

## Special Issue

# Systematic Analysis and Application of Omics Data in Animal Breeding

### Message from the Guest Editors

Over the past decade, the application of genome-wide association studies and genomic selection in pigs was mainly based on SNP chip data. Advances in next-generation sequencing technology and the reduction of sequencing costs have led to a surge in omics data including genomics, transcriptomics, epigenomics, metabolomics, proteomics, microbiomics etc. These rich omics data have provided unprecedented opportunities to systematically elucidate the biological mechanisms of economically important traits from multiple layers in the pig. However, it is a major challenge not only in systematically analyzing these data and formulating new hypotheses but also effectively utilizing them for pig genetic improvement and conservation.

This Special Issue aims to collect high-quality original research articles, mini-reviews, and full-length reviews to address emerging challenges, focusing on “Systematic analysis and application of omics data in pig breeding”. Our topic welcomes but is not necessarily limited to progress in the knowledge of the aforementioned issues. Contributions by experts in the field in the form of research papers and critical reviews are called for.

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### Guest Editors

Prof. Dr. Fuping Zhao

Prof. Dr. Zhe Zhang

Dr. Lingzhao Fang

Dr. Ruidong Xiang

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### Deadline for manuscript submissions

closed (15 September 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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