

Special Issue

Biological Pathways and Molecular Mechanisms of Dementia

Message from the Guest Editors

Dementia is one of the most serious health problems among the elderly, for which only limited medical treatment is available. Molecular pathological studies of dementia disorders, such as Alzheimer's disease (AD), frontotemporal dementia (FTD), and dementia with Lewy bodies (DLB), have greatly advanced along with the discoveries of the genes associated with their familial forms as well as their risk genes. Notably, recent evidence suggests that pathological hallmark proteins, such as amyloid- β (A β), tau, TDP-43, FUS, and α -synuclein, are linked to various biological and molecular pathways: for example, enzymes including proteases (e.g. β -, γ -, δ -secretases), kinases, phosphatases, acetylcholine esterase, and glucocerebrosidase; neurotransmitters, neurotrophic factors, hormones, and other biological ligands and their receptors; lipids and apolipoproteins and their receptors; cell death pathways, including apoptosis and necroptosis; intracellular transport systems, including axonal transport; proteostasis, including ubiquitin proteasome systems (UPSs), autophagy, and mitophagy.

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Cells has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. *Cells* encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

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