

Special Issue

Organoid Models in Host-Pathogen Interactions and Disease Pathogenesis

Message from the Guest Editor

This Special Issue aims to highlight recent advances in the use of organoid technology to study the pathogenesis of infectious diseases. Organoids, three-dimensional and self-organizing structures derived from stem cells, offer physiologically relevant platforms that closely mimic the architecture and cellular diversity of human tissues. These models have transformed our ability to investigate host-pathogen interactions at mucosal surfaces, in deep tissues, and within immune-privileged sites, providing insights unattainable with traditional 2D cultures or animal models. We welcome original research articles, reviews, and methods papers focused on how organoid systems are being applied to model bacterial, viral, fungal, and parasitic infections. Topics of interest include organoid-based studies of microbial invasion, immune response, tissue injury and repair, microbiota interactions, and antimicrobial or vaccine testing. Studies that integrate immune cells, use organoid-on-a-chip platforms, or develop multi-organoid co-cultures are particularly encouraged.

Guest Editor

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Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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