

## Special Issue

# Intracellular Host-Bacteria Dynamics: Unraveling the Molecular Basis

### Message from the Guest Editor

Intracellular bacterial pathogens have evolved diverse strategies to survive and replicate within host cells, shaping immune responses and driving complex disease outcomes. These pathogens can exploit phagosomes, escape into the cytosol, manipulate host cell signaling, and, in some cases, induce organized immune structures such as granulomas. Understanding the molecular and cellular basis of these interactions is critical for developing targeted therapies and vaccines. This Special Issue welcomes studies that investigate the diverse intracellular lifestyles of bacterial pathogens and the corresponding host responses. We invite original research articles, reviews, and short communications focusing on the following topics:

- Bacterial invasion, intracellular trafficking, and replication strategies;
- Host cell responses to intracellular pathogens;
- Formation and regulation of granulomas and other tissue-level immune structures;
- Comparative studies of intracellular pathogenesis across species;
- Innovative in vitro models and animal models;
- Transcriptomic, proteomic, and imaging-based analyses of host-pathogen interactions;
- Strategies for therapeutic or vaccine targeting of intracellular pathogens.

### Guest Editor

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### Deadline for manuscript submissions

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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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### Editor-in-Chief

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