



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

Guest Editors:

**Dr. Dana Jurkovičová**

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

**Dr. Ana Cristina Gonçalves**

Deadline for manuscript  
submissions:

**closed (30 April 2024)**

### Message from the Guest Editors

Dear Colleagues,

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





an Open Access Journal by MDPI

## 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

## 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.

## 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)

## Contact Us

---

*International Journal of Molecular  
Sciences* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
www.mdpi.com

mdpi.com/journal/ijms  
ijms@mdpi.com  
X@IJMS\_MDPI