



## Feature Reviews on Bacteriophages

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### Message from the Guest Editor

The emergence of antibiotic-resistant bacteria has been accelerated due to the misuse and overuse of antibiotics, which has become a public health threat. The treatment of infectious diseases caused by multidrug-resistant pathogens is a challenge due to the limited options and frequent failure of conventional antibiotic therapy. The global concern with antibiotic resistance has led to the discovery of antibiotic alternatives such as antimicrobial peptides, biocontrol agents, antimicrobial adjuvants, and bacteriophages. Among these, bacteriophages have received great attention and are considered a safe and promising alternative to control antibiotic-resistant bacteria due to their specific ability to target bacteria. However, phage resistance limits the use of phage therapy in clinical practice. The phage-resistance mechanisms include receptor alteration, superinfection exclusion, restriction modification, abortive infection, and CRISPR-Cas systems. This Special Issue aims to discuss the anti-phage mechanisms in association with the evolutionary trade-offs (collateral sensitivity) and trade-ups (collateral resistance) to design effective bacteriophage-based intervention strategies.





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## Editor-in-Chief

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## Message from the Editor-in-Chief

There are very few fields that attract as much attention as scientific endeavor related to antibiotic discovery, use and preservation. The public, patients, scientists, clinicians, policy-makers, NGOs, governments, and supra-governmental organizations are all focusing intensively on it: all are concerned that we use our existing agents more effectively, and develop and evaluate new interventions in time to face emerging challenges for the benefit of present and future generations. We need every discipline to contribute and collaborate: molecular, microbiological, clinical, epidemiological, geographic, economic, social scientific and policy disciples are all key. *Antibiotics* is a nimble, inclusive and rigorous indexed journal as an enabling platform for all who can contribute to solving the greatest broad concerns of the modern world.

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