

Special Issue

Next-Generation Sequencing for Pathogen Detection

Message from the Guest Editor

Infectious disease diagnostics and surveillance rapidly evolved into molecular tests based on an analysis of nucleic acids and has been continuing to evolve with the advent of next-generation sequencing. Several techniques exist from gene-targeted amplicon sequencing to shotgun metagenomics for detecting and analysing pathogens present in clinical and environmental samples. Recently, sequencing-based methods for assessing the host response to pathogens has shown promise in detecting pathogens even before the microbes are at high enough concentration to be detectable. As methods advance, previous gaps which made sequencing-based pathogen surveillance and diagnostics cost prohibitive are being addressed and new challenges are emerging. This issue will focus on understanding the innovative advances in next-generation sequencing methods for the detection of pathogens in clinical and environmental samples above background noise.

Guest Editor

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Deadline for manuscript submissions

closed (25 September 2025)

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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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