

# 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](https://mdpi.com/si/111262)

*Microorganisms*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[microorganisms@mdpi.com](mailto: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 20 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the second half of 2025).