



## Genetic Diversity in Livestock and Companion Animals

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### Message from the Collection Editor

Genetic diversity in reared populations plays an important role. The maintenance of genetic variability is necessary for the selection and genetic improvement strategies. One of the goals of selection is to improve desirable traits, limiting the rate of decline of genetic diversity within populations, and reduce the deleterious alleles.

Molecular DNA markers such as microsatellites, SNPs, and CNVs are used to investigate the genetic basis of traits, supplying a support to phenotypic evaluation and genealogical data analysis. The collection of phenotypic data and the different genomic approaches can be used to investigate the genetic basis of inheritance for both Mendelian and complex diseases. Comparison of phylogenetic data, inferred from DNA sequences with different inheritance patterns, such as mitochondrial DNA sequences and Y-chromosome sequences, is widely used to study the genetic relationships and evolutionary history of breeds.

Submissions of original research papers and review articles related to animal genetic diversity as well as the advances in genetics on companion animals and on sustainable livestock productions are welcome.





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## Message from the Editor-in-Chief

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