Special Issue

Health Effects of Airborne Microbial Communities

Message from the Guest Editors

Bioaerosols are airborne particulate matter containing biological materials. Exposure to bioaerosols may have adverse health effects on humans and animals. While both indoor and outdoor air can be contaminated with biological contaminants, exposure to certain microbes can also be beneficial for health. The presence and spread of biological contaminants are influenced by factors such as temperature, relative humidity, air movement, and nutrient availability. Recent advances in next-generation sequencing technologies and metagenomic analyses have significantly enhanced our understanding of the diversity and functional characteristics of airborne microbial communities. However, much remains to be discovered about how these microbial communities impact human health. We welcome articles, reviews, and communications on topics including the diversity, composition, and dynamics of microbial communities in indoor and outdoor environments; the development of techniques for monitoring and detecting bioaerosols; associations between microbial exposure and health outcomes; and the impact of climate change and urbanization on the distribution of bioaerosols and their health effects.

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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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