

Special Issue

Mechanisms of Gene Expression Regulation during Host-Pathogen Interaction

Message from the Guest Editors

Host-pathogen interaction is complex and triggers a change in gene expression in both organisms; the mechanisms associated with the gene regulation involve dynamic changes under control: transcriptional, post-transcriptional, translational, and or post-translational levels. In this Special Issue, we are interested in describing how unicellular or pluricellular pathogens interact, adhere, internalize, colonize, establish, multiply, and egress to infect a new cell host during a successful infection, elucidating different gene-regulation mechanisms. These can then be used to identify targets in the development of new biomolecules which could block a specific mechanism and provide an anti-pathogenic effect, which could help to eradicate or eliminate individual pathogens. The identification of target genes and proteins would help us to develop new compounds to prevent infection (prophylactic activity), eliminate the infectious agent (therapeutic activity), or even bring new strategies to develop ways to prevent infections (like vaccines).

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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

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