

Special Issue

Plant Population Genomics

Message from the Guest Editor

The field of plant population genomics is rapidly evolving in terms of its conceptual framework, its methodologies, and its applications, mostly due to advances in the sequencing technologies and computing capacity. For instance, the conceptual framework and practical tools have shifted from classical quantitative genetics and QTL genetic mapping to latest-generation GWAS models, genomic prediction, machine learning forecasting, and the omnigenic model. Similarly, this base knowledge has led to ecological genomic applications transcending the fields of speciation and adaptation into the frameworks of genomic islands of divergence, conservation genomics, genetic-assisted gene flow, and genomics for restoration. Plant breeding has also been boosted by developments in the population genomics field by shifting from Mendelian marker-assisted selection and marker-assisted backcrossing into genomic-enabled prediction, genomic-assisted introgression breeding, and enviromics. Therefore, this book aims to summarize, discuss, and recommend historical and modern developments that will continue enabling plant population genomics, its foundations, methodologies, and uses.

Guest Editor

Dr. Andrés J. Cortés

Departamento de Ciencias Forestales, Facultad de Ciencias Agrarias,
Universidad Nacional de Colombia—Sede Medellín, Medellín 050034,
Colombia

Deadline for manuscript submissions

closed (20 March 2024)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/156548

*International Journal of
Molecular Sciences*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
ijms@mdpi.com

[mdpi.com/journal/
ijms](https://mdpi.com/journal/ijms)





International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



[mdpi.com/journal/
ijms](https://mdpi.com/journal/ijms)



About the Journal

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.

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

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 and Molecular Biology) / CiteScore
- Q1 (Organic Chemistry)