

Special Issue

Esther Lederberg's 100th Anniversary: Microbial Genetics and Bacteriophages

Message from the Guest Editor

Esther Miriam Zimmer Lederberg (1922–2006) was an American microbiologist and a major pioneer in the field of bacterial genetics and the study of bacteriophages. As part of her outstanding research career, she discovered the lambda phage, a bacterial virus which is a fundamental tool for today's studies on gene regulation and genetic recombination. She also invented the replica plating technique, which is widely used to isolate and analyze bacterial mutants and to monitor antibiotic resistance. Her remarkable findings laid the groundwork for demonstrating how phages can transfer genes between bacteria, and were crucial to advancing the understanding of key aspects such as how genes are regulated and the process of DNA recombination. To commemorate the 100th anniversary of the birth of Dr. Lederberg and to recognize her outstanding career, in this Special Issue we provide a platform for experts in the fields of bacterial genetics and the study of bacteriophages to share their most recent advances in these areas. We welcome research articles, comprehensive reviews, communications, and perspectives.

Guest Editor

Prof. Dr. Grzegorz Węgrzyn

Department of Molecular Biology, University of Gdańsk, Gdańsk, Poland

Deadline for manuscript submissions

closed (30 December 2023)



Microorganisms

an Open Access Journal
by MDPI

Impact Factor 4.2
CiteScore 7.7
Indexed in PubMed



mdpi.com/si/154263

Microorganisms
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
microorganisms@mdpi.com

[mdpi.com/journal/
microorganisms](https://mdpi.com/journal/microorganisms)





Microorganisms

an Open Access Journal
by MDPI

Impact Factor 4.2
CiteScore 7.7
Indexed in PubMed



[mdpi.com/journal/
microorganisms](https://mdpi.com/journal/microorganisms)



About the Journal

Message from the Editor-in-Chief

"Microorganism" merges the idea of the very small with the idea of the evolving reproducing organism is a unifying principle for the discipline of microbiology. Our journal recognizes the broadly diverse yet connected nature of microorganisms and provides an advanced publishing forum for original articles from scientists involved in high-quality basic and applied research on any prokaryotic or eukaryotic microorganism, and for research on the ecology, genomics and evolution of microbial communities as well as that exploring cultured microorganisms in the laboratory.

Editor-in-Chief

Dr. Nico Jehmlich

Department of Molecular Toxicology, UFZ-Helmholtz Centre for
Environmental Research, 04318 Leipzig, Germany

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, PubAg, CAPlus / SciFinder, AGRIS, and other databases.

Journal Rank:

JCR - Q2 (Microbiology) / CiteScore - Q1 (Microbiology (medical))

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.2 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).