Special Issue

Microbial Synthesis of Natural Products and Their Potential Applications

Message from the Guest Editor

Microbial communities comprising bacteria and fungi are immense treasure troves for producing the most promising biologically active natural products. These natural products serve as drug leads for the pharmaceutical arsenal and contemporary medicine. Moreover, the growing prevalence of multidrug-resistant pathogens represents a critical threat to global public health. This underscores the urgent need for the discovery of novel bioactive natural products derived from microorganisms. Remarkably, genome sequencing and bioinformatic analysis unveiled that only a very small fraction of the biosynthetic potential of microorganisms has been realized. The number of cryptic biosynthetic gene clusters (BGCs) that remain uncharacterized is immense. This Special Issue of *Microorganisms* is dedicated to gathering new insights into the microbial synthesis of natural products and their potential applications, spanning novel microbial natural product discovery, the elucidation of the biosynthetic logic of microbial compounds, and their promising bioactivities. We welcome submissions consisting of reviews, original research articles, and communications.

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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