# Special Issue

# Protein Misfolding and Aggregation: From Molecular Mechanisms to Human Diseases

## Message from the Guest Editors

Protein folding is a nuanced process encoded by, and dependent on, the intrinsic properties of the primary amino acid sequence as well as cellular protein quality control machinery. Misfolded proteins can aggregate into toxic oligomers, or amyloid fibrils, and are associated with diseases including Alzheimer's and Parkinson's diseases as well as type II diabetes. These amyloid deposits share a common cross-β structure regardless of their primary amino acid sequences. Recent studies have demonstrated biomolecular condensate formation as an additional commonality inherent to some amyloid-forming proteins. The emergent biophysical properties of condensates can modulate protein aggregation; thus, an understanding of the structural and kinetic basis of amyloid formation as well as the protein quality control machinery is important for understanding protein misfolding diseases and the downstream development of therapeutics. This Special Issue calls for diverse and comprehensive overviews that illustrate protein misfolding and neurodegenerative diseases from biophysical, biochemical, or cellular biological perspectives.

## Guest Editors

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## Deadline for manuscript submissions

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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.

## Editors-in-Chief

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