Special Issue

Molecular Advances in Biotechnological Approaches to Developing Effective Antimicrobial Agents

Message from the Guest Editor

Both antimicrobial peptides and IqY antibodies represent fascinating fields of study in biotechnology, offering promising avenues for the development of novel antimicrobial treatments and immunotherapies. In the context of antimicrobial applications, IqY antibodies have been explored as a potential defense against infectious agents. Researchers have successfully developed specific IgY antibodies targeting various pathogens, including bacteria and viruses for use in passive immunization strategies. These approaches offer an alternative to conventional antibiotics and can be particularly useful in scenarios where antibiotic resistance poses a significant challenge. This Special Issue aims to provide recent insights and potential applications for developing innovative and effective antimicrobial strategies and on the challenges faced in translating these discoveries into clinically viable treatments. The topics covered range from the discovery and design of novel antimicrobial peptides to the engineering and optimization of IgY antibodies for combating infectious diseases.

Guest Editor

Dr. José M. Pérez De la Lastra

Biotechnology of Macromolcules, Instituto de Productos Naturales y Agrobiología, CSIC, 28006 Madrid, Spain

Deadline for manuscript submissions

closed (31 July 2024)



International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed



mdpi.com/si/180724

International Journal of Molecular Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 ijms@mdpi.com

mdpi.com/journal/ ijms





International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed





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.

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

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 (Organic Chemistry)

