Special Issue

Discovery, Development, and Invention of Small Molecules Against Microbial Infections

Message from the Guest Editor

Microbial infections, caused by bacteria, viruses, fungi, and parasites, pose a significant global health threat, and the development of effective treatments is essential. This collection of articles explores various aspects of small molecule research in the fight against infections. It covers the discovery of inventive compounds (natural, semisynthetic, and synthetic) with antimicrobial properties, the development of these compounds into potential therapies, and innovative approaches (e.g., artificial intelligence, machine learning, deep learning, drug repurposing, molecular docking, network pharmacology, signature matching, genetic association, retrospective clinical analysis, pathway mapping, novel data sources, design and synthesis of antimicrobial agents, natural and herbal antimicrobial products, binding assays, understanding the mechanisms of action, new antimicrobial drug targets, phenotype screening, antimicrobial formulations and compositions, and biopharmaceutical studies) to tackling drug resistance.

Guest Editor

Dr. Mohd Imran

Department of Pharmaceutical Chemistry, Faculty of Pharmacy, Northern Border University, Rafha, Saudi Arabia

Deadline for manuscript submissions

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Microorganisms
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
microorganisms@mdpi.com

mdpi.com/journal/microorganisms

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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

Dr. Nico Jehmlich
Department of Molecular Toxicology, UFZ-Helmholtz Centre for Environmental Research, 04318 Leipzig, Germany

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Journal Rank:

JCR - Q2 (Microbiology) / CiteScore - Q1 (Microbiology (medical))

Rapid Publication:

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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