Special Issue

Legionella pneumophila: A Microorganism with Thousand Faces, 2nd Edition

Message from the Guest Editor

Legionella pneumophila is naturally found in fresh water, where bacteria parasitize within protozoa.The pathogenesis of Legionnaires' disease is largely related to the ability of L. pneumophila to invade and grow within macrophages. In recent times, a prodigious number of bacterial virulence factors, which affect the growth of L. pneumophila in both macrophages and protozoa, have been recognized. While L. pneumophila replicates within environmental protozoa, its colonization and persistence within its natural environment are mediated by biofilm formation and colonization within multispecies microbial communities. There is now evidence that some legionellosis outbreaks are correlated with the presence of biofilms. Thus, preventing biofilm formation appears to be one of the optimal strategies available for reducing water system contamination. This Special Issue will focus on epidemiological data and experimental evidence, as well as possible mechanisms of L. pneumophila and host factors involved in causing Legionnaires' disease. Finally, it will review the known mechanisms of biofilm formation, as well as old and new anti-biofilm substances.

Guest Editor

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Message from the Editor-in-Chief

"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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