



## Novel Antibacterial Drugs: Discovery, Synthesis and Design

Guest Editor:

**Prof. Dr. Mariana S. Castro**

Toxinology Laboratory,  
Department of Physiological  
Sciences, Institute of Biology,  
University of Brasilia, Brasilia  
70.910-900, Brazil

Deadline for manuscript  
submissions:

**closed (31 July 2023)**

### Message from the Guest Editor

Dear Colleagues,

Random mutations cause genetic variations in microorganisms, so the emergence of antimicrobial resistance is a natural evolutionary process; however, external selective pressures, such as exposure to antimicrobial agents in healthcare, agriculture, and the environment, can accelerate the dissemination of these genes. Antimicrobial resistance threatens, at alarming levels, the limited treatment options available and portends one of the greatest global public health crises. This situation becomes especially urgent when one notices the lack of new antibiotics under development. In view of this situation, the search for new antibacterial compounds becomes urgent, and this Special Issue will accept original research articles and reviews that highlight the discovery, synthesis, and design of novel antibacterial agents, essential initiatives through which to limit the dissemination of multidrug-resistant microorganisms and ensure the adequate treatment of exposed populations, preventing associated human losses.





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Maurizio Battino

Department of  
Odontostomatologic and  
Specialized Clinical Sciences,  
Sez-Biochimica, Faculty of  
Medicine, Università Politecnica  
delle Marche, Via Ranieri 65,  
60100 Ancona, Italy

## Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

## 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, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Inorganic Chemistry)

## Contact Us

---

*International Journal of Molecular  
Sciences* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

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

mdpi.com/journal/ijms  
ijms@mdpi.com  
X@IJMS\_MDPI