







an Open Access Journal by MDPI

# **Antimicrobial Activity and Mechanisms of Action of Peptides**

Guest Editor:

### Dr. Laura Giovati

Department of Medicine and Surgery, Laboratory of Microbiology and Virology, University of Parma, Parma, Italy

Deadline for manuscript submissions:

closed (30 June 2023)

## Message from the Guest Editor

In the landscape of the growing emergence of drug resistance among pathogens, antimicrobial peptides (AMPs) appear as valuable candidates for the development of a new generation of therapeutic agents intended to replace or supplement conventional antimicrobial drugs.

To date, a plethora of natural and synthetic AMPs has been identified with the ability to exert a direct action on pathogens or to indirectly promote the resolution of the infection through immunomodulatory effects. AMPs with wound healing properties have been also described. These AMPs present an assortment of structures ranging from helical to  $\beta\text{-strand},$  mixed, or random coil, which may account for diverse mechanisms of action. Other characteristics such as charge, hydrophobicity, amphipathicity, and peptide length have been shown to be responsible for modulating the mechanism of AMPs.

This Special Issue aims to gather contributions which may promote a better understanding of the structure–function relationship, mechanism of action, and possible biomedical applications of AMPs. Submissions on the discovery of new AMPs or novel activities of already known AMPs are also encouraged.













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

### **Contact Us**