







an Open Access Journal by MDPI

The Antimicrobial and Antivirulent Effects of Natural Products and Their Nanoparticles

Guest Editors:

Dr. Zhenbo Xu

Dr. Ren-You Gan

Prof. Dr. Huabin Li

Dr. Vuyo Mavumengwana

Deadline for manuscript submissions:

closed (31 December 2021)

Message from the Guest Editors

Many natural products exhibit antimicrobial and antivirulent effects and have been considered potential alternatives to antibiotics. Therefore, understanding the antimicrobial and antivirulent effects of natural products and their underlying mechanisms of action can provide a scientific basis for their further applications as antibiotic alternatives. Coupled to this are advances in knowledge and applications of different nanoparticles, including lipid-based, polymer-based, carbohydrate-based, protein-based, metal-based, nucleic-acid-based nanoparticles, etc., to encapsulate natural compounds to derive enhanced and targeted therapeutic effects.

This Special Issue seeks manuscript submissions that improve our understanding of the antimicrobial and antivirulent effects of natural products and their nanoparticle equivalents. Manuscripts about the discovery of novel antimicrobial and antivirulent natural products, the establishment of natural product-based nanoparticles, their in vitro and in vivo antimicrobial and antivirulent effects, as well as related molecular mechanisms, and their potential applications, such as in food and medicine, are welcome for submission.













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 (*Pharmacology & Pharmacy*) / CiteScore - Q1 (*General Pharmacology, Toxicology and Pharmaceutics*)

Contact Us