



## Antimicrobial Chemotherapy: New Therapeutic Approaches against the Drug-Resistant and Difficult to Treat Bacterial Infections

Guest Editors:

**Dr. Ashok Aspatwar**

Faculty of Medicine and Health  
Technology, Tampere University,  
33100 Tampere, Finland

**Prof. Dr. Seppo Parkkila**

Faculty of Medicine and Health  
Technology, Tampere University,  
33100 Tampere, Finland

Deadline for manuscript  
submissions:

**closed (31 December 2023)**

### Message from the Guest Editors

Dear Colleagues,

Infections caused by pathogenic bacteria can be treated successfully with the existing antibacterial compounds. Despite the huge success of antibiotics in antimicrobial therapy, some bacteria that are susceptible to antibiotics survive either due to inappropriate use of antibiotics or the presence of biofilms that increases their survival in the presence of antibiotics. To treat the infections caused by persistent and drug-resistant bacteria, we urgently need to develop novel antibiotics targeting alternate pathways of pathogenic bacteria.

The current Special Issue will focus on the following topics: 1) novel antibacterial compounds that target alternate pathways of the pathogenic bacteria; combinatorial treatment using novel antibiotics with first-line antibiotics; treatment using phage therapy, nanoparticles, adjuvants, targeting quorum-sensing, and modulation of host immune response; and 2) basic and clinical concepts for the treatment of infections.

**Keywords:** antimicrobial chemotherapy; resistance mechanism; bacterial persistence; alternate targets; biofilms; novel antibiotics; multidrug resistance; clinical concepts





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 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.

## 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, CAPUS / SciFinder, and other databases.

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

## Contact Us

*Antibiotics* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

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

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