Special Issue

Microbial Communities and Antimicrobial Resistance Genes in Environmental Water Systems

Message from the Guest Editors

The emergence of antibiotic resistance has significant implications for the future of global public health. Water is a crucial link between various environmental compartments and represents the final destination of the vast majority of urban sewage worldwide, leading to the dissemination of antimicrobial resistance (AMR) determinants that alter the microbiome ecology and promote the evolution and dissemination of AMR. The main themes of this Special Issue include, but are not limited to, the following:

- Identification and monitoring of emerging drug-resistant bacteria in aquatic systems impacted by anthropogenic activities.
- Resistome analysis of microbial communities affected by human activities in aquatic environments using metagenomic approaches.
- Investigation of the impact of untreated and treated sewage or sludge used as fertilizer on the aquatic resistome.
- Examination of the role of aquaculture in the spread of AMR and antibiotic resistance genes (ARGs).
- Analyses of the impact of climate change on the propagation of AMR and ARGs in water systems.
- Identification of the pathways for the dissemination of ARGs in aquatic ecosystems.

Guest Editors

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Deadline for manuscript submissions

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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.

Editor-in-Chief

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