Special Issue

Antimicrobial Resistance in Heavy Metal Polluted Areas

Message from the Guest Editors

Antibiotic resistance is a continuously growing threat for both people and animals. The inconsistent, abusive, and excessive use of antibiotics has over time led to the emergence of antimicrobial resistance in medicine, veterinary medicine, and the environment. Thus, the degree of pollution with heavy metals, as part of the global pollutants to the environment, could impact the bacteria and their resistome, with severe consequences for inhabitants of the area. Potential topics include but are not limited to the following:

- Farming contributing to antibiotic resistance in heavy metal polluted environments;
- Impact of various heavy metals (Pb, Cd, Zn, As, etc.) on antibiotic resistance gene transfer in non-industrial environments;
- Dynamics of antimicrobial resistance in heavy metal polluted areas;
- Potential role of resistance plasmids in heavy metal polluted environments in enhancing the emergence of diseases;
- Prevention and control of antibiotic resistance in heavy metal polluted areas;
- Antibiotic resistance transfer in heavy metal polluted environments.

Keywords: antibiotic resistance; heavy metals; pollution; zoonotic bacteria; survival

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"Microorganism" merges the idea of the very small with the idea of the evolving reproducing organism is a unifying principle for the discipline of microbiology. Our journal recognizes the broadly diverse yet connected nature of microorganisms and provides an advanced publishing forum for original articles from scientists involved in high-quality basic and applied research on any prokaryotic or eukaryotic microorganism, and for research on the ecology, genomics and evolution of microbial communities as well as that exploring cultured microorganisms in the laboratory.

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