



## Molecular Epidemiology, Antimicrobial Resistance, and Virulence Genes in Drug-Resistant Bacteria

Guest Editor:

**Dr. Aunchalee Thanwisai**

Department of Microbiology and Parasitology, Faculty of Medical Science, Naresuan University, Phitsanulok 65000, Thailand

Deadline for manuscript submissions:

**closed (29 February 2024)**

### Message from the Guest Editor

Dear Colleagues,

Antimicrobial resistance (AMR) is one of the most serious issues in human and veterinary medicine worldwide. AMR is a natural process wherein microorganisms, particularly bacteria, elicit certain resistance processes, receive resistant genes from other bacteria through horizontal gene transfer, and adapt to antibiotics. Antimicrobial-resistant microorganisms are present in humans, animals, food, plants, and the environment. The primary cause of AMR is the misuse and overuse of antibiotics and poor hygiene and sanitation in both humans and animals. Studies on the diversity, distribution, and persistence of drug-resistant and virulence genes in bacterial populations serve as useful tools for improving the understanding of AMR epidemiology. Therefore, we welcome studies on molecular epidemiology, AMR, and the molecular characterization of antibiotic-resistant and virulence genes in bacteria, which can contribute to the understanding of potential molecular, genetic, and environmental risk factors to the etiology, distribution, and prevention of diseases in healthcare facilities and farms.





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 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.

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

## Contact Us

---

*Antibiotics* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

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

mdpi.com/journal/antibiotics  
antibiotics@mdpi.com  
X@antibioticsmdpi