

# UK Biobank Imaging Enhancement Main phase

<https://www.neurodegenerationresearch.eu/survey/uk-biobank-imaging-enhancement-main-phase/>

## Principal Investigators

Professor Sir R Collins

## Institution

UK Biobank

## Contact information of lead PI

### Country

United Kingdom

## Title of project or programme

UK Biobank Imaging Enhancement Main phase

## Source of funding information

MRC

## Total sum awarded (Euro)

€ 7,939,904

## Start date of award

01/02/2016

## Total duration of award in years

2.5

## The project/programme is most relevant to:

Neurodegenerative disease in general

## Keywords

### Research Abstract

UK Biobank has involved the collection of extensive baseline questionnaire data, physical measurements and biological samples from 500,000 men and women aged 40-69 at baseline in 2006-10, and their health is now being followed by linkage to health records and by web-based questionnaires. This proposal involves the enhancement of the phenotyping of 100,000 participants in UK Biobank with information from multiple imaging modalities involving the brain, heart, large blood vessels, body composition, and bone and joints. The large scale is intended to provide sufficient statistical power for reliable assessment of associations between these

imaging phenotype measures and a wide range of incident diseases. As with the successful recruitment and baseline assessment phase, the application of highly efficient processes to optimise and manage these imaging assessments has been shown in the pilot phase to allow them to be conducted cost-effectively. The pilot phase has also demonstrated that non-imaging assessments could be conducted in parallel without interfering with the streamlined imaging process. The pilot phase has shown that high quality data can be obtained and that an increasing range of research-ready measures can be derived using automated analysis tools. These imaging data would be available to all bona fide researchers for health-related research that is in the public interest. During and after the main phase of imaging, these dedicated imaging centres could also be used for repeat imaging in subsets of participants to allow investigation of the relevance of changes in imaging measures to various outcomes (e.g. dementia).

### **Lay Summary**

**Further information available at:**

#### **Types:**

Investments > €500k

#### **Member States:**

United Kingdom

#### **Diseases:**

Neurodegenerative disease in general

#### **Years:**

2016

#### **Database Categories:**

N/A

#### **Database Tags:**

N/A