Functional deficits in a novel murine model of frontotemporal lobar degeneration

https://neurodegenerationresearch.eu/survey/functional-deficits-in-a-novel-murine-model-of-frontotemporal-lobar-degeneration/

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Country

United Kingdom

Title of project or programme

Functional deficits in a novel murine model of frontotemporal lobar degeneration

Source of funding information

Alzheimer's Research UK

Total sum awarded (Euro)

€ 135,941

Start date of award

01/06/2013

Total duration of award in years

2.6

Keywords
Research Abstract

Frontotemporal dementia (FTD) is the second most common cause of dementia in people below 65. Genetic analysis of families with inherited FTD has revealed that mutations in 7 different genes can result in FTD. Each of these genes encodes for production of a specific protein and the disease-causing mutations cause these proteins to become dysfunctional. By investigating how FTD-causing mutations disturb the function of proteins we will better understand how FTD and related diseases arise. Here we aim to understand how mutations in the CHMP2B gene disturb brain function and thus cause FTD. The UCL group has genetically engineered mice to possess a mutated form of the human CHMP2B gene. This results in age-dependent

development of brain pathology reminiscent of FTD. This award funds a link with Bristol scientists who specialise in measuring activity of brain circuits. Using electrical and optical real-time measurements the teams will collaborate to analyse how parts of the brain important in memory and other important functions become disturbed in these disease model mice. This will provide new information about why the brain works poorly in FTD sufferers, and may also shed light on why neurones die in this and related disease such as Alzheimer's.

Further information available at:

Types:
Investments < €500k

Member States:
United Kingdom

Diseases:
N/A

Years:
2016

Database Categories:
N/A

Database Tags:
N/A