The Healthy and Degenerating Neuron

https://neurodegenerationresearch.eu/survey/the-healthy-and-degenerating-neuron/

Title of project or programme

The Healthy and Degenerating Neuron

Principal Investigators of project/programme grant

Title	Forname	Surname	Institution	Country
Professor	Jean	Manson	University of Edinburgh	United Kingdom

Address of institution of lead PI

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Source of funding information

Biotechnology and Biological Sciences Research Council

Total sum awarded (Euro)

1991392

Start date of award

01-08-2008

Total duration of award in months

36

The project/programme is most relevant to

Prion disease

Keywords

Research abstract in English

We aim to use our extensive experience in TSEs to characterise the healthy and degenerating neuron, establish how homeostasis is maintained, and identify specific defects that occur as the cell begins to age. We aim to use TSE models to study the early events and late events of neurodegeneration in the CNS. Understanding such mechanisms may be of significance in all neurodegenerative disease and identify potential strategies for intervention to block the

neurodegenerative process. The objectives of this theme are: To determine the normal function of PrP. To define the mechanisms of neurodegeneration. To identify and quantify changes in CNS and FDC gene expression related to TSE disease progression. Identify and quantify similarities and differences in disease associated changes between scrapie susceptible and resistant sheep. To study cellular maintenance and homeostasis in the presence of misfolded protein. To examine mechanisms of neurogenesis and application to disease prevention.

Lay summary