**Lay Summary** 

**BRAIN UK Ref: 11/003** 

Pilot study - Microglia profile in schizophrenia

Dr D Boche, University of Southampton

Schizophrenia is a disorder affecting normal cognition resulting in a breakdown of coherent thought and speech processes and social and behavioural dysfunction. There appear to be a number of contributory factors including genetics and early environmental influences. Inflammation is an important component of a number of disease processes but it relevance to schizophrenia remains uncertain as evidence is contradictory. A type of cell called microglia, which are an integral part of the immune system, may exhibit different levels of activation which can be characterized by the expression of 'marker' molecules (the cell's 'phenotype') which can be demonstrated using specific staining techniques. This study aims to use specific staining methods in order to determine the phenotypes of microglia in schizophrenia brain tissue and to determine whether such cells play a role in this particular disease.