

Role of caspases in human neuronal cell death and in Alzheimer's disease.

<https://www.neurodegenerationresearch.eu/survey/role-of-caspases-in-human-neuronal-cell-death-and-in-alzheimers-disease/>

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Country

Canada

Title of project or programme

Role of caspases in human neuronal cell death and in Alzheimer's disease.

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5.0

The project/programme is most relevant to:

Alzheimer's disease & other dementias

Keywords

Research Abstract

Current therapies against Alzheimer disease are very limited. One possible reason for failure to achieve efficient therapies against Alzheimer disease is that we do not have a thorough understanding of the earliest degenerative events that occur in the brain to lead to Alzheimer disease. The research of my team is dedicated at identifying the earliest degenerative processes that occur in aging brains. We have identified that Caspase-6, an enzyme that

causes neurodegeneration, is activated in some aged individuals but not in younger individuals. The Caspase-6 is activated in the area of the brain first affected by Alzheimer disease. Caspase-6 is also abundantly active in brains of Alzheimer disease patients at all stages of the disease and is present in all areas that are affected by Alzheimer disease. In this proposal, we will try to further understand how Caspase-6 is activated in neurons, attempt to develop a mouse model with Alzheimer disease by expressing Caspase-6 in the brain of mice, and assess the effects of Caspase-6 on neuronal function. The results of these experiments could indicate that Caspase-6 is an important therapeutic target against Alzheimer disease.

Lay Summary

Further information available at:

Types:

Investments > €500k

Member States:

Canada

Diseases:

Alzheimer's disease & other dementias

Years:

2016

Database Categories:

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