

SCIENTIFIC SEMINAR



Luca Unione

CIC bioGUNE

Chemical Glycobiology Lab

Sugars, Carbohydrates, Saccharides, or simply Glycans

Every single cell, from bacteria to complex organisms such as human beings, is covered by a dense coat made of sugars, carbohydrates, saccharides, or simply glycans.[1] Glycans, in the form of cell's membrane glycoconjugates (glycoproteins and glycolipids), influence a myriad of biological events, including pathogen and viral infections.[2] Pathogens often express glycans that can be detected by glycan binding proteins of the host to establish infections.[3] Several viruses use host surface glycans as attachment points to trigger internalization and, thus, initiate infection.[4] In this scenario, Glycoscience holds a tremendous potential for combating infections. Elucidating the molecular basis of infection is essential, but far from trivial. Within CIC bioGUNE, the chemical glycobiology lab applies a multidisciplinary approach which includes chemical and enzymatic synthesis, mammalian protein expression, and structural biology, to contribute to the further understanding of the role of glycans in infection.[5-7] From the most common human Influenza A virus to the SARS-CoV-2 pandemic, the results of these works demonstrate how pathogen's and host's glycosylation evolves at the front-line of the battle.

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EXCELENCIA
SEVERO
OCHOA

Friday
November 17

Atrio 800

12.00H



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