

The use of a histology slide scanner to aid in the understanding of disease progression and mechanisms in dementia

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Country

United Kingdom

Title of project or programme

The use of a histology slide scanner to aid in the understanding of disease progression and mechanisms in dementia

Source of funding information

Alzheimer's Research UK

Total sum awarded (Euro)

€ 41,079

Start date of award

01/08/2015

Total duration of award in years

1

Keywords

Research Abstract

Frontotemporal lobar degenerations (FTLDs) are the second most common cause of young onset dementia. Previous funding by ARUK enabled a large clinico-pathological study between Queen Square Brain Bank and the Dementia Research Centre and initiated many subsequent projects utilising the brain tissue collection. This includes the investigation of neuropathological hallmarks of FTLDs where proteins normally involved in moving genetic material called RNA

from the cell nucleus to the cytoplasm clump together to form inclusions in neurons. We showed that additional proteins involved in RNA transfer are also found in the cellular inclusions, suggesting their importance in the disease. Utilising our unique collection of FTLD cases we aim to understand the progression of disease to involve different areas of the brain with time. Identifying brain areas affected early in disease may help us to understand the initiating pathological events in FTLDs and identify new targets for therapies to slow disease progression. An Aperio slide scanner will enable us to digitally capture images of whole tissue sections allowing rapid measurement and quantitation of pathological abnormalities using accompanying specialised Definiens software. This will help us to visualise progression of disease from one part of the brain to another as the disease advances.

Further information available at:

Types:

Investments < €500k

Member States:

United Kingdom

Diseases:

N/A

Years:

2016

Database Categories:

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Database Tags:

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