

# Brain white matter imaging and cognitive ageing in the Lothian Birth Cohort of 1936: II

<https://neurodegenerationresearch.eu/survey/brain-white-matter-imaging-and-cognitive-ageing-in-the-lothian-birth-cohort-of-1936-ii/>

## Title of project or programme

Brain white matter imaging and cognitive ageing in the Lothian Birth Cohort of 1936: II

## Principal Investigators of project/programme grant

Title	Forname	Surname	Institution	Country
Professor Ian		Deary	University of Edinburgh	UK

## Address of institution of lead PI

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## Country

United Kingdom

## Source of funding information

Medical Research Council

## Total sum awarded (Euro)

751181.39

## Start date of award

01-01-2011

## Total duration of award in months

36

## The project/programme is most relevant to

Neurodegenerative disease in general

## Keywords

### Research abstract in English

Background: During the calendar years 2008-2011, MRC contributed cash-limited funds to the Disconnected Mind project team, for staff to analyse data from the first wave of brain magnetic

resonance imaging (MRI) studies in the Lothian Birth Cohort 1936 (LBC1936). This has been done and has provided a cutting-edge examination of the brain's white matter in over 725 people in the LBC1936. With further discussion with the relevant MRC programme manager (Rob Buckle) we have been permitted to apply for a similar complement of staff to analyse the next wave of brain imaging data in the Lothian Birth Cohort 1936, to cover the calendar years 2011-2013. All other costs will be met by Age UK.

Science: In this proposal we seek to characterize longitudinal changes in brain white matter structure in old age, and to investigate relationships between brain biological ageing and cognitive ageing in a unique cohort of subjects in whom cognitive data are available in both youth and across old age, and who have just completed a first wave of detailed brain imaging. The average age of the cohort, which is ideal to study ageing affects, the narrow age range, longitudinal MRI, genetic and lifestyle information, and the availability of life-long measures of cognitive ability provide an unparalleled opportunity to study relationships between brain structural and cognitive ageing.

## **Lay Summary**