

Special Issue

Phage-Host Interactions 2021

Message from the Guest Editor

Phage-host interactions can be viewed through the natural life cycle of phages:

- Host range of the phages: The determinants that play a role in the different aspects of the host range of the phages. These include, for example, the receptor binding proteins of the phages and the phage receptor structures on bacteria.
- The defense mechanisms of the host bacteria. To prevent phage infections bacteria employ the restriction enzymes and the CRISPR/Cas systems. The phages fight back by producing anti-restriction and/or anti-CRISPR molecules.
- The factors that phage use to take over the host metabolism.
- The mechanisms phage uses to reach its own goals, for example, re-cycling host-derived macromolecules for building blocks of phage nucleic acids and proteins. Or how phages take over host transcription. Or what host functions are exploited by the phages for replication, transcription and translation.
- The phage particle assembly and lysis of the host cells.
- Temperate phages and the lysogenic life cycle.

In this Special Issue we would like to address all these different stages of phage infection.

Guest Editor

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Deadline for manuscript submissions

closed (31 October 2021)



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.

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Dr. Eric O. Freed

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