



## Plant Genetics and Molecular Breeding

Guest Editor:

**Dr. Pedro Martínez-Gómez**

CEBAS-CSIC, Centro de  
Edafología y Biología Aplicada  
del Segura, Department of Plant  
Breeding, 30100 Murcia, Spain

Deadline for manuscript  
submissions:

**closed (20 February 2019)**

### Message from the Guest Editor

The development of new plant varieties is a long and tedious process involving the generation of large seedling populations for the selection of the best individuals. Genomic studies for the development of marker-assisted selection strategies are particularly useful when the evaluation of the character is expensive, time-consuming. Recently, proteomic and transcriptomic studies have been used for the clarification of the mentioned genomic studies.

This Special Issue aims to report high novelty results and/or plausible and testable new models for the integrative analysis of the different approaches applied to plant breeding including genetic (phenotyping and transmission of agronomic characters), genomic (DNA regions responsible for the different agronomic characters), proteomic (proteins and enzymes involved in the expression of the characters) and transcriptomic (gene expression analysis of the characters) approaches for the development of new MAS strategies. Besides, the application of massive sequencing methodologies ("deep-sequencing") of the genome and transcriptome, based on lowering the costs of DNA sequencing, could be an additional interesting approach in this Issue.





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Maurizio Battino

Department of  
Odontostomatologic and  
Specialized Clinical Sciences,  
Sez-Biochimica, Faculty of  
Medicine, Università Politecnica  
delle Marche, Via Ranieri 65,  
60100 Ancona, Italy

## Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), PubMed, PMC, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q1 (*Biochemistry & Molecular Biology*) / CiteScore - Q1 (*Inorganic Chemistry*)

## Contact Us

*International Journal of Molecular  
Sciences* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
www.mdpi.com

mdpi.com/journal/ijms  
ijms@mdpi.com  
X@IJMS\_MDPI