



## Recent Advances in Understanding of the Role of Synuclein Family Members in Health and Disease

Guest Editor:

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### Message from the Guest Editor

Extensive studies of  $\alpha$ -synuclein function and dysfunction revealed its involvement in multiple normal and aberrant molecular processes and consequently, various effects on the nervous system cell biology. However, certain other types of cells normally express this protein, and they may also be affected by  $\alpha$ -synuclein dysfunction and thus contribute to pathological changes in  $\alpha$ -synucleinopathies. It would be beneficial to summarise scattered data on these aspects of  $\alpha$ -synuclein biology and pathology. Recent studies draw attention to the other two members of the family, b-synuclein and g-synuclein, whose role in homeostasis and pathology is still poorly understood. Three members of the family share many structural properties and have an overlapping pattern of expression and intracellular distribution in the developing and adult nervous system, which point to functional redundancy within the family. However, each synuclein has its own functions unshared with two other synucleins and in some cellular mechanisms and pathways, these functions could be antagonistic rather than synergistic.





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