Special Issue

Antimicrobial Resistance and Increased Virulence of Salmonella

Message from the Guest Editors

Salmonella is one of the major bacterial pathogens that can cause infections to humans and poultry, representing a public health concern. Plasmid-encoded genetic factors often contribute to virulence and antimicrobial resistance (AMR) to Salmonella; however, mechanisms are poorly understood. By identifying the specific virulence factors and antimicrobial resistance genes and understanding plasmid dissemination, strategies can be developed to better control the pathogens and/or reduce the spread of the virulence and antimicrobial resistance plasmids. In this Special Issue, we therefore invite you to contribute original research and review papers describing areas including (but not limited to) antimicrobial resistance and virulence plasmids of Salmonella, dissemination of AMR and virulence of Salmonella, plasmid genetics of Salmonella, coexistence of antibiotic resistance genes and virulence factors, the role of mobile genetic elements in AMR, the role of virulence factors in Salmonella pathogenicity, and the role of Salmonella plasmid factors in increased virulence. Keywords: Salmonella; antimicrobial resistance; virulence; plasmids; co-selection

Guest Editors

Dr. Bijay Khajanchi
National Center for Toxicological Research, Jefferson, AR, USA

Dr. Steven Foley
Division of Microbiology, National Center for Toxicological Research (NCTR), US Food and Drug Administration (FDA), Jefferson, AR 72079, USA

Deadline for manuscript submissions

closed (15 February 2023)

Microorganisms

an Open Access Journal by MDPI

Impact Factor 4.2
CiteScore 7.7
Indexed in PubMed

mdpi.com/si/111262

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

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

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).

MDPI