

Abstract

Neurodegenerative diseases, Viral Infections, and Autophagy

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Age-related neurodegenerative diseases such as Alzheimer's disease, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and frontotemporal dementia are devastating diseases, and no curative treatments are available. While their etiologies are not fully understood, a shared hallmark is the accumulation of neurotoxic protein aggregates. Autophagy, the conserved cellular degradation pathway, plays a critical role in clearing these aggregates, as its impairment leads to their buildup. Interestingly, many viruses subvert autophagy to evade the cellular host defence. This talk will focus on how neurotrophic viruses may contribute to the initiation or progression of neurodegenerative diseases by disrupting innate immune responses and autophagy.