







an Open Access Journal by MDPI

Advances in Microbial Pathogenesis and Host Responses

Guest Editors:

Dr. Alessandra Fusco

Department of Experimental Medicine, University of Campania "Luigi Vanvitelli", Naples, Italy

Dr. Giovanna Donnarumma

Dipartimento di Medicina Sperimentale, Università degli Studi della Campania "Luigi Vanvitelli", Naples, Italy

Deadline for manuscript submissions:

31 July 2024

Message from the Guest Editors

Dear Colleagues,

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













an Open Access Journal by MDPI

Editor-in-Chief

Dr. Nico Jehmlich

Department of Molecular Systems Biology, UFZ-Helmholtz Centre for Environmental Research, 04318 Leipzig, Germany

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC,

PubAg, CAPlus / SciFinder, AGRIS, and other databases.

Journal Rank: JCR - Q2 (Microbiology) / CiteScore - Q2 (Microbiology (medical))

Contact Us