

# Programme Grant: Cognitive functioning in normal and pathological aging: Typical pathways, risk and protective factors, and plasticity

<https://neurodegenerationresearch.eu/survey/title-of-piprogramme-grant-cognitive-functioning-in-normal-and-pathological-aging-typical-pathways-risk-and-protective-factors-and-plasticity/>

## Title of project or programme

Title of PI Programme Grant: Cognitive functioning in normal and pathological aging: Typical pathways, risk and protective factors, and plasticity

## Principal Investigators of project/programme grant

### Title Forname Surname Institution Country

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## Source of funding information

Swedish Council for Working Life and Social Research

## Total sum awarded (Euro)

668100

## Start date of award

01-01-2007

## Total duration of award in months

72

## The project/programme is most relevant to

- Neurodegenerative disease in general

## Keywords

Ageing, social, environmental, genetic factors, age-related cognitive decline

## **Research abstract in English**

The focus of this interdisciplinary program of research is cognitive functioning in aging. The group of investigators represent psychology, epidemiology, and different branches of medicine (i.e., geriatrics, neurology, psychiatry), who have collaborated actively during the last 20 years. The chief objective is to elucidate the mechanisms behind the chain that progresses from intact cognitive function through impairment and dementia to death. The research activities are organized within four specific, yet conceptually related, projects: (a) antecedents of normal cognitive aging; (b) the transition to dementia; (c) a life-course perspective on terminal decline and mortality; and (d) cognitive intervention. Whereas the first three projects employ data from a new community-based study targeting the 60+ population (the Swedish National Study of Aging and Care-Kungsholmen), the fourth project examines the effectiveness of a new cognitive training approach focusing on general, executive intellectual abilities. Special attention is directed at delineating factors that may exacerbate versus protect against cognitive decline in late life. The factors examined include a wide variety of demographic (e.g., education, sex), social (e.g., SES, social network), life-style (e.g., activity patterns, substance use), psychological (e.g., personality, subjective health), medical (e.g., blood pressure, vitamin status), genetic (e.g., gene coding for APOE and COMT), and brain-related (e.g., grey-matter volumes, white-matter integrity) factors. Although thematically distinct, the four projects converge in examining similar antecedents from social, environmental, genetic, and disease-related domains on the key outcomes of age-related cognitive decline, dementia, mortality, and plasticity (i.e., the ability to benefit from training). This commonality is important with regard to the possibility to integrate insights on human aging across a wide spectrum of pathways and outcomes.

## **In which category does this research fall?**

- Basic research

## **Lay Summary**