Special Issue

Combating Antimicrobial Resistance Spread in Food and Drinks Using Bacteriophage Technologies

Message from the Guest Editor

The rising prevalence of antimicrobial resistance is negatively impacting treatment outcomes and posing a serious threat to human health, agriculture, and the environment. To mitigate this crisis, precise detection and effective control of pathogenic bacteria in key sources of infection such as agriculture, raw and processed foods, beverages, and relevant environments are crucial. Bacteriophages are highly specialised parasitic bacterial viruses. Lytic phages infect and lyse their hosts, while temperate phages can integrate into their bacterial host chromosomes or co-exist independently as plasmids intracellularly. Harnessing phage technologies offers a promising approach to the detection and control of pathogenic bacteria. This strategy will complement existing methods, limit the spread of AMR, and enhance microbial safety in food and beverages. In this Special Issue, we aim to publish manuscripts covering:

- Phage-based strategies as biocontrol agents of pathogenic bacteria in food and beverages
- Phage–host interactions in foodborne and waterborne bacteria in relevant infection models
- Etc.

Guest Editor

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About the Journal

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.

Editor-in-Chief

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