Special Issue

Bioinformatics and Omic Data Analysis in Microbial Research, 2nd Edition

Message from the Guest Editor

This Issue will explore current applications of omics approaches to better understand the roles and functions of microbes in contexts such as ecology, agriculture, disease, homeostasis, or industry. We invite submissions of original research and review articles related to software development, pipeline creation, and/or the application of bioinformatics to address key questions in microbial science.

Submissions may focus on any group of microorganisms—including viruses, bacteria, fungi, protists, and others—using bioinformatics to derive biologically meaningful insights through genomics, proteomics, metabolomics, transcriptomics, or any integrative multi-omics approaches.

Given the essential biological roles of microorganisms, applying omics technologies in these organisms is crucial for advancing our understanding. Relevant topics may include speciation and species complexes, pan genome analyses (including horizontal gene transfer), gene networks, microbiomes, symbiosis, and pathogenesis.

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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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).

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