

The inflammatory mediator Lactorferrin induces rapid and pronounced amyloidogenic processing of APP

<https://neurodegenerationresearch.eu/survey/the-inflammatory-mediator-lactorferrin-induces-rapid-and-pronounced-amyloidogenic-processing-of-app/>

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Country

Australia

Title of project or programme

The inflammatory mediator Lactorferrin induces rapid and pronounced amyloidogenic processing of APP

Source of funding information

Alzheimer's Australia Dementia Research Foundation

Total sum awarded (Euro)

€ 34,196

Start date of award

01/01/2015

Total duration of award in years

1

Keywords

Research Abstract

The balance of iron and response to inflammation (e.g. through infection) in the cell are closely linked and has previously been implicated in Alzheimer's disease. Lactorferrin, an iron transport protein produced in conditions such as increased inflammation was recently discovered by Dr Wong to also bind Amyloid Precursor Protein (APP). The binding of lactorferrin to APP promotes the production of β -amyloid; the main peptide found in senile plaques within the brains of

Alzheimer's disease patients. At first this interaction may be a way of protecting the body by temporarily locking the iron safely within the cell and out of harm's way, however, more persistent presence of lactoferrin could lead to greater β -amyloid levels which is known to cause neuronal death in Alzheimer's disease. By investigating the ability of lactoferrin binding to APP, Dr Wong hopes to understand the significance of this interaction and identify a potential new drug target.

Further information available at:

<https://www.dementiaresearchfoundation.org.au/researchers/bruce-wong>

Types:

Investments < €500k

Member States:

Australia

Diseases:

N/A

Years:

2016

Database Categories:

N/A

Database Tags:

N/A