



## Recent Drug Design Strategy of the Design of Molecules against Alzheimer's Disease and Parkinson's Disease

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Deadline for manuscript  
submissions:

**closed (31 January 2023)**

### Message from the Guest Editors

Dear Colleague,

Alzheimer's disease (AD) and Parkinson's disease (PD) are the most prevalent of the heterogeneous and complex neurodegenerative disorders (NDDs) that largely affect the elderly patients. Their pathogenesis has been attributed to a variety of genomic, epigenomic, and environmental factors. Mounting evidence indicates that drugs targeting a single pathway cannot adequately address the multifactorial nature of NDDs. Oxidative stress, mitochondrial dysfunction, and imbalances in the levels of enzymes that control the metabolism of biogenic amines may promote NDD progression. On the other hand, several molecular scaffolds have been designed to simultaneously target entities such as choline esterase (ChE), monoamine oxidases (MAOs), and  $\beta$ -site amyloid precursor protein cleaving enzyme 1 ( $\beta$ -secretase, BACE-1), to retard NDD progression.

Topics to be covered include the following:

- Multi-target design of the molecules for AD;
- Multi-target design of the molecules for PD;
- Natural isolates for AD and PD;
- Synthesis and Biological evaluation for the treatment of AD and PD.





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## Message from the Editor-in-Chief

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