

Special Issue

Genetics of Host–Pathogen Interactions

Message from the Guest Editors

Host–pathogen interactions are fundamental to understanding the biology of infectious diseases. Pathogens have evolved sophisticated mechanisms to exploit host resources, while hosts have developed complex immune defenses to counteract these threats. Understanding the genetic factors that govern these interactions is essential for unraveling disease mechanisms and developing effective interventions in both human and veterinary medicine, agriculture, and ecology. This Special Issue aims to highlight advances in the genetic and genomic study of these complex interactions across diverse systems, including humans, animals, plants, and microbes. Topics may include genetic determinants of host resistance, pathogen adaptation, immune modulation, co-evolutionary processes, and host–pathogen–microbiome interactions. We invite original research articles, reviews, and methodological papers that explore genetic mechanisms underlying host–pathogen interactions. Contributions addressing emerging infectious diseases or using innovative models and methods are particularly encouraged.

Guest Editors

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Deadline for manuscript submissions

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About the Journal

Message from the Editor-in-Chief

Genes is central to our understanding of biology, and modern advances such as genomics and genome editing have maintained genetics as a vibrant, diverse and fast-moving field. There is a need for good quality, open access journals in this area, and the *Genes* team aims to provide expert manuscript handling, serious peer review, and rapid publication across the whole discipline of genetics. Starting in 2010, the journal is now well established and recognised. Why not consider *Genes* for your next genetics paper?

Editor-in-Chief

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