Special Issue

Fate of Antimicrobial Resistance Genes in the Environment

Message from the Guest Editor

The environment is increasingly being recognized as an antimicrobial resistance reservoir and plays a key role in the dissemination of antimicrobial resistance genes (ARGs). ARGs are usually located on mobile genetic elements (MGEs) such as plasmids, transposons and integrons and can migrate between MGEs through horizontal gene transfer (HGT). Meanwhile, the ubiquitous presence of antibiotics, biocides and heavy metals in the environment are considered important driving forces of ARGs transmission. To better understand the dynamics of ARGs in the environment and their threat to human health, studies about the fate of ARGs in the environment are urgently needed. Potential topics for this Special Issue include, but not are limited to, the following:

- Investigations of ARGs in the environment based on metagenomics technologies;
- Genetic elements that mediate the horizontal transmission of ARGs;
- Factors governing ARG removal or transfer in the environment;
- Human health impacts and risk assessment associated with environmental ARGs;
- Strategies or technologies for the removal of ARGS from diverse sources in the environment.

Guest Editor

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Deadline for manuscript submissions

closed (20 December 2022)

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Impact Factor 2.8
CiteScore 5.5
Indexed in PubMed

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Genes is central to our understanding of biology, and modern advances such as genomics and genome editing have maintained genetics as a vibrant, diverse and fast-moving field. There is a need for good quality, open access journals in this area, and the *Genes* team aims to provide expert manuscript handling, serious peer review, and rapid publication across the whole discipline of genetics. Starting in 2010, the journal is now well established and recognised. Why not consider *Genes* for your next genetics paper?

Editor-in-Chief

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