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Determining the molecular basis of neurodegenerative disorders such as Alzheimer's disease and Parkinson's disease and establishing strategies for the treatment of these intractable diseases are urgent tasks of pharmaceutical scientists today when the aging of society is intensifying. Human genome analyses have revealed the causative genes of the familial neurodegenerative disorders and associations between their mutations and the diseases, which are characterized by the accumulation of protein aggregates in the brain. Growing evidence suggests that sporadic neurodegenerative disorders also result from bankruptcy of the intracellular "protein society," which includes the infrastructure for folding, transport, and quality control of proteins in cells. Therefore these systems are expected to become new targets for drug discovery aimed at the prevention and treatment of neurodegenerative disorders.

This symposium intends to provide an up-to-date overview of the research on neurodegenerative disorders and to cover emerging topics from the molecular, functional, and clinical points of view. We will discuss the possibility of drug discovery for the treatment of neurodegenerative disorders.