Higher Quality of Life for Senior Citizens through Interconnected Digital Assistance Systems

A German Interdisciplinary Research and Practice Study Collaborates with the CREATE Consortium and Its PRISM Research

The **Carl Zeiss Foundation**, a major German foundation, has made approximately 4.5 million euros available for the SMART-AGE project in the context of its “Breakthroughs” programme. The project is scheduled to run for five years beginning in April 2021.

The study “Smart aging in the local context: investigating intelligent forms of self-regulation and co-regulation under real-life conditions” (SMART-AGE) involves equipping two groups of 450 people aged 67 and above – in each of the cities of Heidelberg and Mannheim – with a combination of intelligent assistance systems. The latter include apps giving advice to senior citizens on healthcare and how to avoid loneliness, as well as digital language assistants. In the case of health impairments, a ‘soft exo-suit’ for smart support can also, as required, be used to ease back-strain during everyday actions. Further elements are a digital platform for physical training and an app to support after-care after hospitalisation. This platform aims to help each participant find the way of living appropriate to their needs.

“We look at the older persons involved as our research partners who, with interconnected technologies, benefit from new ways of improving their own health and facilitating social participation. We also hope to obtain fresh findings on how older persons can be enabled to use interconnected assistance systems in an optimum way,” underlines psychologist and gerontologist Prof. Hans-Werner Wahl, senior professor in the Network Aging Research (NAR) at Heidelberg University and one of the research project leaders.

SMART-AGE will have a close cooperation with the **Center on Research and Education on Aging and Technology Enhancement (CREATE)** funded since 1999 by the National Institute on Aging. In particular, SMART-AGE will make an attempt to replicate previous encouraging findings with the Personalized Reminder Information and Social Management System (PRISM) developed by Prof. Sara Czaja and colleagues from CREATE. In the words of Prof. Wahl: “We regard this collaboration as unique and highly promising, because it builds on an existing long-standing cooperation between CREATE and my research team at Heidelberg University. Even more important, we aim in tandem to build an international research alliance toward helping older adults to make full use of digital technology and media for their quality of life. CORONA recently has unraveled how urgent this challenge indeed is.”

SMART-AGE combines the expertise of software engineering, medicine and gerontology. It also includes special fields such as ethics, sociology and biomechanics. Further project leaders are Prof. Dr Jürgen Bauer, director of the Center for Geriatric Medicine Heidelberg, Prof. Dr Lorenzo Masia from
the Institute of Computer Engineering and Prof. Dr Barbara Paech from the Institute of Computer Science at Heidelberg University.

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