

Special Issue

Application of Bioinformatics in Complex Traits

Message from the Guest Editor

Advances in bioinformatics have revolutionized the study of complex traits by enabling the integration and analysis of large-scale multi-omics data, including genomics, transcriptomics, epigenomics, proteomics, and metabolomics.

This Special Issue aims to highlight innovative computational methods, statistical models, and machine learning approaches that dissect the genetic architecture and elucidate the molecular mechanisms underlying complex, multifactorial traits and diseases such as cancer, diabetes, obesity, cardiovascular disease, and substance addiction.

We welcome submissions that address methodological and practical challenges in identifying gene–environment interactions, predicting polygenic risk, conducting causal inference using integrative omics, and performing network-based analysis of biological pathways.

Applications may span a broad spectrum of traits, from metabolic and behavioral phenotypes to neuropsychiatric conditions or agriculturally important traits in plants and animals. Please kindly note that research articles require biological verification.

Guest Editor

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Deadline for manuscript submissions

20 January 2026

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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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