

Special Issue

Autophagy and Viral Infections: The Era of New Therapeutical Strategies

Message from the Guest Editor

The autophagy system is a classical system that regulates the cellular homeostasis. The balance between healthy and pathological conditions is related to the development of new in vitro and in vivo therapeutic strategies in defining its clinical management in patients. The macroautophagy exacerbates the system's role in recycling and degrading macromolecules, and in damaging organelles and portions of cytoplasmic space. This cellular system is triggered by several stimuli under stress conditions. The LC3-II isoform is a marker of the onset of autophagy cascade, highlighting the synthesis of double vesicles enriched by cargo and the fusion with autolysomes. The last step requires the degradation of target cargo and the recycling of macronutrients. The viral infection is managed by the degradation of host microbes by the macroautophagy system (e.g., Influenzae Virus). However, gamma-herpesviruses hijack the autophagy system to sustain the viral maturation in the cytoplasmic compartments.

Guest Editor

Dr. Marisa Granato

Department of Human Sciences and Quality of Life Promotion, San Raffaele Open University, 00166 Rome, Italy

Deadline for manuscript submissions

20 September 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/226860

*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)* 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, and molecular biophysics. *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. José L. Quiles
Department of Physiology, Institute of Nutrition and Food Technology
"Jose Mataix", Biomedical Research Center, University of Granada,
Avda. Conocimiento s/n, 18100 Armilla, Granada, Spain

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, CAPus / SciFinder, and other databases.

Journal Rank:

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