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Yeast buddies helping to unravel the complexity of neurodegenerative disorders

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Abstract

Neurodegenerative disorders have a profound effect on the quality of life of patients and their environment. However, the development of adequate therapies requires accurate understanding of the underlying disease pathogenesis. On that account, yeast models can play an important role, as they enable the elucidation of the mechanisms leading to neurodegenerative disorders. Furthermore, by using so-called humanized yeast systems, the findings in yeast can be interpolated to humans. In this review, we will give an overview of the current body of knowledge on the use of yeast models with regard to Huntington's, Parkinson's and Alzheimer's disease. In addition to the results, obtained with the baker's yeast *Saccharomyces cerevisiae*, we also consider the existing literature on the less common but promising fission yeast *Schizosaccharomyces pombe*.

Keywords: Alzheimer, Parkinson, Huntington, prion, yeast

Graphical abstract

Highlights

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