

## Special Issue

# Genetics and Genomics of Cattle

### Message from the Guest Editor

In recent decades, genome discovery has been one of the greatest advances in the development of tools for the genetic improvement of cattle. The availability of medium- and high-density SNP (single-nucleotide polymorphism) arrays combined with advanced statistical methods allows for genomic selection, which is revolutionizing livestock breeding. The science of genetics and genomics has traversed a long way, through ground-breaking discoveries of cytogenetic maps, synteny analysis, somatic cell genetics, in situ hybridization, radiation-hybrid maps, high-resolution comparative maps, molecular markers, rudimentary genome maps, association studies for quantitative trait loci, marker-assisted selection, high-throughput SNP genotyping, and whole-genome shotgun sequencing to whole-genome mapping, which have had considerable positive effects on molecular breeding. This Special Issue in *Genes*, entitled “Genetics and Genomics of Cattle”, will highlight how genetic and genomic technologies are paving the way to improve cattle production systems.

### Guest Editor

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### Deadline for manuscript submissions

closed (25 October 2023)

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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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### Editor-in-Chief

Prof. Dr. Selvarangan Ponnazhagan  
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