Special Issue

Advances in Plant Cell Dynamics

Message from the Guest Editor

Plant cells, though immobile, achieve dynamic organization through the relentless movement of cellular components, primarily via cytoplasmic streaming. Cellular responses to internal developmental cues and external environmental stimuli involve the strategic repositioning of organelles and molecules. This Special Issue aims to advance our understanding of these cellular adjustments and their roles in plant development and stress adaptation. Contributions will leverage cutting-edge imaging techniques, genetic tools, and biochemical approaches to explore the complexities of changes occurring in the cell wall, membrane compartments, cytoskeleton, and signalling pathways. By promoting interdisciplinary collaborations, we aim to deepen insights into plant cell biology and reveal the underlying cellular mechanisms that drive growth, development, and reproduction.

Guest Editor

Dr. Andrei Smertenko

Institute of Biological Chemistry, Plant Sciences Building, Room 281, Washington State University, Washington, WA, USA

Deadline for manuscript submissions

20 January 2026



International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed



mdpi.com/si/221643

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





International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed





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)

