

Special Issue

Computational Genomics and Bioinformatics in Microbiology

Message from the Guest Editor

Through continued advancements in high-throughput technology, the raw experimental data extracted from genomes of microorganisms continue to grow at an increasing rate. As viruses, archaea, bacteria, fungi and unicellular protozoa together are the main contributors to the Earth's total biomass, its climate, and the known spectrum of human, animal and plant diseases, we must rise to this data challenge through scalable computational methods that help to uncover the intrinsic and contextual meaning of their genomes. At the same time, these data allow us to explore microbial genomes at unprecedented resolutions and precisions in terms of evolutionary time, structural organisation and their functional elements. Many of these data are already in public data repositories waiting to be (re-)analysed with novel computational and bioinformatics methods. With this preamble, this *Special Issue* invites research contributions in comparative, structural, and functional genomics that, from fine-grained details to large-scale organization, use computational methods to microbial genomics data.

Guest Editor

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Deadline for manuscript submissions

20 July 2025



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 8.1
Indexed in PubMed



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Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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