Special Issue

Adaptation Mechanisms of Microbial Pathogens to Their Host Niche

Message from the Guest Editor

Microbes are able to infect almost all life forms, ranging from plants to animals and humans. The host range can be as diverse as the microbial adaptation mechanisms are multifaceted to invade and survive in the host and establish infection in different tissues. During this process, microorganisms encounter severe and rapid environmental challenges due to host defense mechanisms and the rapidly changing availability of nutrients, oxygen and temperature levels, or pH values. Understanding how bacteria and fungi sense and overcome host-imposed stress and antimicrobial treatment is of paramount importance to understand virulence and to improve treatment strategies. Host–microbe crosstalk at a molecular and cellular level requires transcriptional and metabolic adaptation. This Special Issue will demonstrate distinct and common adaptation mechanisms of microbial pathogens to their host niches in an integrated manner. We cordially invite you to submit research articles, review articles, and short communications related to microbial adaptation mechanisms to host-imposed stressors.

Guest Editor

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About the Journal

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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