Special Issue

The Role of Microorganisms in the Development of Biological Drugs

Message from the Guest Editors

Recent developments in the understanding of the human microbiome provided evidence of the therapeutic potential of selected micro-organisms to prevent or treat disease. In recent years, the concept of "next-generation probiotics" has been proposed, with new drugs and micro-organisms being considered as "live biotherapeutic products (LBP)". According to the FDA's definition, which was published in 2016, LBP are living bacterial drugs that can be used to prevent or treat certain human diseases and symptoms. Due to these clear advantages, LBP have been the subject of various recent drug development research projects and have broad development prospects.

This Special Issue will provide insights into novel drugs' promising biosynthesis and biotransformation strategies, as well as recent development of novel LBPs. Moreover, the latest proven enzyme-mediated routes, which use single-step biotransformation or enzyme cascade synthesis to achieve optimal outcomes, will be discussed.

Guest Editors

Dr. Jingyu Chen

Dr. Annett Mikolasch

Dr. Mariam Gaid

Deadline for manuscript submissions

closed (15 December 2023)

Microorganisms

an Open Access Journal by MDPI

Impact Factor 4.2
CiteScore 7.7
Indexed in PubMed

mdpi.com/si/156194

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

mdpi.com/journal/microorganisms

Microorganisms

an Open Access Journal by MDPI

Impact Factor 4.2
CiteScore 7.7
Indexed in PubMed

mdpi.com/journal/microorganisms

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

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, PubAg, CAPlus / SciFinder, AGRIS, and other databases.

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).

MDPI