



## Advances in Plasmid Mediated Antimicrobial Resistance

Guest Editor:

### Dr. Jonathan Frye

Poultry Microbiological Safety  
and Processing Research Unit,  
USDA ARS Russell Research  
Center (RRC), Athens, GA, USA

Deadline for manuscript  
submissions:

**closed (15 August 2024)**

### Message from the Guest Editor

The discovery of antibiotics allowed the treatment of many diseases that humans, animals, and plants had suffered with throughout history. The development of antimicrobial resistance (AMR) threatens to reduce the effectiveness of these treatments and return medicine to a pre-antibiotic state. In many bacteria, the AMR genes are encoded by foreign DNA often associated with mobile genetic elements, such as a plasmid. Plasmids are small circular, self-replicating pieces of DNA that can carry an accessory genome for the host bacteria, conferring special abilities, such as AMR. Plasmids are often self-transmissible through conjugation during mating and are, thus, responsible for much of the spread of AMR. Authors are invited to submit manuscripts on any aspect of AMR plasmids and their host organisms, including but not limited to the sequencing, the spread of plasmids and antimicrobial-resistant mechanism





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