

Astrocytes influence interactions between Abeta and tau to cause synaptotoxicity in AD

<https://neurodegenerationresearch.eu/survey/astrocytes-influence-interactions-between-abeta-and-tau-to-cause-synaptotoxicity-in-ad-2/>

Name of Fellow

Beatriz Gomez Perez-Nievas

Institution

Funder

Alzheimer's Research UK

Contact information of fellow

Country

United Kingdom

Title of project/programme

Astrocytes influence interactions between Abeta and tau to cause synaptotoxicity in AD

Source of funding information

Alzheimer's Research UK

Total sum awarded (Euro)

€ 235,798

Start date of award

10/07/15

Total duration of award in years

3.3

The project/programme is most relevant to:

Alzheimer's disease & other dementias

Keywords

Immunity and Inflammation | Astrocytes

Research Abstract

Synapses are critical connections between nerve cells in the brain and are involved in learning,

memory and the way that we behave in response to different situations. In Alzheimer's disease, synapses become unhealthy and die, and this leads to clinical features of Alzheimer's disease such as impairments in memory and changes in behaviour. A recent study from the applicant showed that alterations in memory in Alzheimer's patients are strongly linked with two changes in the brain – (1) the accumulation of astrocytes, cells which are involved in brain inflammation, and (2) the presence of tau in synapses. The goal of this project is to find out if astrocytes influence synapse health by altering the amount of tau in synapses. This is important because it is known that synapses are very resilient and can recover when damaging influences are removed. Therefore, if we can identify means to improve synapse health this will have considerable benefit for Alzheimer's patients.

Types:

Fellowships

Member States:

United Kingdom

Diseases:

Alzheimer's disease & other dementias

Years:

2016

Database Categories:

N/A

Database Tags:

N/A