Investigation of the roles of GSK-3 isoforms in mediating Abeta, tau and insulin related Alzheimer-like synaptic, cholinergic impairments

https://neurodegenerationresearch.eu/survey/investigation-of-the-roles-of-gsk-3-isoforms-in-mediating-abeta-tau-and-insulin-related-alzheimer-like-synaptic-cholinergic-impairments/

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Country

Canada

Title of project or programme

Investigation of the roles of GSK-3 isoforms in mediating Abeta, tau and insulin related Alzheimer-like synaptic, cholinergic impairments

Source of funding information

CIHR

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€ 650,000

Start date of award

01/01/2013

Total duration of award in years

4.0

The project/programme is most relevant to:

Alzheimer's disease and other dementias

Keywords

cell culture| electrophysiology| mouse model| neuroanatomy| neurobehaviour| signal transduction| transgenic/knockout

Research Abstract

Lay Summary

Alzheimer’s Disease affects over 26 million worldwide and is projected to affect at least four times as many by 2050, as a consequence of our aging populations. The current therapies for Alzheimer’s Disease help slow progression in some patients but the development of the disease is relentless and its fatal outcome, unavoidable. In this application, teams of researchers in Canada and China have combined their unique biological tools and expertise to ask definitive questions about the role of two particular proteins that have previously been implicated in promoting some of the damage found in the brains of patients with Alzheimer’s Disease. The proposed studies will employ sophisticated, genetically engineered mouse models to examine the role of these two proteins and testing whether neurological functions can be protected by blocking their action. Ultimately, the team expects to devise new tests and therapies that allow earlier evaluation and more effective intervention in this devastating disease.

Further information available at:

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N/A

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