



The Cellular Response to DNA Damage: From DNA Repair to Polyploidy and Beyond

Guest Editor:

Prof. Dr. Razmik Mirzayans

Department of Oncology,
University of Alberta, Cross
Cancer Institute, Edmonton, AB
T6G 1Z2, Canada

Deadline for manuscript
submissions:

closed (31 August 2020)

Message from the Guest Editor

Dear Colleagues,

The purpose of this Special Issue is to provide a comprehensive update on the growing complexity of cellular responses to DNA-damaging agents. Articles on advances in single-cell detection methodology to study the long-term fate of human cells following anticancer treatment are particularly welcomed.

Potential topics include, but are not limited to:

- DNA repair deficiency syndromes
- DNA repair pathways
- Cell cycle checkpoints
- Biological outputs orchestrated by p53 signaling
- Cancer cell dormancy and disease relapse post-therapy
- Reversible apoptosis (anastasis)
- Reversible polyploidy/multinucleation (atastic model of cancer)
- Novel therapeutic strategies targeting dormant cancer cells

Dr. Razmik Mirzayans

Guest Editor





an Open Access Journal by MDPI

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

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.

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 & Molecular Biology*) / CiteScore - Q1 (*Inorganic Chemistry*)

Contact Us

*International Journal of Molecular
Sciences* Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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

mdpi.com/journal/ijms
ijms@mdpi.com
X@IJMS_MDPI