# Special Issue

# Bacteriophage-Host Cell Interactions: From Biology to the Control of Bacterial Infection

## Message from the Guest Editor

Bacteriophages (phages) were first described more than a century ago, and it was immediately discovered that their bactericidal activity could be used to treat bacterial infections (phage therapy). Research on understanding how phages infect and interact with bacterial hosts in different environments has provided answers to fundamental questions in biology and this research is linked to the very foundations of molecular biology. Phage research maintained its relevance over the years, being at the forefront of fundamental discoveries and major technological revolutions, with the CRISPR-Cas systems being one of the most recent and famous examples. Some focal areas include, but are not limited to, the following:

- Understanding phage interaction with the host cell envelope and how phages cope with the bacterial cell barriers;
- Use of phages and their derived proteins in the design of strategies to detect and/or fight bacteria in different contexts;
- Bacterial response and defense mechanisms to phage infection and phage countermeasures.

Keywords: bacteriophages; phage therapy; bacterial infections; bacteriophage–host interactions

## Guest Editor

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## Deadline for manuscript submissions

closed (30 October 2023)

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## Editor-in-Chief

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