

Special Issue

The Glycobiology of Viral Infections

Message from the Guest Editors

All mammalian cells are covered in a layer of glycoconjugates—glycoproteins and glycolipids—known as the glycocalyx. Its glycans orchestrate diverse biological processes, including cell–cell recognition, cell growth and differentiation, neoplastic transformation and cell death. The glycocalyx also serves as a barrier against viruses and other intracellular pathogens, but is often utilized by such pathogens for attachment and entry (and is sometimes enzymatically processed during the release of progeny virus). Many viruses make use of glycans as entry receptors (e.g., sialic acids, histo blood group antigens and glycosamino-glycans; caliciviruses, influenza viruses, polyomaviruses, and papillomaviruses) play critical roles in cell attachment and determining host range and tropism. The goal of this Special Issue is to highlight recent advances in the definition of parameters that guide virus–glycan binding and the impact on virus infection, and their use in the development of novel compounds with inhibitory and thus antiviral activities.

Guest Editors

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About the Journal

Message from the Editor-in-Chief

Viruses (ISSN 1999-4915) is an open access journal which provides an advanced forum for studies of viruses. It publishes reviews, regular research papers, communications, conference reports and short notes. Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. The full experimental details must be provided so that the results can be reproduced. We also encourage the publication of timely reviews and commentaries on topics of interest to the virology community and feature highlights from the virology literature in the 'News and Views' section.

Electronic files or software regarding the full details of the calculation and experimental procedure, if unable to be published in a normal way, can be deposited as supplementary material.

Editor-in-Chief

Dr. Eric O. Freed

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