

Deciphering the fundamental roles of two proteins involved in neurodegenerative disease.

<https://www.neurodegenerationresearch.eu/survey/deciphering-the-fundamental-roles-of-two-proteins-involved-in-neurodegenerative-disease/>

Name of Fellow

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Institution

Funder

Wellcome Trust

Contact information of fellow

Country

United Kingdom

Title of project/programme

Deciphering the fundamental roles of two proteins involved in neurodegenerative disease.

Source of funding information

Wellcome Trust

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€ 822,891

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01/09/14

Total duration of award in years

3.0

The project/programme is most relevant to:

Neurodegenerative disease in general

Keywords

Alzheimer

Research Abstract

The long term goal of this proposal is to understand the 3-D structure and molecular mechanisms of the presenilin/gamma-secretase complex and of the related signal peptide peptidase family of intramembranous aspartyl proteases. We will define their structure and the mechanisms by which they select, dock and then cleave the transmembrane domains of their substrate proteins in an unusual reaction (regulated intramembranous proteolysis), which appears to be catalysed by two conserved hydrophilic aspartyl residues that are buried within the hydrophobic lipid compartment of the membrane.

Types:

Fellowships

Member States:

United Kingdom

Diseases:

Neurodegenerative disease in general

Years:

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