



## Colistin Resistance: The Need for a One Health Approach

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Deadline for manuscript  
submissions:

**closed (31 December 2021)**

### Message from the Guest Editors

Dear Colleague,

Antimicrobial resistance is one of the main concerns worldwide. Some studies contemplate the possibility of a return to the so-called “pre-antibiotic era”. Recently, the discovery of a plasmid gene (*mcr-1*) responsible for transferable colistin resistance in *E. coli* opened a new potential crisis. Colistin is an antibiotic belonging to the class of Polymyxins. Largely used in veterinary medicine, it is considered a “last choice” antimicrobial in human therapy. Since the first detection of *mcr-1* in 2015, many other *mcr* variants were discovered in isolates from humans, animals and foods. An integrated approach involving human and veterinary medicine, as well as environmental aspects, is essential.

This Special Issue welcomes contributions on colistin resistance. Basic studies exploring new variants or modes of action of *mcr* genes are considered. Investigations exploring this topic with phenotypic and molecular methods are encouraged. “Epidemiological” studies describing the circulation of bacteria showing colistin resistance among humans, animals, food, and environmental samples from different areas of the world are of great interest.





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## Editor-in-Chief

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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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