

Special Issue

Advances in Microbial Pathogenesis and Host Responses

Message from the Guest Editors

The mechanisms of microbial pathogenesis are significantly influenced by the host response. Host–pathogen interaction is a highly dynamic process between different microbial pathogens and hosts at all stages of pathogenic infection, from invasion to spread. Following pathogenic infection, the innate immune system responds to pathogen-associated molecular patterns and activates immediate host inflammatory and antimicrobial responses. Innate host immune activation results in the production of multiple effective molecules, including cytokines and chemokines, as well as antimicrobial proteins, to fight off invading pathogens and parasites; however, many intracellular pathogens employ a variety of evolved strategies to escape, modulate, and hijack host immunity during infection. **Keywords:** microbial infections; pathogenesis; microbiota; immune response; host–pathogen interactions; antibiotic resistance; clinical microbiology; public health; drug development; new therapeutic strategies

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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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