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Lipid Membranes and Lipid-Like Molecules Catalyze Protein Aggregation

Guest Editors:

Dr. Jobin Varkey
Keck School of Medicine, University of Southern California, Los Angeles, CA-90033, USA

Dr. Anoop Rawat
Keck School of Medicine, University of Southern California, Los Angeles, CA 90033, USA

Dr. Nitin Kumar Pandey
Keck School of Medicine, University of Southern California, Los Angeles, CA-90033, USA

Deadline for manuscript submissions:
closed (30 April 2022)

Message from the Guest Editors

Dear Colleagues,

Generally, specific proteins have been implicated in such diseases and have been shown to undergo monomer to fibril transition through oligomeric forms. Many studies underscore the importance of identifying and understanding the mechanism(s) that promote(s) this transition. Among several factors promoting misfolding and aggregation of such proteins, lipid membranes and lipid-like molecules are of prime importance due to their abundance in the cellular environment and unique physicochemical properties. Notably, lipid and protein co-aggregates have been commonly observed in the plaques from autopsy samples of many age-related diseases.

This Special Issue is focused on studies investigating the effect of lipid membranes and lipid-like molecules on misfolding and aggregation of proteins and peptides implicated in several diseases of neuronal and non-neuronal origin. We invite original research articles, reviews, mini-reviews, and short articles covering molecular, structural, mechanistic, and cellular aspects of membrane-mediated protein misfolding and toxicity.

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mdpi.com/si/64032

Special Issue