

a Joint Programming Initiative

Final seminar



Ageing and place in a digitising world

April 19th and 21st, 13:30-17:00 CEST





Background

The Joint Programming Initiative 'More Years, Better Lives' (JPI MYBL) seeks to enhance coordination and collaboration between European and national research programmes related to demographic change. Areas affected by demographic change cover a wide range of research fields and policy topics ranging from health to social welfare, education & learning, work & productivity to housing, urban & rural development and mobility. JPI MYBL therefore follows a transnational, multi-disciplinary approach bringing together different research programmes and researchers from various disciplines in order to provide solutions for the upcoming challenges and make use of the potential of societal change in Europe.

We are an initiative of currently 9 member states represented by representatives of ministries, funding agencies, civil society and research institutes. Throughout the year we organise workshops at conferences and with partners, attend meetings, collaborate with other institutions, organise expert processes, publish positions and policy papers and support and supervise the projects we are funding in research calls.

Aim of this joint call

This call is concerned with the ways in which the health and wellbeing of older people, at all stages of later life, is supported and promoted through the design of the social and physical environment, access to opportunities to learn, and the use of technologies of all kinds. The objective is seeking for innovative, transnational and interdisciplinary collaborative projects that investigate the potential of technology, place and learning in relation with the older population.

Research addresses the main topic of **technology** and may also address topics of **place** and **learning**, in relation with technology.

- **Technology**: How can existing and emerging technologies improve the quality of life, engagement and social integration of older people?
- **Place:** How do individuals experience the places where they live, work and interact with others, and how can learning and technology enhance or diminish their quality of life?
- **Learning**: How can opportunities for learning best be made available and accessible for older people, through public, private and third sector means?

Projects

ACCESS

Project coordinator: Claudia Mueller Project website: <u>https://access.wineme.fb5.uni-siegen.de/</u>

Digital media and new technologies can support older persons' wellbeing and enrich their every-day lives. However, seniors face a multitude of obstacles and hindrances when taking on these modern technologies. ACCESS provides socially embedded learning opportunities for older persons with low technical skills in order to enable them to get in touch with modern technology and find meaningful ways for its every-day use. ACCESS explores, implements and evaluates new modes for older persons of approaching the new digital worlds and to gain experiences and sustainable knowledge and skills. To achieve this, different settings of informal, non-formal, and formal learning will be examined and further developed in combination with different forms of learning (courses, senior-to-senior, negotiation spaces) as new learning opportunities. Besides, a stationary as well as a mobile demo kit of assistive technologies will be created, accompanied by a training concept for learning providers and

organizations, who will integrate these objectives in their repertoire of learning opportunities in the field of digital literacy. ACCESS combines expertise from five participating countries (Austria, Finland, Germany, Italy, Japan) and considers a range of nation-specific different social and political framework conditions. By cooperating with local practice partners, the project will examine diverse local circumstances and institutional structures supporting digital literacy of older people.

VoiceAdapt

Project coordinator: Sebastian Moeller
Project website: https://www.voiceadapt.de/

Despite the prognosis that the aging population is expected to have on increasing stroke prevalence, current advances in the availability of digital technologies for aphasia rehabilitation provide hope for those affected by this condition. VoiceAdapt project aims to empower elderly people with aphasia (PwA) by means of improving their communication capabilities and their daily communicative activity to attain greater levels of long-term recovery. To this end, we apply innovative speech-sensitive technology to application-based support & training of PwA in order to develop a system that detects and adapts to spoken language deficiencies that are typical signs and symptoms of aphasia. Building on existing speech training and adaptive testing approaches, at the core of the system is an intelligent personalization and adaptation engine that receives input from multiple data sources (language training application, voice and interaction pattern analysis) and dynamically adapts a) the multimodal interface of the application as well as b) the behaviour itself to individual mental states and cognitive capabilities, in particular with regard to their cognitive disabilities. Continuous involvement of PwA, their caregivers and medical experts during development leads the way to the conduction of a randomized controlled trial (RCT) with PwA to measure and monitor the impact of the developed adaptive training tool on participants' linguistic abilities, communication habits and quality of life.

HARVEST

Project coordinator: Simon Lindgren

Digital health and social care, so-called eHealth, is an emergent phenomenon which is portrayed as a way of managing societal challenges like demographic ageing, relocation from rural areas and increased demands for availability. But yet, there is a lack of research on the real impact and consequences of eHealth, especially in relation to old age users in rural areas. In this collaborative and transnational project, we will explore the changing dynamics of health and social care by empirically and theoretically examining old age users' use and non-use of "virtual health rooms", virtual health and social service centres, digital care applications – care apps – and health and social care information online, in rural regions. Using an ethnographic approach, we try to understand (a) the impact of ICTs in the everyday lives of older people; (b) the role of (rural) place; and (c) the relationship between technology and digital competences in relation to older people's use of eHealth in three different countries: Finland, Italy, Sweden. The final goal is to provide relevant information for policy-makers, to develop eHealth projects that go beyond a technocentric and deterministic approach and consider the real and cultural context of use of digital technologies among elderly.

ORIENT

Project coordinator: Helina Melkas Project website: <u>https://www.robotorientation.eu/</u>

The ORIENT project focuses on orientation; introduction to technology use and learning of different skills for effective use in the spirit of co-creation. Various obstacles to care robot acceptance and shortcomings in their use have been identified. In ORIENT, new methods and models will be developed







for orientation into care robot use – taking into account the needs of older customers and their relatives as a first priority. Caregivers, care service organizations and the societal level, other stakeholders in the 'innovation ecosystem' such as business and industry, public administration and the nonprofit sector, are also included. Knowledge, know-how, know-why and know-what will be boosted by active interaction between ORIENT and the people utilizing the results. ORIENT's societal and social objectives are to smoothen the co-creation of care robot technology and service innovations by identifying, characterizing and developing best practices for orientation into care robot use at the different levels of the ecosystem. This is also expected to contribute to economic objectives, such as more effective use of technology in welfare services, with careful attention to the needs of responsible research. The project builds on close cross-border collaboration and exchange. The scientific objective is to link the traditionally practice-oriented theme of orientation to the theories of sociotechnical transition, where new technologies are seen to contribute to broader societal changes.

BCONNECT@HOME

Project coordinator: Eugene Loos

This project investigates fundamental changes in the contemporary experience of later life, at the intersection of digital infrastructures, place and the experience of "being connected". We address a research gap by exploring and theorizing the role of digital communication devices (such as smartphones (that will be tracked), tablets, PCs, apps, fitness trackers, pedometers, or "brain games") in relation to the modern life course. And we combine this theoretical approach with a practical goal of making our insights actionable through co-design by involving older people and other relevant stakeholders in "Academic Work Places" in The Netherlands, Spain, Sweden and Canada. The project is contextualized by debates around ageing in place, loneliness and social isolation, and the idea that these are age-related challenges that require interventions. The potential of such interventions has so far not been realized because the complexities of human-machine interactions are both undertheorised and over-instrumentalised in technology projects. To have impact, new devices to stimulate social engagement and social connectedness need to be based on a fine-grained understanding of digital use as an integral element in the contemporary experience of "being connected". We will deliver such understanding and utilize it in order to realize impact for older citizens, business and policy maker alike – impact that will help alleviate the increasing burden of loneliness and social isolation.

MCI@WORK

Project coordinator: Louise Nygard



This multidisciplinary project (occupational therapy, psychology, elder law and labourlaw, social and political science, and engineering) will provide new insights into what happens when people develop mild cognitive impairment or early stage dementia while still working, how this is influenced by legislation, and how it is experienced and potentially managed by those concerned. This project will focus on:

- The role of technology, the match between persons and technologies, testing new/adapted solutions to support continued work and/or transition from work, and the learning approaches and problem-solving strategies each person develops for adapting and managing working with cognitive impairment;
- How laws, regulations and policies in different countries and organizations can support and/or hinder continued work and/or transition from work, how these are practiced by a variety of actors, and how they can be understood better by people with dementia/MCI and their employers;
- 3. The creation of a new digital tool to support understanding, communication, and planning between people with MCI and their employers.

Researchers from Sweden, Finland and Canada will collaborate with people with MCI/dementia in the workplace, their families, employers and HR staff. An interdisciplinary, in-depth inquiry into cases in all countries, in combination with analyses of legal regulations and their translation into practice, will add profound new conceptual understanding to produce new tools and technologies that enable people with MCI/dementia to take a lead role in managing and choosing their work life.

COORDINATEs

Project coordinator: France Legare



Most older adults facing loss of autonomy choose to continue living at home. Governments are also interested in enabling older adults to remain safely at home. We aim to develop technology that augments self-management among older adults living at home and their caregivers, and use information generated by the technology to inform shared decision making about housing options among older adults impacted by early-stage dementia, their caregivers, healthcare professionals and policymakers. We will therefore 1) assess the self-reported and Global Positioning System (GPS)-reported mobility of people with early-stage dementia still living at home; 2) co-design an enhanced version of the TakeCare platform; 3) assess experiences of users of the new system; 4) survey other potential users and identify factors influencing their willingness to use it; and 5) compare data between rural/urban areas and across jurisdictions in Canada, the Netherlands and Sweden. The outputs are self-reported and objectively measured data about mobility and health changes in older adults living at home in 3 countries; enhance technical support platform for self-management; factors influencing potential uptake; instructions and recommendations for implementation; information for shared decision making about housing options among end-users, including policy makers.

PAAL

Project coordinator: Francisco Florez Project website: <u>https://paal-project.eu/</u>

European and other countries around the world are facing crucial challenges regarding health and social care because of the demographic change and current economic context. Innovation in technologies and services for Active and Assisted Living stands out as one promising solution to address these challenges while profiting from the economic opportunities. For instance, lifelogging technologies may enable and motivate individuals to pervasively capture data about them, their environment, and the people with whom they interact in order to receive a variety of services to increase their health, well-being, and independence. The aim of this project is manifold: to increase the awareness of the ethical, legal, social, and privacy issues associated to lifelogging technologies; to propose privacy-aware lifelogging services for older people, evaluating their acceptability issues and barriers to familiarity with technology, to elaborate on possible strategies for overcoming them, promoting the use of technologies of all kinds, and opportunities to learn; and to develop specific applications referred to relevant use cases for older and frail people. The synergies produced by the international cooperation of experts from different disciplines will lead to robust and reliable lifelogging systems, which will provide more valuable and trustworthy services for the end users and will facilitate development and deployment, speeding up route to market for lifelogging solutions addressing older adults.

