infancy and retains focus on separate methodologies and/or technologies. The background to this area, the use of available glycobiinformatic tools and the requirements for future informatics developments will be presented.