

## Neuroinflammation in Alzheimer's disease

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Neuroinflammation is a common feature of Alzheimer's disease pathology, which is characterized by the presence of reactive astrocytes and activation of the microglia (the brain's resident macrophages), as well as increased expression of pro-inflammatory cytokines & complement system activation. Amyloid beta protein accumulation in the brain of Alzheimer's disease patients is the activator of the complement system and leads to glial cells activation and subsequent release of neurotoxic substances and free oxygen radicals. We are studying different aspects of neuroinflammation in a cohort of two groups "post-mortem human brain tissue" of Alzheimer's disease and age matched controls in different brain areas including frontal and temporal cortices to highlight the role of innate immunity in the disease and if it can be considered as potential targets for treating Alzheimer's disease.

### Biography

Mai Mwafy is currently a PhD student in University of Bristol, Dementia Research Group, also work in Infection & Immunity as a collaborator in Cardiff University, Mai has completed her Master's Degree in Medical Microbiology & Immunology in Egypt, Faculty of Medicine Tanta University in 2013. Funded by: Newton- Mosharafa fund British Council in Egypt in collaboration with the Egyptian Government awarded 2015, and ARUK small grant awarded 2017.

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Keywords: