

# Cellular modelling of C9orf72 di-peptide repeat proteins

<https://www.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 explore the effect of DPR length and cell death as it is believed 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