

Board of examiners

Prof. dr. Jos Schols

Department of Health Services Research and Department of Family Medicine
Care and Public Health Research Institute (CAPHRI)
Maastricht University

Dr. Tom Van Daele

Centre for the psychology of Learning and Experimental Psychopathology
Katholieke Universiteit Leuven;
Expertise Unit Psychology, Technology & Society
Thomas More University of Applied Sciences;
School of Social Sciences, Education and Social Work
Queen's University Belfast

Prof. dr. Birgit Morlion

Faculty of Medicine and Pharmacy
Vrije Universiteit Brussel

Prof. dr. Eva Dierckx

Department of Clinical & Lifespan Psychology
Faculty of Psychology & Educational Sciences
Vrije Universiteit Brussel

Prof. dr. Ivan Bautmans, Chair

Department of Gerontology
Vrije Universiteit Brussel

Prof. dr. Ronald Buyt, Supervisor

Biostatistics and Medical Informatics (BISI)
Vrije Universiteit Brussel

Prof. dr. Ellen Gorus, Supervisor

Frailty in Ageing (FRIA)
Vrije Universiteit Brussel



PhD in Gerontology
2022-2023

INVITATION to the Public defence of

Samantha DEQUANTER

To obtain the academic degree of

'DOCTOR OF GERONTOLOGY'

**Living with mild cognitive decline in connection with
technology**

The public defence will take place on

Monday, 7 November 2022 at 5 p.m.

In Auditorium **Piet Brouwer**

Faculty of Medicine and Pharmacy, Laarbeeklaan 103, 1090 Brussel

and can be followed online, accessible through the following link:

https://gf.vub.ac.be/redirects/PhD_defense_Samantha_Dequantier.php

Population ageing entails challenges for independent living due to the increasing prevalence of cognitive decline. Technologies can be considered an innovative strategy to support independent living, or ageing in place, in the population of older adults with mild cognitive decline. However, research indicates that technology implementation among this population is not without issues. This dissertation provides an overview of promising technologies for this specific population and a thorough understanding of the processes involved in technology adoption among this population. First, a systematic review of technological solutions and their potential effectiveness in the context of supporting ageing in place among older adults and informal caregivers was conducted. Second, a large study on multidimensional determinants of internet use among older adults with varying degrees of cognitive frailty, operationalized as subjective cognitive decline, was performed. Third, a comprehensive qualitative study involving older adults with mild cognitive decline, informal caregivers and professional caregivers was undertaken to gain a deeper understanding of the determinants of technology implementation and its dynamic processes. Fourth, a multiple-country qualitative study focused on the professional caregivers' perspective in this regard. And lastly, a conceptual position paper was written offering directions on the development and implementation of a decision support tool aimed at supporting older adults with mild cognitive decline as well as informal and professional caregivers in informed decision-making on the adoption of technologies. This dissertation may inspire researchers, technology developers, clinical practitioners and policymakers to remove barriers to successful technology implementation in this population.

Samantha Dequanter (born on August 23, 1991) graduated in 2014 as a Master of Science in Psychology – option Clinical Psychology at the Vrije Universiteit Brussel. In 2015 she started working two part-time jobs as a case manager in a government project to optimize home care in frail community-dwelling older adults and as a clinical psychologist at the department of geriatrics of the Universitair Ziekenhuis Brussel. At the same time, she took evening classes in the Master of Management, Care and Policy in Gerontology at the Vrije Universiteit Brussel in which she graduated in 2018. From 2018 on, she took the opportunity to join an interesting Flanders-Quebec bilateral collaborative FWO research project on the acceptance of technological solutions among older adults with cognitive impairments. She is part of the Biostatistics and Medical Informatics (BISI) and Frailty in Ageing (FRIA) Research groups of the Departments of Public Health Sciences (GEWE) and Gerontology (GERO) respectively. Since the start of her PhD, Samantha (co-)authored 9 peer-reviewed papers and 3 conference papers and presented her work at several national and international scientific conferences. She also supervised 1 Master's thesis to completion and had limited involvement in a Master class on qualitative research methods. Next to her scientific work, Samantha also works in her private psychotherapy practice for middle-aged and older adults with divergent problems.