

Centre for Cognitive Ageing & Cognitive Epidemiology

<https://neurodegenerationresearch.eu/survey/centre-for-cognitive-ageing-cognitive-epidemiology/>

Principal Investigators

Professor IJ Deary

Institution

University of Edinburgh

Contact information of lead PI

Country

United Kingdom

Title of project or programme

Centre for Cognitive Ageing & Cognitive Epidemiology

Source of funding information

MRC

Total sum awarded (Euro)

€ 3,998,250

Start date of award

01/09/2013

Total duration of award in years

5.0

The project/programme is most relevant to:

Alzheimer's disease & other dementias

Keywords

Research Abstract

The Centre will: (1) elucidate the routes to the vulnerable ageing brain; (2) find mechanisms by which lower cognitive ability makes the body vulnerable to ill health; (3) provide an outstanding environment for interdisciplinary research training. In research training: Mentor a new cohort of post-doctoral scientists. Expand our cohort of interdisciplinary PhD students. Expand our training of medical scientists. In cognitive epidemiology: Expand it to include non-cognitive traits.

Conduct individual participant meta-analyses. Use new datasets to test mechanistic hypotheses. In cohort work on cognitive ageing: Expand work on the Lothian Birth Cohorts and Edinburgh type 2 Diabetes Study. Test genetic and environmental influences on cognitive change from childhood to old age and in old age. Test determinants of cognitive change across 10 years in type 2 diabetes. Conduct longitudinal genome-wide methylation studies. Conduct genome-wide expression studies. Test associations between the human brain connectome and cognitive functions. Lead international consortia on GWAS, exome chip, and methylation studies of cognition, novel brain imaging and other phenotypes. In experimental work on cognitive ageing: Complete regulatory approval for Alzheimer diagnostic tests. Use brain imaging to explore why some cognitive functions are preserved with age. Identify cognitive signatures that identify those likely to convert to dementia. Explore the relationship between the design and use of digital memory systems and our research on age-impaired forgetting and multitasking. In mechanisms of cognitive ageing: Investigate how stress and glucocorticoids influence cognitive ageing and test therapeutic strategies. In cerebral small vessel disease test the importance of vascular integrity, inflammation and oxidative stress for ageing brain integrity. Understand how brain injury occurring in the context of acute systemic illness can alter cognitive decline.

Lay Summary

Further information available at:

Types:

Investments > €500k

Member States:

United Kingdom

Diseases:

Alzheimer's disease & other dementias

Years:

2016

Database Categories:

N/A

Database Tags:

N/A