



The LETHE–Project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no 101017405

LETHE Project

KNOWLEDGE DISCOVERY

Improvement of disease knowledge and symptoms interpretation through data visualization

Edge Computing multicentre Big Data Framework

DATA ANALYTICS FRAMEWORK

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INTERVENTION

Personalization of User Interface Design (UI) & User Experience Design (UX) interventions based on the extended FINGER model and health behaviour change models

PREDICTION MODEL

Data-driven prediction model of risk of cognitive impairments and related risk factor evolution

PERSONAL INTERVENTION

PATHWAYS

Personalized intervention pathways based on short-term and long-term effect simulations adapted to specific user context and phenotypic characteristics



LETHE Project

As the world's population increases in age, the number of people living with dementia grows. Dementia has long been considered to be neither preventable nor treatable, but while the underlying illnesses are not curable, today we know that the disease course might be modifiable with good preventive interventions at an early time point.

LETHE will establish novel digital biomarkers, for early detection of risk factors, based on unobtrusive ICT-based passive and active monitoring. The aim is to establish a digital-enabled intervention for cognitive decline prevention based on the evolution of a successful protocol (FINGER study) evolving into an ICT based preventive lifestyle intervention through individualized profiling, personalized recommendations, feedback and support –FINGER 2.0–, well targeted on a population stratified by cost–effective biological biomarkers.

LETHE is leading to a more personalized risk factor prevention for persons in the initial stages of cognitive decline, thereby empowering people to an active and healthy lifestyle. Expansion of digital-enabled health preventive approaches, by reaching out to large populations, can save healthcare systems costs on expensive traditional interventions and confer benefits for the wider society.

