

## Special Issue

# Regulations by Small RNA in Plant Development and Beyond

### Message from the Guest Editors

Plants are subjected to several environmental stimuli and a fine transcriptome reprogramming is needed to allow the balance between the plant response to stress factors and processes of plant growth and development. In this context, non-coding RNAs (ncRNAs) are fundamental players in the transcriptional and epigenetic regulatory mechanisms involved in the development and environmental adaptation of plants. Basing on their biogenesis, small RNAs are classified in different categories, each exerting specific functions in gene regulation that often overlap with hormonal signalling cascades. Although in the last decade there was a real explosion of studies on plant small RNAs, much of RNA signalling pathways is still unknown. Papers submitted to this Special Issue should report novel and timely results unveiling significant aspects of small RNA-mediated signalling pathways, including DNA methylation patterns, crucial for the understanding of plant development, and of physiological and molecular responses to abiotic and biotic stress. Groundbreaking insights shedding new light on MIRNA genes and/or the diversification of miRNA biogenesis and functionality in plants are welcome as well.

### Guest Editors

Dr. Giorgio Gambino

Istituto per la Protezione Sostenibile delle Piante, Consiglio Nazionale delle Ricerche, Torino, Italy

Dr. Chiara Pagliarani

Istituto per la Protezione Sostenibile delle Piante, Consiglio Nazionale delle Ricerche, 10125 Torino, Italy

### Deadline for manuscript submissions

closed (31 July 2019)



## International Journal of Molecular Sciences

an Open Access Journal  
by MDPI

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



[mdpi.com/si/19612](https://mdpi.com/si/19612)

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