Dementias Research Platform UK

Research Areas

- Tool Development
- Clinical Trial
- Basic Research
- Data-Sharing Enabler
- Product Development
- Drugs

At a Glance

- Status: Completed Consortium
- Year Launched: 2014
- Initiating Organization: Medical Research Council
- Initiator Type: Government
- Location: Europe

Abstract

The MRC Dementias Platform UK (DPUK) is a multi-million pound public-private partnership, developed and led by the Medical Research Council, to accelerate progress in, and open up, dementias research. The DPUK’s aims are early detection, improved treatment and ultimately, prevention, of dementias.

Mission

The DPUK is creating the world’s largest population study for use in dementias research, bringing together two million participants aged 50 and over, from 22 existing study groups within the UK. Included are people from the general population, people known to be at-risk of developing dementia, and people diagnosed with early-stage dementia.

By adding to information that we already know about the participants (such as their diet, exercise...
habit and previous infections) we hope to identify cognitive, genetic, physiological and imaging measures (biomarkers) to understand who is at risk of developing dementia and why the progression of dementia varies from person to person.

Clinical Research Infrastructure award

In addition to the £12m core funding for DPUK, the further award of £37m from MRC is being used to establish three national networks for imaging, informatics and cell biology, to significantly enhance the UK’s research capacity in the dementias.

Imaging Network - PET/MRI scanners will be installed at five universities (Cambridge, Edinburgh, ICL, Manchester and Newcastle), with a sharing of resources and expertise to facilitate the development of harmonized operating protocols for efficient multi-centre studies.

Informatics Network – An integrated informatics environment will be established to bring together cohort and linkage data for the 2 million DPUK participants and help to co-ordinate the use of imaging and tissue sample resources for experimental medicine studies.

Stem Cell Network – This will comprise co-ordinated programmes for the immortalisation of selected cell lines, high-throughput genome editing, and detailed cell phenotyping.

Structure & Governance

The DPUK is directed by Professor John Gallacher at the University of Oxford, together with an executive team of investigators drawn from seven universities (Cambridge, Cardiff, Edinburgh, Imperial College London (ICL), Newcastle, University College London (UCL) and Swansea), including the UCL-based MRC Unit for Lifelong Health and Ageing. The clinical research infrastructure award links DPUK with further universities, Manchester and Bristol.

The DPUK is open to new industry partners. Companies seeking to engage with the DPUK should contact the platform director, Professor John Gallacher (DPUK), the project manager Allison Hanbury (DPUK) or Dr Catherine Moody (MRC). Companies may join the existing consortium either as a partner or through a 1:1 agreement for access to specified resources.
DPUK is governed by:

The MRC Oversight Board which monitors the performance of DPUK and advises on future developments
Scientific Steering Group and Industrial partners, to provide scientific and strategic input to the Executive Team.
Executive Team comprising academic leaders of the consortium and industry representatives to inform the Operations Team.
Operations Team to monitor the progress of the work packages and communications programmes.

Financing

The MRC is providing £12m funding for the Dementias Platform UK (DPUK) for an initial period of five years. This MRC funding is supplemented by £4m from six partner companies, a mixture of cash contributions and valuable company resources such as research tools, analytical capabilities and expertise. Investment has been significantly supplemented by £37m funding for networks of clinical research infrastructure.

Patent Engagement

Dementias Platform UK will be making use of 33 existing cohort studies, gathering data from around two million participants. We are not recruiting people directly for studies, but if you are already registered with a cohort, then please look out for calls for further studies and research, as this data will form a valuable part of DPUK.

If you are interested in participating in dementias research you can sign up to receive details of relevant studies with Join Dementia Research. Join Dementia Research has been developed by the National Institute for Health Research (NIHR) in partnership with Alzheimer’s Research UK and the Alzheimer’s Society. This service allows people to register their interest in participating in dementia research and be matched to suitable studies.
Data Sharing

DPUK is being set up for use as a research resource for the scientific community.

Researchers intending to access the DPUK should contact Professor John Gallacher (as above) in the first instance. There is also a dedicated help line (08000 232000; Mon-Sat 8am-7pm). Data produced through research using the UK Dementias Research Platform will be made openly available to the scientific community as the project progresses.

DPUK takes the issue of data protection very seriously. The health information held about study volunteers from the population studies participating in DPUK is protected and subject to the highest levels of ethics and data security. Water-tight safeguards are in place to ensure that the data and samples are only used for scientifically and ethically approved research. Information made available to researchers through the Data Portal contains no personal identifiers and cannot be traced back to an individual. The analysis portal does not allow the downloading of individual level data but does enable statistical results such as tables and effect sizes (e.g. risk ratios and confidence intervals) to be calculated and accessed. Patient rights are respected and DPUK adheres to the stringent interlocking legal framework surrounding data protection.

Impact/Accomplishment

The DPUK has produced its first publication from its team in Cardiff. The article titled ‘Common polygenic variation enhances risk prediction for Alzheimer’s disease’ has been written by Professor Valentina Escott-Price, Julie Williams, Doctor Christian Bannister, Ms Elisa Majounie and colleagues and has been submitted into BRAIN, a journal of Neurology.

Prof. Julie Williams is a member of the DPUK Executive Team. Prof. Williams and Prof. Escott-Price leads a scientific work package focussing on Genetics, with their first work concentrating on polygenic scores and Prof. Williams also leads an Informatics Workstream which aims to establish an infrastructure to underpin genetic analyses across DPUK.
Links/Social Media Feed

Homepage  http://www.dementiasplatform.uk/
Other website  https://www.mrc.ac.uk/research/facilities/dementias-platform-uk/
Twitter  https://twitter.com/dementiasuk

Points of Contact

Platform Director: Professor  John Gallacher (DPUK) - Gallacher@cardiff.ac.uk

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