



## Mobile Antibiotic Resistance Encoding Elements: From Biology to Epidemiology

Guest Editor:

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Deadline for manuscript  
submissions:

**closed (31 July 2021)**

### Message from the Guest Editor

The recent accumulation and analysis of bacterial genomic data, which has enabled horizontal gene transfer events to be identified, exhibits the fundamental role of these events in shaping pathogenic bacterial genomes. Horizontal gene transfer refers to the transfer of genetic material often coding for adaptive traits such as antibiotic resistance and/or virulence from the genome of one bacterial cell to that of another. This horizontal transfer constitutes the cornerstone for bacterial adaptation and evolution. Mobile genetic elements such as plasmids and integrative conjugative elements are the major facilitators of this horizontal transfer and are pivotal in the capturing, accumulation, and/or dissemination of antibiotic-resistance determinants within pathogenic bacterial species.

This Special Issue seeks manuscript submissions that further our understanding on the one-health epidemiology of mobile genetic elements, as well as their genomic and functional characteristics that drive this epidemiology.





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## Editor-in-Chief

### Prof. Dr. Nicholas Dixon

School of Chemistry and  
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## 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.

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