



## Natural Bioactive Compounds from Fungi with Potential Antimicrobial Properties: New and Future Developments in Microbial Biotechnology

Guest Editors:

**Dr. Paola Angelini**

Department of Chemistry,  
Biology, and Biotechnology,  
University of Perugia, 06122  
Perugia, Italy

**Dr. Carolina Girometta**

Department of Earth and  
Environmental Sciences,  
University of Pavia, Via  
Sant'Epifanio 14, 27100 Pavia,  
Italy

Deadline for manuscript  
submissions:

**closed (31 July 2023)**

### Message from the Guest Editors

Dear Colleagues,

Fungi produce a wide range of natural products, often called secondary metabolites (low-molecular weight compounds). Interest in these compounds is considerable, as many natural products are of medical, industrial, and/or agricultural importance.

In this Special Issue, research papers and reviews on the search for new fungal metabolites for the pharmaceutical and agrochemical industries are welcome, providing new evidence about fungi as potential sources of bioactive or more largely useful properties.

Due to the increasing resistance of microorganisms to synthetic antibiotics, research on new antibacterial and new antifungal agents, as well as investigations of the biosynthetic pathways of already known or new molecules, at a laboratory scale or at a pilot level, could be emphasized.

Additional biotechnological processes for industrial applications and/or alternative use of fungal compounds in food, beverage, supplements, cosmetic, bio-based materials, or painting industries could also be part of this Special Issue.

**Keywords:** antimicrobials; biological properties; biosynthesis; endophytic fungi; filamentous fungi





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Nicholas Dixon

School of Chemistry and  
Molecular Bioscience, University  
of Wollongong, Wollongong, NSW  
2522, Australia

## 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.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q1 (General Pharmacology, Toxicology and Pharmaceutics)

## Contact Us

---

*Antibiotics* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
www.mdpi.com

mdpi.com/journal/antibiotics  
antibiotics@mdpi.com  
X@antibioticsmdpi