Special Issue

Using Microbial Functions to Improve Health, Technology, and Applications

Message from the Guest Editor

This Special Issue focuses on (1) the range and utility of capacities of microorganisms, and (2) how their diversity of genes and functional capacities drive advances in holobiont health and technological applications. The goal of this Special Issue is to increase our understanding and use of microorganisms and their genes, constituent parts, and/or functional capacities to improve human, animal, plant, microbial, industrial, and ecological wellbeing.

Potential topics include, but are not limited to, the following:

- Microbes and microbial applications that benefit human health and wellbeing;
- Microbes and microbial applications that improve animal, plant, agricultural, and/or ecological wellbeing; Fundamental and specialized processes used by microbes that can be applied in technologies (e.g., biobatteries, digestors, targeted medical treatments, restorative agriculture, informational networks, and space technologies);
- Interactions between holobiont commensal microbes and environmental microbes;
- The presence and significance of specialized microorganisms within the human microbiome;
- The flow of information and energy within the microbial holobiont.

Guest Editor

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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.

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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).

