

VPH Dementia Research Enabled by IT

<https://www.neurodegenerationresearch.eu/survey/vph-dementia-research-enabled-by-it/>

Principal Investigators

Institution

Contact information of lead PI

Country

European Commission

Title of project or programme

VPH Dementia Research Enabled by IT

Source of funding information

European Commission FP7-Seventh Framework Programme

Total sum awarded (Euro)

€ 13,393,565

Start date of award

01/04/2013

Total duration of award in years

4.0

The project/programme is most relevant to:

Alzheimer's disease & other dementias

Keywords

Research Abstract

The DementiA Research Enabled by IT project responds to the European Parliament's 2011 resolution for a European Initiative on Alzheimer's disease and other dementias, and the EU Year of the Brain 2014 Initiative. It delivers the first patient-specific predictive models for early differential diagnosis of dementias and their evolution. Its mechanistic/phenomenological models of the ageing brain account simultaneously for the patient-specific multiscale biochemical, metabolic and biomechanical brain substrate, as well as for genetic, clinical, demographic and lifestyle determinants. It investigates the effect of metabolic syndrome, diabetes, diets, exercise, and pulmonary conditions on the ageing brain, as environmental factors influencing onset and evolution of dementias.

An integrated clinical decision support platform will be validated/ tested by access to a dozen databases of international cross-sectional and longitudinal studies, including exclusive access to a population study that has tracked brain ageing in more than 10,000 individuals for over 20

years (Rotterdam Study).

Enabling more objective, earlier, predictive and individualised diagnosis and prognosis of dementias will support health systems worldwide to cope with the burden of 36M patients that, due to ageing societies, will increase to 115M by 2050. Worldwide costs are estimated to €450B annually. In 2012, the WHO declared dementia a global health priority.

Our consortium assembles highly recognised engineering, physical, biomedical and clinical scientists, and industrial partners experienced in exploiting VPH technologies in healthcare. Co-operation with infrastructure projects like VPH-Share, related international Physiome efforts, and other dementia research consortia is assured, allowing European researchers from different disciplines to contribute to share resources, methods and generate new knowledge.

Lay Summary

Further information available at:

Types:

Investments > €500k

Member States:

European Commission

Diseases:

Alzheimer's disease & other dementias

Years:

2016

Database Categories:

N/A

Database Tags:

N/A