

Special Issue

Phage Engineering: Pioneering Advances in Biomedical and Environmental Fields

Message from the Guest Editor

Phage engineering is as a groundbreaking area of biotechnology which leverages the specialized abilities of bacteriophages, the viruses that target and multiply within bacteria. The essence of phage engineering involves modifying phage genomes to boost their innate properties or provide them with new capabilities. Phage engineering has particularly promising applications in healthcare, especially for treating bacterial infections that are resistant to standard antibiotics. Phage therapy, or the use of phages to combat bacterial infections, presents a focused, effective, and environmentally friendly alternative to traditional antibiotics. Engineered phages can also be tailored to bypass bacterial defense strategies, thereby improving success rates in eliminating harmful bacteria. Furthermore, phages can be modified to carry genes encoding for antibacterial enzymes or antibiotics, thus enhancing their antimicrobial efficacy. We are seeking original research and review articles on phages. Contributions should explore the molecular sciences behind phage applications in the biomedical, industrial, and environmental arenas.

Guest Editor

Dr. Apichai Tuanyok

Department of Infectious Diseases and Immunology, College of Veterinary Medicine, University of Florida, Gainesville, FL 32608, USA

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MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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