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Genetic Research and Plant Breeding

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Message from the Guest Editors

Over the last two decades, molecular biology has improved markedly in QTL and functional analysis, as well as gene identification and cloning in plant species. In parallel, innovation in molecular technologies has been exponential in the areas of genetics and genomics.

Functional genomics has become one of the most promising scientific areas in the characterization of gene (and protein) functions and interactions using vast genetics and various omics data. In addition, there are various advanced tools and methodologies that could also allow the effective and efficient validation of gene functions when used in lab settings such as transcriptome, metabolomics, overexpression, knock-out, RNAi and gene editing, and when applying advanced computational methodologies such as machine learning and deep learning.

This Special Issue welcomes original research articles and reviews that explore agronomic trait characterization, gene discovery, and function and expression control analysis, using both wet lab technologies and computational biology which could accelerate plant breeding programs.













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Message from the Editor-in-Chief

Genes are central to our understanding of biology, and modern advances such as genomics and genome editing have maintained genetics as a vibrant, diverse and fastmoving 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.

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