# Cellular Pathways in Neurodegenerative Disorders

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**Abstract.** This study investigates the cellular pathways involved in neurodegenerative disorders such as Alzheimer's and Parkinson's disease. These conditions are characterized by the progressive loss of neuronal function and structure. The research focuses on key cellular processes, including protein aggregation, oxidative stress, and mitochondrial dysfunction, that contribute to neuronal degeneration. By understanding these pathways, the study aims to identify potential therapeutic targets to halt or reverse the progression of neurodegenerative diseases.

**Keywords:** Neurodegenerative disorders, Protein aggregation, Oxidative stress, Mitochondrial dysfunction, Therapeutic targets

## Introduction

Neurodegenerative disorders, such as Alzheimer's and Parkinson's disease, are marked by the gradual loss of neuronal structure and function, leading to cognitive and motor deficits. The cellular pathways involved in these diseases are complex and multifactorial, involving protein misfolding, oxidative stress, and mitochondrial dysfunction. This study seeks to elucidate the cellular mechanisms contributing to neurodegeneration, with the goal of identifying potential therapeutic targets. By targeting these pathways, we aim to develop strategies to prevent or slow the progression of these debilitating conditions.



## References

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