



Membranes to Fight Drug-Resistant Microbes

Guest Editor:

Dr. Nermina Malanovic

Institute of Molecular
Biosciences, University of Graz,
Humboldtstrasse 50/III, 8010
Graz, Austria

Deadline for manuscript
submissions:

31 August 2025

Message from the Guest Editor

Dear Colleagues,

In the fight for finding possible ways to combat multidrug resistance, microbial membranes play a central role. Every microorganism is enveloped with a membrane, which gives them not only a unique character but protection that is essential for survival. The interruption of this fundamental barrier function leads to a rapid cell death and killing rate that is usually faster than the microbial growth rate. Such a non-specific mode of action is less likely to result in resistance and, amongst others, is effective on a variety of microbes. Compounds disrupting or acting on microbial membranes are generally termed as membrane-active and examples include antimicrobial peptides (AMPs), lipidoids, or many other small molecules, such as quaternary ammonium compounds. The mechanism behind the killing of microorganisms underlies specific interactions of those compounds with major constituents of microbial membranes, in particular with (phospho)lipids. In this context, the scope of this Special Issue focuses on membranes as a target for drug/vaccine development and agents strongly affecting membrane architecture in diverse pathogens.





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 (Infectious Diseases) / 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](https://twitter.com/antibioticsmdpi)