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DNA Damage and DNA Repair in Cancer

Guest Editors:

Prof. Dr. Alexandros Georgakilas

DNA Damage Laboratory, Department of Physics, School of Applied Mathematical and Physical Sciences, Zografou Campus, National Technical University of Athens (NTUA), 15780 Athens, Greece

Prof. Dr. Lorenzo Manti

Radiation Biophysics Laboratory, Department of Physics, University of Naples Federico II, Complesso Universitario di Monte Sant'Angelo, Via Cinthia, 80126 Naples, Italy

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Message from the Guest Editors

This Special Issue focuses on the most recent insights on the role(s) that DNA damage and repair have on cancer development and therapy. The maintenance of DNA integrity and the fidelity of the repair of exogenous as well as endogenous DNA damage as the main barrier against cellular transformation is a tenet in carcinogenesis. Cancerous cells are commonly viewed as lacking repair proficiency or harbouring defective biomolecular pathways compared to non-cancer cells. At the same time, many forms of anticancer strategies rely on further impairing cancer cell repair ability. However, how the latter is achieved varies according to whether the anticancer agent is a chemical or ionizing radiation, for example. Understanding how cancer may continue to progress in the face of incorrect lesion restitution and immune system evasion is arguably a crucial target of interdisciplinary research.

Therefore, in this Special Issue, we welcome original basic research carried out by pre-clinical in vitro and/or in vivo approaches, as well as up-to-date reviews on these topics, with special emphasis on the novel frontiers in the fields of radiotherapy, immunotherapy and anticancer molecular targets.













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Editors-in-Chief

Prof. Dr. Peter E. Nielsen

Department of Cellular and Molecular Medicine, Faculty of Health and Medical Sciences, University of Copenhagen, Blegdamsvej 3C, DK-2200 Copenhagen, Denmark

Prof. Dr. Lukasz Kurgan

Department of Computer Science, Virginia Commonwealth University, Richmond, VA 23284, USA

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