Special Issue

Mechanism of Antibiotic Resistance of Foodborne Salmonella

Message from the Guest Editor

Foodborne Salmonella remains a significant global public health burden, causing millions of infections annually through contaminated food products. The emergence and spread of antibiotic-resistant 'Salmonella' strains have severely compromised treatment efficacy, escalating healthcare costs and mortality rates. Resistance mechanisms in these pathogens—such as enzymatic inactivation, efflux pumps, target modification, and plasmid-mediated horizontal gene transfer—are increasingly complex and poorly understood in the context of foodborne transmission. Furthermore, the interplay between agricultural practices, food processing, and human consumption creates reservoirs for resistance gene dissemination. This Special Issue aims to compile cutting-edge research and reviews on the molecular, genetic, and ecological drivers of antibiotic resistance in foodborne 'Salmonella'. Contributions will support the development of evidence-based policies and innovative solutions to mitigate resistance spread, directly addressing the journal's focus on microbial threats to human, animal, and environmental health.

Guest Editor

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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.

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