

Special Issue

DNA Damage Repair in Cancer: Genetics, Molecular Mechanisms, Diagnostic and Therapeutic Perspectives

Message from the Guest Editors

DNA damage response (DDR) plays a crucial role in genome integrity preservation. Changes in DNA damage signaling pathways, DNA repair, and DNA recombination, among other mechanisms, can potentially lead to genomic instability, increase susceptibility to cancer, and influence cancer treatment. Genome instability is a well-established hallmark of cancer, also showing a role in tumor sensitivity and resistance to cancer therapy (including chemotherapy and radiation). Since genome instability, mutation burden, and DNA repair efficiency in cancer cells may have prognostic and predictive value, they also provide a portfolio of new molecular targets and treatment strategies in cancer.

We invite researchers to submit research and review articles addressing various issues DNA repair in cancer, including but not limited to the following topics:

DNA damage and repair as mechanisms of carcinogenesis

DDR in cancer biology

Role of DNA damage and repair in cancer diagnosis and prognosis

DNA repair as a molecular target and therapeutic option in cancer

Guest Editors

Dr. Dana Jurkovičová

Cancer Research Institute, Biomedical Research Center, Slovak Academy of Sciences, Dubravská cesta 9, 845 05 Bratislava, Slovakia

Dr. Ana Cristina Gonçalves

1. Laboratory of Oncobiology and Hematology (LOH) and University Clinics of Hematology and Oncology, Faculty of Medicine, University of Coimbra, 3000-548 Coimbra, Portugal
2. Coimbra Institute for Clinical and Biomedical Research (iCBR)—Group of Environmental Genetics of Oncobiology (CIMAGO), Faculty of Medicine, University of Coimbra, 3000-548 Coimbra, Portugal
3. Center for Innovative Biomedicine and Biotechnology (CIBB), 3004-504 Coimbra, Portugal

Deadline for manuscript submissions



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/148229

*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)