

Cellular modelling of C9orf72 di-peptide repeat proteins

<https://neurodegenerationresearch.eu/survey/cellular-modelling-of-c9orf72-di-peptide-repeat-proteins/>

Principal Investigators

Stuart Pickering-Brown

Institution

University of Manchester

Contact information of lead PI

Country

United Kingdom

Title of project or programme

Cellular modelling of C9orf72 di-peptide repeat proteins

Source of funding information

Alzheimer's Research UK

Total sum awarded (Euro)

€ 67,504

Start date of award

02/03/2015

Total duration of award in years

1

Keywords

Research Abstract

Frontotemporal dementia (FTD) , the second most common form of dementia after Alzheimer's disease, is often caused by mutated genes. The most common known genetic cause of FTD is from a mutation in a gene called C9orf72. One of the things this mutated gene does is to cause abnormal proteins called di-peptide repeat proteins (DPRs) to be made. These proteins build up within brains cells and it is thought that this contributes to the death of the brain cells in FTD. We plan on making a cell model of the DPRs by cloning a synthetic gene fragment that will make them. We will use a system where we can turn on and off the production of the DPRs. We will use this system to expore the effect of DPR length and cell death as it is beleived that the longer DPRs are more toxic and we want to see if this is the case. These cells will also be

useful to screen for drugs to prevent DPR toxicity.

Further information available at:

Types:

Investments < €500k

Member States:

United Kingdom

Diseases:

N/A

Years:

2016

Database Categories:

N/A

Database Tags:

N/A