Special Issue

The Application of 3D Tissue Culture Systems in Virology

Message from the Guest Editor

Since viruses are obligate intracellular parasites, the advent and subsequent innovations in cell culture technology have significantly impacted the field of virology. In recent years, the incorporation of tissue architecture and the integration of relevant cell-cell interactions, together with additional biochemical and mechanical cues that recapitulate the in vivo microenvironment, have yielded more physiologically relevant systems that bridge the gap between standard monolayer cell cultures and animal models. These novel models provide unique opportunities to further analyze virus-host interactions, culture previously hard-to-grow pathogens, identify novel therapeutic targets, and advance drug development. In this Special Issue, we will showcase recent advancements in the engineering and/or application of three-dimensional culture systems with emergent properties for virus infection. We welcome submissions reporting any aspect of virushost interactions in these systems, especially those focusing on pathogens with patterns of infection that are not easily recapitulated in cell lines.

Guest Editor

Dr. Margaret Scull

Department of Cell Biology and Molecular Genetics, Maryland Pathogen Research Institute, University of Maryland, College Park, MD 20742, USA

Deadline for manuscript submissions

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Viruses
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
viruses@mdpi.com

mdpi.com/journal/ viruses





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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

HIV Dynamics and Replication Program, Center for Cancer Research, National Cancer Institute, Frederick, MD 21702-1201, USA

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