

Special Issue

Unraveling the Enigma of Colorectal Cancer: From Mechanisms to Therapeutic Advances

Message from the Guest Editors

Colorectal cancer (CRC) remains a significant global health burden, with an increase in its incidence and mortality rates necessitating a deeper understanding of its molecular underpinnings. Unravelling the intricate regulatory networks that govern the pathogenesis of CRC is essential for developing precision therapies and improving clinical outcomes. This Special Issue aims to present cutting-edge research on the molecular drivers of CRC, including genetic mutations, epigenetic modifications, transcriptomic and proteomic alterations, and the dysregulated signalling pathways that orchestrate the initiation, progression, and therapeutic resistance of tumors. We will place particular emphasis on the interplay between oncogenes and tumor suppressors, the tumor microenvironment, immune evasion mechanisms, and the utilization of emerging biomarkers in early detection and prognostic assessment. Additionally, we explore novel therapeutic paradigms, such as targeted therapies, immunotherapy, and multi-modal treatment strategies, that circumvent drug resistance and enhance therapeutic efficacy.

Guest Editors

Dr. Valentina Belli

National Cancer Institute—IRCCS, Fondazione “G. Pascale”, 80131 Naples, Italy

Dr. Vincenza Ciamarella

IRCCS SDN, Istituto di Ricerca, Naples, Italy

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/233286

*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)