

## **Lay Summary**

**BRAIN UK Ref: 11/002**

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

**Dr D Boche, University of Southampton**

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.