

## Special Issue

# Multidrug Resistance as Trigger for the Development of Novel Antimicrobials

### Message from the Guest Editors

The incidence of human pathogens resistant to multiple antimicrobials has been increasing over the last decades. Infections caused by pathogens resistant to multiple antimicrobials are quite difficult to eradicate and are associated with a worst outcome than those caused by the respective susceptible strains being directly associated with an increased risk of morbidity, mortality and cost. While the emergence of multidrug resistance has been associated with misuse and abuse of antimicrobials, the number of available effective drugs is decreasing and novel compounds arriving at the market are scarce. This Special issue aims to gather papers describing novel antimicrobials, originating from chemical synthesis, repurpose of existent drugs or from natural sources. Papers on the description of novel structures, discovery of novel targets and mechanisms of action, as well as on the use of omics approaches in the field of novel antimicrobials discovery and characterization are also welcome. **Keywords:** novel antimicrobials, multidrug resistance, target identification, ESKAPE bacteria, drug design, mechanisms of action

### Guest Editors

Dr. Luis G. Alves

Centro de Química Estrutural, Associação do Instituto Superior Técnico para a Investigação e Desenvolvimento, Lisbon, Portugal

Dr. Jorge H. Leitão

Instituto Superior Técnico, Universidade de Lisboa, Lisboa, Portugal

### Deadline for manuscript submissions

closed (31 December 2022)



## Antibiotics

an Open Access Journal  
by MDPI

Impact Factor 4.6  
CiteScore 8.7  
Indexed in PubMed



[mdpi.com/si/125936](https://mdpi.com/si/125936)

*Antibiotics*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[antibiotics@mdpi.com](mailto:antibiotics@mdpi.com)

[mdpi.com/journal/  
antibiotics](https://mdpi.com/journal/antibiotics)





# Antibiotics

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.6  
CiteScore 8.7  
Indexed in PubMed



[mdpi.com/journal/  
antibiotics](https://mdpi.com/journal/antibiotics)



## About the Journal

### 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 disciplines 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.

---

### Editor-in-Chief

Prof. Dr. Nicholas Dixon  
School of Chemistry and Molecular Bioscience, University of  
Wollongong, Wollongong, NSW 2522, Australia

---

### 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 (Infectious Diseases) / CiteScore - Q1 (General Pharmacology, Toxicology and Pharmaceutics)