

High-throughput and high-resolution digital slide scanner Nanozoomer-XR for studies in dementia

<https://www.neurodegenerationresearch.eu/survey/high-throughput-and-high-resolution-digital-slide-scanner-nanozoomer-xr-for-studies-in-dementia/>

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Contact information of lead PI Country

United Kingdom

Title of project or programme

High-throughput and high-resolution digital slide scanner Nanozoomer-XR for studies in dementia

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Alzheimer's Research UK

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€ 135,580

Start date of award

15/04/2015

Total duration of award in years

1

Keywords

Research Abstract

Great strides have recently been made in genetic studies identifying genes involved in pathways associated with increased risk of developing dementia. Genes operate by producing proteins which are major functional components of cells. An important approach to understand how the brain malfunctions in dementia is to localise and quantify proteins by immunohistochemistry. We have used this approach with significant success by capturing microscopic images with a

digital camera for computerised quantitative analysis. However, this method of image capture is labour intensive and time consuming and we need a step change in technology, to a high-throughput systems to improve efficiency and productivity. Thus we are requesting funds to purchase a digital slide scanner that can capture and digitize 320 slides automatically overnight. This equipment will greatly aid our current and proposed studies on inflammation and lipid metabolism in dementia. The scanner will be housed in the Biomedical Imaging Unit at Southampton University where it will be supported by experts in microscopic imaging. Not only will this equipment benefit studies in the South Coast network, but as the scanner can be connected to the internet, we will offer a slide scanning service to ARUK-funded researchers elsewhere in the UK.

Further information available at:

Types:

Investments < €500k

Member States:

United Kingdom

Diseases:

N/A

Years:

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Database Categories:

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