

Special Issue

Molecular Insights into Pathogen Dynamics: Enhancing One Health Surveillance

Message from the Guest Editors

This Special Issue seeks to bring together research employing a variety of methodologies, including molecular omics (genomics, proteomics, metabolomics), wet lab experiments, and phenotypic analyses, to explore the transmission, evolution, and adaptation of pathogens. We welcome original research articles, reviews, and case studies that enhance disease surveillance, facilitate early detection of emerging threats, and inform targeted interventions across the One Health spectrum. We are particularly interested in studies focusing on a wide range of pathogens that impact human and animal health, as well as environmental ecosystems. This includes, but is not limited to, bacterial, viral, fungal, and parasitic pathogens. Research on zoonotic diseases, antimicrobial resistance, emerging and re-emerging infectious agents, and vector-borne diseases is especially encouraged. Contributions that examine the interplay between pathogens and hosts or the environment, and those that offer insights into cross-species transmission and environmental reservoirs, are highly welcome.

Guest Editors

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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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