Chemical-genetics approaches using in vivo models of age-dependent neurodegeneration

https://neurodegenerationresearch.eu/survey/chemical-genetics-approaches-using-in-vivo-models-of-age-dependent-neurodegeneration/

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Contact information of lead PI Country

Canada

Title of project or programme

Chemical-genetics approaches using in vivo models of age-dependent neurodegeneration

Source of funding information

CIHR

Total sum awarded (Euro)

€ 391,504

Start date of award

01/04/2014

Total duration of award in years

5

Keywords

Research Abstract

Amyotrophic lateral sclerosis (ALS) is a fatal neurodegenerative disease characterized by selective death of motor neurons. Even though recent advances have discovered many of the genetic causes of ALS, it remains an incurable disease. To learn more about disease mechanisms and identify new therapeutic approaches we use the genetic system Caenorhabditis elegans, a nematode worm with powerful and rapid methodologies to model ALS. Using our C. elegans ALS models we have discovered novel mechanisms and FDA approved compounds that alleviate neuronal degeneration caused by mutant human proteins linked to ALS. We propose to further validate these findings in more complex models like mice

to set the stage for clinical trials that may open the door to new therapeutics for ALS patients.

Further information available at:

Types: Investments < €500k

Member States: Canada

Diseases: N/A

Years: 2016

Database Categories: N/A

Database Tags: N/A