

Characterisation of a novel in vivo model of human tauopathy

<https://neurodegenerationresearch.eu/survey/characterisation-of-a-novel-in-vivo-model-of-human-tauopathy/>

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United Kingdom

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Characterisation of a novel in vivo model of human tauopathy

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Research Abstract

Animal models are urgently required that accurately represent dementia in humans so that we can study changes in the brain during progression of dementia, and to enable accurate testing of new drugs. Several animal models do exist, but the majority of these are disadvantaged by the fact that they contain unrealistically high amounts of specific proteins (usually amyloid and/or tau), sometimes in parts of the brain where they would not normally be found. In this project we will use a new mouse model we have created that contains normal amounts of a particular form of tau that we identified in human brain. Tau protein is a major component of the tangles that contribute to brain degeneration that occurs in dementia. The tau fragment we identified is associated with disease and forms tangle-like aggregates in cells. Recently we

made a new genetically-modified mouse that produces this human tau fragment in the brain. We plan to examine the effects of this tau fragment on the development of dementia, by measuring tau aggregation and examining mouse behaviour in parallel. We hope that the findings from this project will provide a better model for testing new treatments as they become available for dementia.

Further information available at:

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