Special Issue

Advances in Molecular Therapy Targeting DNA Damage and Repair Systems

Message from the Guest Editors

DNA damage and repair defects have been emerging as a central player in a broad spectrum of human diseases, such as neurodegeneration, cardiovascular diseases, and cancer. DNA base mutations, abnormal sequence deletion/inclusion, nucleotide adduct formation, and chromatin landscape alterations are the major pathological changes in DNA molecules that can lead to sporadic or familial diseases. In most cases, uncontrolled inflammatory responses due to persistent DNA damage response (DDR) signal activation and impaired or defective repair machinery are believed to be the main etiopathological factors. In this Special Issue, we invite original studies and review articles covering the molecular advances in DNA damage and repair systems, such as what is the relationship between DNA damage and metabolic dysfunctions and how chromatin structure remodeling influences repair processes. These advances will enable researchers to better understand the mechanisms of DDR and DNA repair. That will also lead to new therapeutic strategies for treating DNA damage-related diseases, including cancer and neurodegeneration.

Guest Editors

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Biomolecules is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in *Biomolecules* so far. We would be delighted to welcome you as one of our authors.

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