

Atomic details of antimicrobial peptides at work in live cells

<https://neurodegenerationresearch.eu/survey/atomic-details-of-antimicrobial-peptides-at-work-in-live-cells/>

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Country

Australia

Title of project or programme

Atomic details of antimicrobial peptides at work in live cells

Source of funding information

Australian Research Council

Total sum awarded (Euro)

€ 330,000

Start date of award

01/01/2014

Total duration of award in years

3.0

The project/programme is most relevant to:

Alzheimer's disease & other dementias

Keywords

Research Abstract

Membrane-active peptides, such as antimicrobial and amyloid (Ab) peptides, play an important role in disease. With the growth of antibiotic resistance and increase in Alzheimer's disease, which is epitomised by plaques of Ab, new drugs are required. Although Ab is toxic in neuronal cell cultures and disrupts cell membranes, the mechanism is unknown. Antimicrobial peptides that target bacterial membranes have evolved as a defence mechanism against infection and,

since membranes show little genetic adaptation, could be drug candidates. Model membranes will be developed to elucidate the mechanism of action and key molecular features that determine affinity for membrane lipids of an antimicrobial peptide and full length Ab peptides.

Lay Summary

Further information available at:

Types:

Investments > €500k

Member States:

Australia

Diseases:

Alzheimer's disease & other dementias

Years:

2016

Database Categories:

N/A

Database Tags:

N/A