Special Issue

Pathogenesis and Therapeutic Intervention of Alzheimer's Disease

Message from the Guest Editor

Alzheimer's Disease (AD) is the most common cause of dementia. Neuronal death occurs via several mechanisms, including oxidative stress, excitotoxicity, energy depletion, inflammation, and apoptosis, particularly in brain regions that are essential for cognitive and memory functions. An enhanced understanding of the molecular mechanisms that underlie neuronal cell death and glial homeostasis could pave the way for novel therapeutic strategies. Several treatments have progressed to the clinical stage, including acetylcholinesterase inhibitors, nerve growth factors, nonsteroidal anti-inflammatory drugs (NSAIDs), estrogen, and compounds such as antioxidants, neuronal calcium channel blockers, and anti-apoptotic agents. More recently, it has been suggested that the gut microbiome could influence the function of the brain. Additionally, the application of artificial intelligence in the identification of novel AD-related genes has provided new opportunities for research and therapeutic development.

Guest Editor

Dr. Chanchal Sharma

Department of Molecular Medicine, Byrd Alzheimer's Center and Research Institute, University of South Florida, Tampa, FL, USA

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Biomedicines
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
biomedicines@mdpi.com

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Biomedicines (ISSN 2227-9059) is an open access journal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to Biomedicines, be it original research, review articles, or developing Special Issues of current key topics.

Editor-in-Chief

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

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