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Glycomics goes visual and interactive

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Glycomics@ExPASy the glycomics tab of the Swiss Institute of Bioinformatics server (www.expasy.org/glycomics) was created in 2016 to centralise web-based glycoinformatics resources developed within an international network of glycoscientists. The philosophy of this toolbox is to be {glycoscientist AND protein scientist}-friendly with the aim of popularising (a) the use of bioinformatics in glycobiology and (b) the relation between glycobiology and protein-oriented bioinformatics resources. The scarcity of bridging data led us to design tools as interactive as possible based on database connectivity in order to facilitate data exploration and support hypothesis building. The current set of resources is mostly built on top of curated or experimental data relative to glycan structures, glycoproteins, host-pathogen interactions and mass spectrometry data. The information is provided to the user with dedicated services embedded in web applications. Query tools support compositional, substructure, epitope queries to match structures and related features. This presentation will cover the latest release of Glycomics@ExPASy and focus on the newly developed tools most of which are visual and interactive.

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