# **Special Issue**

# The Whole-Genome Analysis and Breed Evolution of Horses

### Message from the Guest Editor

The domestication and selection of horses in different environments for specific purposes has resulted in more than 500 horse breeds worldwide. Understanding genetic variation between and within horse breeds should increase our knowledge of the genetic mechanisms involved in the development of traits and their genomic architecture. The identification of the variants and genes involved in the determination of traits should shed light on how selection has shaped different horse breeds.

In this Special Issue, we invite papers focusing on genome-wide association studies using SNP-by-SNP and multimarker methods. We also welcome papers that highlight selection signatures in horse breeds and the effects of inbreeding on traits. These findings will contribute to the refinement of breeding programs, provide new insights into the history of breeds and open the way for new traits in horse breeding.

This Special Issue aims to publish papers that address breed traits and their underlying genetic or regulatory variants, as well as genomic architecture and its consequences in a variety of horse breeds.

#### **Guest Editor**

Prof. Dr. Ottmar Distl

Institute for Animal Genomics, University of Veterinary Medicine Hannover, 30559 Hannover, Germany

### Deadline for manuscript submissions

closed (20 January 2025)

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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?

### Editor-in-Chief

### Prof. Dr. Selvarangan Ponnazhagan

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