



## Advances in the Search for Protective Agents against Amyloid $\beta$ -Induced Brain Degeneration

Guest Editor:

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Deadline for manuscript submissions:

**30 August 2024**

### Message from the Guest Editor

Dear Colleagues,

The enhanced production of neurotoxic amyloid  $\beta$  peptides in the brain has been reported in the context of brain neurodegenerative processes and neurological disorders. Neurotoxic amyloid  $\beta$  peptides can be produced by neurons and/or reactive astrocytes generated due to the brain inflammation observed in neurodegenerative processes. The small oligomers of neurotoxic amyloid  $\beta$  peptides are chiefly responsible for the neurotoxicity of amyloid  $\beta$  peptides in the brain. This Special Issue focuses on agents that afford protection against the rise of neurotoxic amyloid  $\beta$  peptides in the intracellular and extracellular spaces of the brain, which could find potential applications in improved therapies aiming to delay or prevent brain neurodegeneration. These agents can be endogenous biomolecules that scavenge nanomolar concentrations of neurotoxic amyloid  $\beta$  peptides, a primary defense barrier, but also compounds that attenuate the production of these peptides or antagonize the neuronal dysfunctions induced by neurotoxic amyloid  $\beta$  peptides. Eventually, this leads to neuronal death.

Prof. Dr. Carlos Gutiérrez-Merino

*Guest Editor*





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