



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

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### 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.





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## Message from the Editor-in-Chief

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