



## Bacteriophages and Biofilms

Guest Editors:

**Prof. Dr. Zuzanna Drulis-Kawa**

Department of Pathogen Biology  
and Immunology, Institute of  
Genetics and Microbiology,  
University of Wrocław, 51-148  
Wrocław, Poland

**Dr. Barbara Maciejewska**

Department of Pathogen Biology  
and Immunology, Institute of  
Genetics and Microbiology,  
University of Wrocław, Wrocław,  
Poland

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### Message from the Guest Editors

Dear Colleagues,

Biofilms are a community of surface-associated microorganisms embedded within a matrix of extracellular polymeric substances (EPS—extracellular polymeric substances) composed essentially of polysaccharides, eDNA, and proteins. These multicellular communities are characterised by the presence of different cell types in terms of physiology and phenotype.

Persister cells are much more abundant in biofilms compared to planktonic culture; therefore, it is important to understand persister cells interactions with domesticated phages (prophages) as well as with lytic ones. Phages are actively involved in biofilm formation, in two different ways: as promoting or degrading agents. Phages can be equipped with matrix-degrading enzymes and effectively infect biofilm-embedded cells. In this meaning, phages are a natural and helpful weapon against microbial biofilms. On the other hand, prophages regulate phage-mediated cell lysis and eDNA release, an important component of stabilizing the biofilm matrix.

Dr. Zuzanna Drulis-Kawa

Dr. Barbara Maciejewska

*Guest Editors*





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### Dr. Eric O. Freed

Director, HIV Dynamics and  
Replication Program, Center for  
Cancer Research, National  
Cancer Institute, Frederick, MD  
21702-1201, USA

## Message from the Editor-in-Chief

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*Viruses* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

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