



## Axonopathy in Neurodegenerative Diseases

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### Message from the Guest Editor

Axonal degeneration or axonopathy is a neurotoxic disorder. Its primary site of toxicity is the axon. Axonopathies represent a common starting point for neuronal pathological alterations across wide range of neurodegenerative diseases. Axons transfer proteins and organelles throughout the nervous system. Axonal transport is necessary to maintain neuronal homeostasis depending on efficient degradation pathways such as the autophagy mechanism. So the precise investigation of autophagy in the soma, axons, or synapses would represent beneficial therapeutic intervention to combat neurodegenerative diseases. Lipids and lipid-metabolizing enzymes control fundamental aspects of the autophagy process, and lipids have also been identified as autophagy substrates. Notably, neurodegenerative diseases share lipid dysregulation as a metabolic feature in disease pathology. Hence, the knowledge of the molecular mechanisms between axonal maintenance, autophagy, and lipid droplets is critical to combat neurodegenerative diseases. This Special Issue will collect papers focused on understanding the mechanisms relating autophagy to axonal damage in axonopathies in the context of lipid metabolism.





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## Message from the Editor-in-Chief

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