

Special Issue

Impacts of Tryptophan Metabolism on the Outcome of Host-Pathogen Interactions

Message from the Guest Editors

Tryptophan is an essential amino acid that, after absorption, can be metabolized by the host via two main pathways: the serotonin pathway and the kynurenine pathway. Tryptophan can also be metabolized by microorganisms into various indole metabolites.

Furthermore, tryptophan metabolites play a crucial role in inter-kingdom communication (microbiota–pathogen–host), influencing pathogen virulence and acting as quorum-sensing molecules. Therefore, it is essential to further explore the role of tryptophan metabolism in the context of host–pathogen interaction. This Special Issue welcomes contributions (original research articles and reviews) on the impacts of tryptophan metabolism on the outcome of host–pathogen interactions. We welcome manuscripts exploring how tryptophan metabolism influences inflammation and other biological processes in response to infection by pathogens, as well as tryptophan metabolism involvement in pathogen virulence and other traits in microorganisms.

Guest Editors

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Message from the Editor-in-Chief

The worldwide impact of infectious disease is incalculable. The consequences for human health in terms of morbidity and mortality are obvious and vast but, when infections of animals and plants are also taken into account, it is hard to imagine any other disease that has such a significant impact on our lives—on healthcare systems, on agriculture and on world economics.

Pathogens is proud to continue to serve the international community by publishing high quality studies that further our understanding of infection and have meaningful consequences for disease intervention.

Editor-in-Chief

Prof. Dr. Hinh Ly

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