## Lay Summary

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# Pilot study comparing microglial markers in different neurological diseases known to be associated with inflammation

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A particular cell type in the central nervous system called microglia are involved in the normal immune response to inflammation caused by processes such as infection, traumatic injury and inflammatory diseases such as multiple sclerosis (MS). However, microglia may exhibit different forms of activation which can be characterized by the types of 'marker' molecules this cell type expresses which is called its phenotype. This study aims to identify specific "markers" of microglia in different neuroinflammatory conditions in order to both determine their phenotypes as well as to ensure that the staining methods used are optimised for extension to other related studies.

#### **Publications:**

Date	Publication title
2013	Inflammatory Components in Human Alzheimer's Disease and After Active amyloid-β42 Immunization
2015	Effect of Amyloid-β (Aβ) Immunization on Hyperphosphorylated Tau: A Potential Role for Glycogen Synthase Kinase (GSK)-3β
2015	Effect of Active Aβ Immunotherapy on Neurons in Human Alzheimer's Disease
2015	Novel Association Between Microglia and Stem Cells in Human Gliomas: A Contributor to Tumour Proliferation?
2018	TREM2 Expression in the Human Brain: A Marker of Monocyte Recruitment?
2018	Systemic Infection Modifies the Neuroinflammatory Response in Late Stage Alzheimer's Disease