



DNA Repair: From Neuronal Development to Degeneration

Guest Editor:

Dr. Flavia Antonucci

Department of Pharmacological
and Biomolecular Sciences,
Università degli Studi di Milano,
Milan, Italy

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Message from the Guest Editor

Recent studies have demonstrated that the proper development of cognitive abilities is also a consequence of the proper functioning of DNA double-strand breaks (DSBs) machinery. Furthermore, clinical reports describe developmental defects and increased hyperexcitability in subjects with genetic mutations against genes linked to the DNA repair pathways. This evidence indicates how changes in DNA repair proteins may affect brain developmental processes. In parallel, recent data established a connection between reduced DNA repair capacity and neurodegenerative conditions, which are profoundly characterized by defective cognitive abilities, as found in preclinical studies for Parkinson's and Alzheimer's diseases. Thus, the scope of this Special Issue is to highlight why and how DNA repair machinery is implicated in neurological and cognitive diseases, thus representing a new pathological substrate and potential therapeutic target for neurological states.





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Prof. Dr. Felipe Fregni

1. Neuromodulation Center and
Center for Clinical Research
Learning, Spaulding
Rehabilitation Hospital and
Massachusetts General Hospital,
Harvard Medical School, Boston,
MA 02114, USA
2. Department of Epidemiology,
Harvard T.H. Chan School of
Public Health, Boston, MA 02115,
USA

Message from the Editor-in-Chief

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Biomedicines Editorial Office
MDPI, St. Alban-Anlage 66
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