

Special Issue

Neuropeptides in Brain Health and Disease: From Molecular Mechanisms to Therapeutic Potential

Message from the Guest Editor

Neuropeptides play key roles in neural development, synaptic transmission, neuroimmune interactions, and the regulation of inflammation, myelination, and regeneration. Understanding their signaling pathways and receptor dynamics at the molecular level is crucial to uncovering their impact on brain function and dysfunction. This Special Issue will encompass topics that explore the molecular functions and mechanisms of neuropeptides in the central nervous system (CNS), both under physiological and pathological conditions. We welcome original research articles, reviews, systematic reviews, and meta-analyses that address neuropeptide-related mechanisms in healthy states as well as in neurodegenerative diseases, demyelinating disorders, neuropsychiatric conditions, or brain injury. Special emphasis will be placed on studies investigating intracellular signalling, gene and protein expression changes, receptor-ligand interactions, and cross-talk between neurons and glial cells. This Special Issue aims to foster a deeper understanding of neuropeptide biology and promote research that bridges basic molecular insights with therapeutic development for CNS disorders.

Guest Editor

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Message from the Editor-in-Chief

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