

## Special Issue

# Integrating Traditional and Modern Technology for Cattle Genetic Improvement

### Message from the Guest Editors

Cattle breeding, genetics, and genomics are crucial for driving advancements in sustainable livestock production, enhancing productivity, and ensuring the health and adaptability of cattle populations. We are particularly interested in studies that explore the integration of traditional breeding practices with modern genomic tools to enhance productivity, sustainability, and adaptability in cattle populations. Key topics include the analysis and application of genomic selection, functional genomics, and epigenetic studies to identify genes and pathways that influence economically essential traits, such as milk yield, meat quality, disease resistance, and reproductive performance. The Special Issue is also particularly interested in studies about the role of advanced technologies, such as whole-genome sequencing, genome-wide association studies (GWAS), and machine learning, in accelerating genetic progress and improving breeding strategies.

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### Guest Editors

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### Deadline for manuscript submissions

closed (15 January 2026)

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## Genes

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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?

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