# **Special Issue**

# Antimicrobial Peptides from Natural Sources to Synthetic Optimization

## Message from the Guest Editors

Antimicrobial peptides (AMPs) are considered the main resource for the development of new therapeutic alternatives against antimicrobial infections. AMPs have been identified in plants and animals with very diverse primary and secondary structures, which give them physicochemical properties that are fundamental for their antimicrobial activity. AMPs that have been identified and/or isolated from natural sources are the starting point for the design and development of new molecules with enhanced antimicrobial activity and in some cases these AMPs have been commercialized. increasing our therapeutic options. The design and optimization of peptide sequences involves different synthetic strategies such as: obtaining short linear sequences, dendrimers, cyclic peptides, dimeric peptides, tetrameric peptides, polymeric peptides, inclusion of non-natural amino acids, D-amino acids, organic molecules of non-peptide origin, etc. These modifications require the simultaneous use of methodologies such as solid phase and solution chemical synthesis, click chemistry, oxidation reactions, recombinant technology, etc.

#### **Guest Editors**

Prof. Dr. Javier Eduardo García Castañeda

Departamento de Farmacia, Facultad de Ciencias, Universidad Nacional de Colombia, Bogotá Carrera 45 No 26-85, Building 450, Bogotá 11321, Colombia

Dr. Zuly Jenny Rivera-Monroy

Departamento de Química, Facultad de Ciencias, Universidad Nacional de Colombia, Bogotá Carrera 45 No 26-85, Building 451, Bogotá 11321, Colombia

# Deadline for manuscript submissions

closed (31 March 2024)



an Open Access Journal by MDPI

Impact Factor 4.6
CiteScore 8.7
Indexed in PubMed



mdpi.com/si/107036

Antibiotics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
antibiotics@mdpi.com

mdpi.com/journal/ antibiotics





an Open Access Journal by MDPI

Impact Factor 4.6 CiteScore 8.7 Indexed in PubMed



# **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 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.

#### 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)

