Special Issue

Fungal Metabolites and Synthetic Derivatives: Antimicrobial Properties Toward Microbial Pathogens

Message from the Guest Editor

The resistance of bacteria to current antibiotics and the limitations in toxicity of antiparasitic and antifungal medications pose significant challenges to global public health. Fungal metabolites and their synthetic derivatives have long been explored as promising alternatives, with notable successes such as penicillins and cephalosporins. Synthetic derivatives of natural products, such as β-lactams, including carbapenems, are crucial in treating resistant bacterial infections. Furthermore, the development of synthetic triazole derivatives has enhanced antifungal therapy, providing broader-spectrum activity and better pharmacokinetic properties. These compounds exemplify the potential of synthetic modifications to enhance efficacy and reduce toxicity.This Special Issue aims to explore the antimicrobial properties of fungal metabolites and their synthetic derivatives, focusing on innovative approaches to combat microbial pathogens. We invite contributions that delve into the discovery, development, and application of these compounds, as well as their underlying mechanisms of action.

Guest Editor

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Message from the Editor-in-Chief

There are very few fields that attract as much attention as scientific endeavor related to antibiotic discovery, use and preservation. The public, patients, scientists, clinicians, policy-makers, NGOs, governments, and supra-governmental organizations are all focusing intensively on it: all are concerned that we use our existing agents more effectively, and develop and evaluate new interventions in time to face emerging challenges for the benefit of present and future generations. We need every discipline to contribute and collaborate: molecular, microbiological, clinical, epidemiological, geographic, economic, social scientific and policy disciples are all key. *Antibiotics* is a nimble, inclusive and rigorous indexed journal as an enabling platform for all who can contribute to solving the greatest broad concerns of the modern world.

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