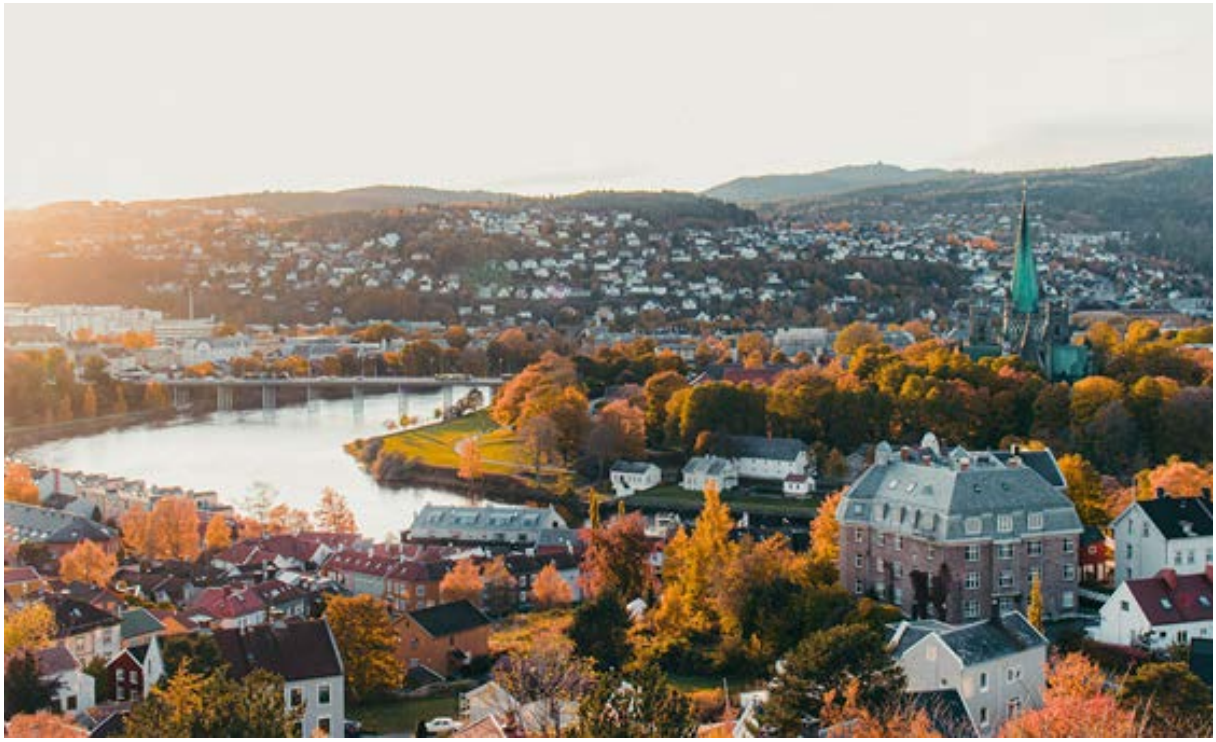
International Society for Gerontechnology

ISG's 12th World Conference of Gerontechnology

Final Program



International Society for Gerontechnology

Designing technology and environment for independent living and social participation of older persons in good health, comfort and safety

ISG2020 is an extraordinary conference at an extraordinary time in our history. Never in our modern era has humanity faced a pandemic lethal to older adults around the world. Yet also never at the same time has there been so many well-developed ICT technologies which could be brought to the fore to meet the challenges of delivering healthcare, emotional and mental support and basic services including transportation to our elder citizens. These ICT technologies, developed by the world's leading Gerontechnology researchers, many of whom are our members, have matured over the past 25 years into products and services designed to address the specific needs of the most vulnerable of our planet's citizens.

The opposing force of Gerontechnology has surely saved many lives during this dreadful scourge. In a very real sense, the pandemic has done more to accelerate the acceptance of Gerontechnology than all of the well-reasoned arguments made by policymakers, politicians and researchers. Nowadays families think nothing about using products such as Zoom and Skype and FaceTime to communicate with their isolated elderly family members and regularly use these tools to hold face-to-face family meetings. AI companions such as Alexa and Google Home allow simplified access to ordering groceries and products for delivery safely to our elder citizens' doorsteps. It is truly an age of marvels in an age of great challenges.

ISG 2020's transition to a virtual conference, accomplished in just five months, is nothing short of remarkable. It represents an immense amount of work by Espen Aspnes and members of his Organizing Committee, the fine staff at SINTEF, NTNU and Atlantic MICE TIBE, the conference's PCO. As a virtual conference it offers its own opportunities and challenges, allowing worldwide access to a world that cries out for our wisdom and knowledge. It's appearance at this point in history is extremely timely and Gerontechnology is urgently needed.

On a personal note, I deeply regret being unable to meet you in person in Trondheim, a city of great beauty and potential, to walk its beautiful streets and sample its restaurants' exquisite fare. I can but hold its fair visage in mind as I dream of better days ahead as the pandemic is conquered and once again, we can meet and heartily greet each other face to face as colleagues.

My very best wishes for your enjoyment of ISG 2020 and for your continued good health!

William D. Kearns, PhD

President, International Society for Gerontechnology

Trondheim, Norway

Overview

Scientific Program - Tuesday, October 6, 2020

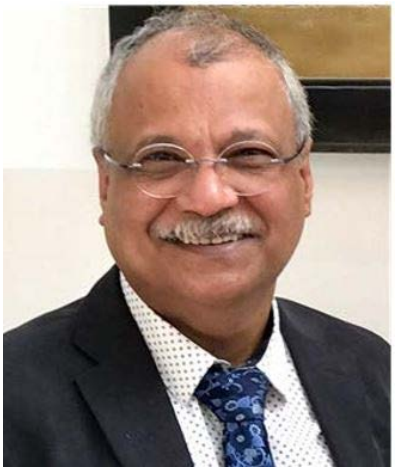
15:00 - 16:45 Opening of ISG 2020

15:00 - 15:30 Opening ceremony

Welcome to ISG 2020: **Vice President of ISG, Espen H. Aspnes**, SINTEF
Introduction of online host, **Elise Landsem**, Accenture
Video greetings from:
The Mayor of Trondheim, Rita Ottervik
General Director Bjørn Guldvog, The Norwegian Directorate of Health
ISG President William D. Kearns, Professor Emeritus, University of South Florida

15:45 - 16:15 Keynote Presentation

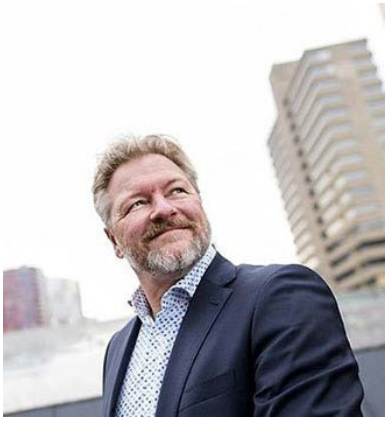
Programme Director Chapal Khasnabis, World Health Organization
Technological and social innovations in products and services for older people



16:15 - 16:45 Keynote Presentation

Vice President Aad Koster, The European Ageing Network (EAN)

EAN and the EAN report "Long-Term Care 2030"



16:45 - 17:00 Break

17:00 - 18:00 ISG General assembly

Scientific Program - Wednesday, October 7, 2020

11:45 - 12:00 Introduction of day

Video greeting from: **President and CEO Alexandra Bech Gjørv**, SINTEF

O.1 Technology for health

O.1.1 ***Supporting caring activities among older people to decrease loneliness: a closer look at the Give&Take peer-to-peer platform***, Elin Siira, Gothenburg University, Sweden

O.1.2 ***An Intersectional Place Perspective for AgingTech Research, Policy and Practice***, Mei Fang, University of Dundee, United Kingdom

O.1.3 ***An Evidence-Based and Culturally Tailored Online Video Course for Chinese Dementia Caregivers***, Hongtu Chen, Environmental and Health Group, United States of America

O.1.4 ***Digital technology for personalized multisensory stimulation to promote communication and engagement and support implementation of person centered in dementia care***, Nick Hird, Aikomi, Japan

O.1.5 ***Multisensory stimulation in treatment of older people living with dementia***, Carla Castro, University of Sao Paulo, Brazil

O.1.6 ***Detecting Apnea in Community Dwelling Older Adults,*** Frank Knoefel, Elisabeth-Bruyère Hospital, Canada

O.2 Housing and Daily Activities

O.2.1 ***Charting the Innovation landscape for Age-friendly housing in Europe,*** Frans Sengers, Utrecht University, The Netherlands

O.2.2 ***Sharing Neighbourhoods –Barriers and drivers to share spaces and the role of technology***, Karin Høyland, SINTEF, Norway

O.2.3 ***"Smart furniture 'listening' to your body!" – Designing an assistive 'hub' to support aging independence and mobility***, Danying Yang, Coventry University, United Kingdom

O.2.4 ***An internet of things patient care system on inpatient fall prevention and the care quality***, Dorothy Bai, Yuan Ze University, Taiwan

O.2.5 ***Practicing care through social alarm systems***, Randi Stokke, NTNU in Gjøvik. Centre For Care Research, Norway

O.3 Personal Mobility

O.3.1 ***Co-creating a mobility app with and for older adults to go out,*** Fan Li, Eindhoven University of Technology, the Netherlands

O.3.2 ***A mobile app for unlicensed support personnel who care for older adults with dementia,*** Lili Liu, University of Alberta, Canada

O.3.3 ***User Experiences Following 30 Days of Self-Administered Fall Risk Assessment via a Mobile Application,*** Shannon Mejia, University of Illinois, United States of America

O.3.4 ***SmartDrive: A self-assessment app to steer the conversation about safe driving for older adults,*** Surya Neti, University of Waterloo, Canada

O.3.5 ***Implementing Mind Monitoring Service for Elderly People at Home Using LINE Chatbot***, Chisaki Miura, Kobe University, Japan

O.3.6 ***Value-Based eHealth: Lifestyle Monitoring***, Henk Herman Nap, Vilans, The Netherlands

O.4 Communication and Governance

O.4.1 ***User expectations and experiences during implementation of new technology in healthcare services,*** Dag Waaler, Norwegian University of Science and Technology, Norway

O.4.2 ***Four Year Trends in IT Sophistication and Quality in United States Nursing Homes,*** Gregory Alexander, University of Missouri, United States of America

O.4.3 ***Designing Video Chat for Social Engagement in Older Adults With, and Without Mild Cognitive Impairment,*** Qiong Nie, University of Illinois Urbana Champaign, United States of America

O.4.4 ***Leveraging Over-the-Counter Hearing Technology & Older Adult Peers Educators to Increase Access: Lessons from HEARS,*** Carrie Nieman, Johns Hopkins University School of Medicine, United States of America

O.5 Robotics

O.5.1 ***Care robots in society: Knowledge and orientation needs***, Satu Pekkarinen, Lappeenranta-Lahti University of Technology, Finland

O.5.2 ***The need for care robot orientation in elder care services,*** Rose-Marie Johansson Pajala, Mälardalen University, Sweden

O.5.3 ***Older people's acceptance of robot-assisted Activities of daily living,*** Tianyang Huang, National Taipei University of Technology, Taiwan

O.5.4 ***One-year experience on care robot development for people with significant disabilities and elderly in Korea***, Won-Kyung Song, National Rehabilitation Center, Republic of Korea

O.5.5 ***A context-aware social robot to improve the quality of life of people with dementia,*** Henk Herman Nap, Vilans, The Netherlands

O.5.6 ***Experiences from implementation and long-term use of 'Zora' robot in elderly care services,*** Helinä Melkas, Lappeenranta-Lahti University of Technology, Finland

O.6 Technology & health

O.6.1 ***A theoretical grounding for AgingTech research: the inclusion of older adults as experiential stakeholders,*** Judith Sixsmith, AGE-WELL, Canada

O.6.2 ***Digital inclusion of unpaid carers of older people: a research agenda***, Jacqueline Damant, London School of Economics and Political Science, United Kingdom

O.6.3 ***Enabling factors for facilitating co-creation with older adults: A literature review***, Marikken Høiseth, Sintef, Norway

O.6.4 ***Use intention of digital technology in older adults by age and gender,*** Alicia Murciano, University of Salamanca, Spain

O.6.5 ***Managing decisions within health technology organizations - Descriptive qualitative study,*** Katarina Baudin, Mälardalen University, Sweden

O.6.6 ***How do Socio-Economic Factors Influence the Intention to Use Eldercare-Technology in South Korea***, Jeungkun Kim, Kangnam University, Republic of Korea

O.6.7 ***The study on the usage of on-line matching of care service and the users' attitude on digital recruitment process,*** Dongseon Kim, Joincare LTD., Republic of Korea

13:00 – 14:10 Exhibition

Visit our exhibitors using the OnAIR platform

13:00 – 13:05 Break

13:05 – 13:50 Poster session 1

P.1.1 ***A systematic review of e-Health solutions for aging in place with MCI or dementia***

Samantha Dequanter[1], Ronald Buyl[2], Maaike Fobelets[2], Marie-Pierre Gagnon[3], Ellen Gorus[4], Mame-Awa Ndiaye[5]

[1]Vrije Universiteit Brussel (VUB), [2]BISI Research Group, [3]Université Laval, [4]FRIA Research Group, [5]CERSSPL-UL

P.1.2 ***What is self-sovereign identity, and can it be applied to persons living with dementia at risk for going missing?***

Noelannah Neubauer[1], Lili Liu[2]

[1]University of Alberta, [2]University of Waterloo

P.1.3 ***Cognitive aging level influencing purchasing of Gerontechnology***

WooJoung Shim

Wheel Line Co., Ltd.

P.1.4 ***Development of a Group Conversation Support Robot Bono-05 for Cognitive Health of Older Adults***

Mihoko Otake-Matsuura[1], Seiki Tokunaga[1]

[1]RIKEN

P.1.5 ***Developing a Smart System Encouraging Self-Aid and Mutual Voluntary Aid for Elderly People at Home***

Masahide Nakamura

Kobe University

P.1.6 ***Developing a Caregiver Feedback Response System using a Home-based Sensor Platform***

Laura Ault[1], Allison Kachala[1], Frank Knoefel[1], Andrew Frank[1], Bruce Wallace, Rafik Goubran[2], Jeffrey Kaye[3], Chantal Trudel[2], Neil Thomas[1,4]

[1]Bruyere Research Institute, [2]Carleton University [3]Oregon Health and Science University, [4]University of Ottawa

P.1.7 ***Prioritization of novel technologies by people with disabilities and their caregivers***

Ben Mortenson[1], Oladele Atoyebi[1], Claudine Auger[2], Maude Beaudoin[3], Louise Demers[2], Emilie Lacroix[3], Michelle Plante[4], Francois Routhier[3]

[1]University of British Columbia, [2]Unviersité de Montréal, [3]University of Laval, [4]CRIUGM

P.1.8 ***Technology support for enhancing daily resilience and safe ambulation of very old people***

Claudia Giacomozzi

Italian National Institute of Health

P.1.9 ***Implementing gerontechnology in Norwegian municipalities***

Roger Søraa[1], Erlend Kleiven-Jørgensen[1]

[1]Norwegian university of science and technology

P.1.10 ***The Value of Linguistic Redundancy in Human-Robot Communication: A Comparison of Younger and Older Adults***

Saryazdi Raheleh[1], Craig Chambers[1], Raheleh Saryazdi[1]

[1]University of Toronto

P.1.11 ***Voice Assistant for ageing people: reminding drugs prescriptions without Internet connection***

Jose Garcia-Alonso[1], Javier Berrocal[1], Jose Garcia-Alonso[1], Manuel Jesús-Azabal[1], Juan M. Murillo[1]

[1]University of Extremadura

P.1.12 ***Matters of care when introducing technology: the case of remote monitoring at night by camera***

Lucia Crevani[1], Silvia Bruzzone[1], Michela Cozza[1]

[1]Mälardalen University

P.1.13 ***Vital Sign and Well-being Assessment Using Bed Based Sensing***

Bruce Wallace[1], Laura Ault[2], J. Larivière-Chartier, Rafik Goubran[1], Frank Knoefel[2]

[1]Carleton University, [2]Bruyere Research Institute

P.1.14 ***Can MaaS change elder persons' lifestyle, behavior and consciousness?***

Yusuke Kanda

National Institute of Technology, Kure College

P.1.15 ***Alberta Rating Index for Apps (ARIA): Helping older adults find acceptable mobile health apps***

Peyman Azad Khaneghah[1], Martin Ferguson-Pell[1], Lili Liu[2], Mary Roduta Roberts[1], Eleni Stroulia[1]

[1]University of Alberta, [2]University of Waterloo

P.1.16 ***Methods to assess needs for welfare technology among older persons. A survey of welfare technology providers in Sweden***

Viktoria Zander

Mälardalen University

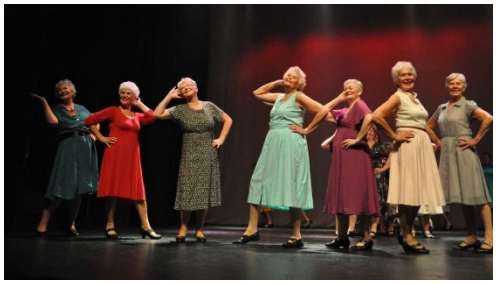
P.1.17 ***Introducing assistive media***

David Frohlich[1], Paula Castro[2], Sarah Campbell[1]

[1]University of Surrey, [2] Federal University of São Carlos

13:50 - 14:10 Break

The video **"PATINA"** *(Photo: The newspaper "Sør-Trøndelag")*



14:10 - 15:15 Symposia 1-4

S.1 ***Robotizing care for older people what should be automized when robots enter home care?***

Convener: **Britt Östlund**, Royal Institute of Technology, Sweden

Participants

Moon Choi, Korea Advanced Institute of Science and Technology, South Korea
Anna Spånt Enbuske, Kommunal, Sweden
Sanna Kuoppamäki, Royal Institute of Technology, Sweden
Björn Fischer, Royal Institute of Technology, Sweden

S.2 ***The technology acceptance model in older age: new directions and perspectives***

Convener: **Mario Jokisch**, Heidelberg University, Germany

Participants

Louisa Scheling, Heidelberg University, Germany
Friedrich Wolf, Goethe University, Germany
Anna Schlomann, Heidelberg University, Germany
Thorsten Kolling, discussant, Goethe University, Germany

S.3 ***Appropriate Level Technologies in Aging: Economic, Public Policy, Human Factors, and Psycho-Social Perspectives***

Convener: **Sunkyo Kwon**, Hanyang University, South Korea

Participants

James L. Fozard, University of South Florida, United States of America
Gloria M. Gutman, Simon Fraser University, Canada
William D. Kearns, University of South Florida, United States of America
Christophe Kunze, Furtwangen University, Germany
Yeong-Ran Park, Kangnam University, South Korea

S.4 ***Sociological perspectives on Gerontechnology. Theoretical and empirical reflections on current technology development processes***

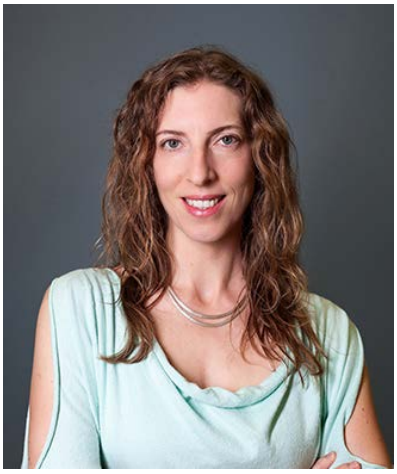
Convener: **Harald Künemund**, University of Vechta, Germany
Cordula Endter, German Centre of Gerontology, Germany

Participants

Sebastian Merkel, Institute for Work and Technology, Germany
Sibylle Meyer, discussant, SIBIS institute, Germany

15:15 - 15:30 Break

15:30 - 16:15 Keynote Presentation



Jennifer Boger, Intelligent Technologies for Wellness and Independent Living lab. and University of Waterloo

I am more than my vital signs! - Leveraging technology to support meaningful aging

16:15 - 16:20 Break

16:20 - 17:20 Symposia 5-8

S.5 ***The Center for Research and Education on Aging and Technology Enhancement (CREATE): Twenty Years of Advancing Technology to Support Older Adults***

Convener: **Wendy Rogers**, University of Illinois Urbana-Champaign, United States of America

Participants

Neil Charness, Florida State University, United States of America
Sara J. Czaja, Weill Cornell Medicine, United States of America
Walter R. Boot, Florida State University, United States of America
Helianthe Kort, University of Applied Sciences Utrecht and Eindhoven University of Technology, The Netherlands

S.6 ***Robots influencing emotional wellbeing***

Convener: **Barbara Klein**, Frankfurt University of Applied Sciences, Germany

Participants

Yayoi Saito, NiCT and Osaka University, JAPAN
Keiko Ishihara, Hiroshima International University, Japan
Ryuji Yamazaki, Osaka University, Japan

S.7 ***The voice of the user revisited***

Convener**: Evelin Wouters**, Tilburg University and Fontys University of Applied Sciences, The Netherlands

Participants

Ittay Mannheim, Fontys University of Applied Sciences, The Netherlands
Yvonne Schikhof, Rotterdam University of Applied Sciences, The Netherlands
Manon Peeters-Schaap, Fontys University of Applied Sciences, The Netherlands
Rens Brankaert, University of Technology Eindhoven and Fontys University of Applied Sciences, The Netherlands

S.8 ***Aged Care Information Technology Roadmaps and Research***
Convener: **Gregory Alexander**, University of Missouri Sinclair School of Nursing, United States of America

Participants
Anne Moen, University of Oslo, Norway

Scientific Program - Thursday, October 8, 2020

11:45 - 12:00 Introduction of day

Video greeting from: **Pro-Rector for Innovation Toril A. Nagelhus Hernes**, NTNU

12:00 - 12:45 Oral session 7-12

O.7 Technological needs and barriers

O.7.1 ***Understanding Healthcare Challenges and Needs for Older Adults with and without Mobility and Sensory Disabilities,*** Qiong Nie, University of Illinois Urbana Champaign, United States of America

O.7.2 ***Unmet needs and barriers to use of technology and potential novel solutions for family caregivers***, Ben Mortenson, University of British Columbia, Canada

O.7.3 ***Adopting an ethical mindset while developing and using 'smart' gerontechnology in long-term care***, Henk Herman Nap, Vilans, Netherlands

O.7.4 ***Life under COVID-19 – Opportunities and challenges for AgeTech,*** Andrew Sixsmith, Simon Fraser University, Canada

O.8 Experienced Health and (Self) Respect

O.8.1 ***Older people seeking health information before seeing a doctor,*** Anthea Tinker, King's College London, United Kingdom

0.8.2 ***How do people living with subjective cognitive impairments want to get support in resilience?*** Henk Herman Nap, Vilans, The Netherlands

O.8.3 ***Digital Health Screening Tool for Identification of Elder Mistreatment***, Fuad Abujarad, Yale University School of Medicine, United States of America

O.8.4 ***Examining Quality of Life Enhancing Affordances of Information and Communication Technology Use Among Older Adults in the United States,*** Travis Kadylak, Michigan State University, United States of America

O.8.5 ***Psychological outcomes of telecare use in informal care - a qualitative intervention study in Slovenia***, Simona Hvalič-Touzery, University of Ljubljana, Faculty of Social Sciences, Slovenia

O.9 Sensors and Monitoring

O.9.1 ***Using machine learning for in-bed posture classification, sleep and daily pattern recognition on a motion-sensing mattress***, Yeh-Liang Hsu, Yuan Ze University, Taiwan

O.9.2 ***Re-thinking community mobility for older adults amid a revolution in automotive technology,*** Tara Kajaks, McMaster University, Canada

O.9.3 ***Locomotion analysis in ecological contexts by an automatically guided vehicle for clinical and rehabilitation evaluation: preliminary results,*** William Bégin, Université du Québec à Chicoutimi, Canada

O.9.4 ***Proof of concept: The use of time resolved bioimpedance to measure hydration state***, Solfrid Romundstad, NTNU/Mode Sensors/Levanger Hospital, Norway

O.9.5 ***Effectiveness of eNightLog in night-time monitoring of elderly***, Eric Tam, The Hong Kong Polytechnic University, Hong Kong

O.10 Gait and falls

O.10.1 ***The diffusion of gerontechnology for fall prevention, fall detection, and fall monitoring model testing,*** Gabriela Pereira, Oklahoma State University, United States of America

O.10.2 ***Who will fall in the next three months? Screening fall risk in healthy older persons***, Paula Castro, Federal University of Sao Carlos, Brazil

O.10.3 ***Moving safely, living independently: The co-creation of FreeWalker,*** Henk Herman Nap, Vilans, The Netherlands

O.10.4 ***A framework to describe the levels of risk associated with dementia-related wandering,*** Noelannah Neubauer, University of Alberta, Canada

O.11 Methods and Models

O.11.1 ***A participatory spiral model for gerontechnology development,*** Coco Chen, HKU, Hong Kong

O.11.2 ***User Acceptance and Evaluation of Ambient Assisted Living Systems,*** Jelena Bleja, Dortmund University of Applied Sciences and Arts, Germany

O.11.3 ***Analyzing the barriers of technology acceptance model of older adults during the COVID-19 Pandemic,*** Yasemin Afacan, Bilkent University, Turkey

O.11.4 ***The i-evAALution RCT: rationale, methods and first results of the pre-tests,*** Ines Simbrig, Eurac Research, Italy

O.11.5 ***Acceptability and usability of the ICT and AI-based care services for older people living alone in Korea***, Yeong Ran Park, Kangnam University, Republic of Korea

O.12 Innovation

O.12.1 ***Quantifying movement variability with fractals: From fall prediction to pharmaceutical evaluations***, James Fozard & William D. Kearns, University of South Florida, United States of America

O.12.2 ***Feasibility study of a digital screen-based calming device on disruptive BPSD in shared areas of a LTC facility,*** Gloria Gutman, Simon Fraser U Gerontology Research Centre, Canada

O.12.3 ***Technology usage among elderly with self-reported hearing disability: results from In-veCe.Ab.***, Mauro Colombo, ASP Golgi Redaelli, Italy

O.12.4 ***MCI@Work: Developing a customizable digital tool to support people with MCI and early-onset dementia with task-management in the workplace,*** Arlene Astell, University of Toronto, Canada

O.12.5 ***Development of a Dialogue Robot Bono-06 for Cognitive Training of Older Adults,*** Seiki Tokunaga, RIKEN, Japan

12:45 - 14:00 Exhibition

Visit our exhibitors using the OnAIR platform

12:45 - 12:50 Break

12:50 - 13:35 Poster Group 2

P.2.1 ***Considerations for Designing Domestic Robots for Older Adults***
Travis Kadylak[1], Megan Bayles[1], Dann Rhee[1], Wendy Rogers[1]

[1]University of Illinois Urbana-Champaign

P.2.2 ***Giving voice to human-robot intersubjectivity in loneliness contexts***
Fernando Montalvo[1], Giovanna Alves[2], Sean Hinkle[1], Daniel McConnell[1], Eva Parkhurst[1], Janan Smither[1], Gabrielle Vasquez[1]

[1]University of Central Florida, [2]John Jay College of Criminal Justice

P.2.3 ***Digital training as medicine***
Mariann Sandsund[1], Knut Løkke[2], Jan Helgerud[2], Jan Hoff[2], Even Andre Fiskvik[2], Jens Petter Lysø[2], Nina Vanvik Hansen[1]

[1]SINTEF Norway, [2]Myworkout

P.2.4 ***A rehabilitation program with patient-personalized exergames to address fear and risks of falling in vulnerable older adults of a geriatric hospital: A feasibility study***
Nolwenn Lapierre[1], Joël Belmin[1], Joël Chevrier[2], Manuella Igout[1], Nathavy Um Din[1]

[1]Hôpital Charles Foix, [2]Centre de Recherche Interdisciplinaire

P.2.5 ***Can a Group Exergaming Intervention Impact Balance, Movement Confidence, and Cognitive Function Among People with Cognitive Impairment?***
Erica Dove[1], Arlene Astell[2], Rosalie Wang[1], Karl Zabjek[2]

[1]Toronto Rehab, [2]University of Toronto

P.2.6 ***Aging in place: Perspectives across time and disciplines***
Widya A. Ramadhani[1], Maurita Harris[1], Wendy Rogers[1]

[1]*University of Illinois at Urbana Champaign*

P.2.8 ***Advancing Reminiscence Therapy through Virtual Reality Application to Promote Social Connectedness of Persons with Dementia***

Winnie Sun[1], Sheri Hornsburgh[2], Manon Lemonde[1], Julie Earle[2], Alvaro Quevedo[1], Ramiro Liscano[1], Bill Kapralos[1], Akira Tokuhiro[1], Emma Bartfay[1], Rabia Akhter[1], D. Wilson

[1]Ontario Tech University, [2]Ontario Shores Centre for Mental Health Sciences

P.2.9 ***Interactive Doll Training System for Elderlies with Dementia***

James Cheung[1], Alex Mak[1], Eric Tam [1], Tess Law[1], Tim Chan[1], Yongping Zheng[1]

[1]*The Hong Kong Polytechnic University*

P.2.10 ***Strategies for persons living with dementia at risk of going missing: Applying the Goldilocks Principle***

Noelannah Neubauer[1], Christine Daum[1], Lili Liu[2]

[1]*University of Alberta,* [2]*University of Waterloo*

P.2.11 ***MCI@work: The role of technology in work and everyday life as experienced by people with MCI or early stage dementia***

Arlene Astell[1], Jen Boger[2], Mervi Issakeinen[3], Anna Mäki-Petäjä-Leinonen[3], Ann-Charlotte Nedlund[4], Louise Nygård[5], Charlotta Ryd[5], Karan Shastri[2]

[1]*University of Toronto,* [2]*University of Waterloo,* [3]*University of Eastern Finland,* [4]*Linköping University,* [5]*Karolinska Institute*

P.2.12 ***Contextualizing smart home technologies with augmented reality tools to facilitate aging in place***

Laura Levy[1], Ben Thompson[1], Maribeth Gandy[1]

[1]*Georgia Institute of Technology*

P.2.13 ***Assessment of Time in Bed and Overnight Bed Exits using and Bed Based Sensing***

Bruce Wallace[1], Laura Ault[2], J. Larivière-Chartier, Rafik Goubran[1], Frank Knoefel[2]

[1]*Carleton University,* [2]*Bruyere Research Institute*

P.2.14 ***Enhancement of the mobility and social connectedness in older people with a chronic disorder by using an activity tracker and social interactions gatherings***

Chantal Huisman[1], Helianthe Kort[1], Sigrid Vorrink[2]

[1]*University of Applied Sciences Utrecht,* [2]*OLVG*

P.2.15 ***The probe on the Intention of Use for elders of Health Improvement System***

Kenneth Wang[1], Houn-Gee Chen[2]

[1]*Lunghwa University of Science and Technology,* [2]*National Taiwan University*

P.2.16 ***The influence of the affective dimension on the digital literacy of older adults***

Lilian Bernardo[1], Sabrina Alvaro[1], Caroline Pizzetti[2], Taiuani Raymundo[2]

[1]*Federal Institute of Rio de Janeiro,* [2]*Universidade Federal do Paraná*

P.2.17 ***Age-related manual dexterity declines associated with reduced white matter integrity in baseline and follow-up sessions***

Shulan Hsieh[1], Meng-Heng Yang[1], Zai-Fu Yao[2]

[1]*National Cheng Kung University,* [2]*University of Amsterdam*

P.2.18 ***PROTECT Norge***

Jon Arild Aakre[1], Martha Therese Gjestsen[1], Ingelin Testad[1], Dag Aarsland[1]

[1]*SESAM - Centre for Age-Related Medicine*

13:35 - 14:00 Break

The video **"PATINA"** again (for those who missed it)

14:00 - 15:00 Roundtable

ISG chapters: challenges and opportunities to raise the global profile of gerontechnology

Convener: **Gloria Gutman**, Simon Fraser U Gerontology Research Centre, Canada

Participants:
Yeh-Liang Hsu, Yuan Ze University, Taiwan
Ishihara Shigekazu, Hiroshima International University, Japan
Barbara Klein, Frankfurt University of Applied Sciences, Germany
Helianthe Kort, University of Applied Sciences Utrecht and Eindhoven University of Technology, The Netherlands
Yeong-Ran Park, Kangnam University, Republic of Korea
Carla da Silva Santana, University of Sao Paulo, Brazil
Yong-Ping Zheng, The Hong Kong Polytechnic University, Hong Kong

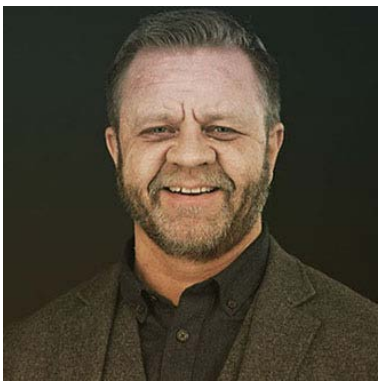
15:00 - 15:05 Break

15:05 - 15:35 Keynote Presentation

Jan Helgerud, Norwegian University of Science and Technology, Norway
The fountain of youth goes digital. Exercise capacity, health and longevity - digitally assisted

15:35 - 16:05 Keynote Presentation

Roald Kvam, Motitech AS, Norway
Motiview - turns older people and people with dementia into dedicated athletes



Scientific Program - Friday, October 9, 2020

11:45 – 12:00 Introduction of day

Video greeting from: **Professor Jorunn L. Helbostad**, NTNU

12:00 – 13:00 Symposia 9-13

S.9 ***Use of Real-World Data for advancing clinical practice***
Convener: S**abato Mellone,** University of Bologna, Italy
Kristin Taraldsen, Norwegian University of Science and Technology, Norway

Participants
Ronny Bergquist, Norwegian University of Science and Technology, Norway
Carl-Philipp Jansen, Heidelberg University, Germany
Anisoara Paraschiv-Ionescu, Ecole Polytechnique Federale de Lausanne, Switzerland

S.10 ***Involving older people in the development of technological innovations; an interactive session about co-creation and co-design with older people***
Convener: **Helianthe Kort**, University of Applied Sciences Utrecht and Eindhoven University of Technology, The Netherlands

Participants
Bas Steunenberg, Utrecht University of Applied Sciences, The Netherlands
Paula Castro, Universidade Federal de Sao Carlos, Brazil
Rens Brankaert, University of Technology Eindhoven and Fontys University of Applied Sciences, Germany
Maribel Pino, Broca Living Lab, France

S.11 ***Current trends in Gerontechnology. Recent findings from the German speaking chapter***
Convener: **Barbara Klein**

Participants
Vera Maria Gallistl, University of Vienna, Austria
Sebastian Merkel, Ruhr-University Bochum, Germany
Jana Tessmer, University of Applied Sciences, Germany
Claudia Oppenauer, Medical University Vienna, Austria

S.12 ***Conceptualizing trust and AAL-technology: steps towards a comparative framework***
Convener: **Mads Solberg**, Norwegian University of Science and Technology

Participants
Sigrid Nakrem, Norwegian University of Science and Technology, Norway
Agneta Malmgren Fänge, Lund University, Sweden
Kirsten Thommes, University of Paderborn, Germany
Pernille Nyvoll, Norwegian University of Science and Technology, Norway
Ralf Kirchhoff, Norwegian University of Science and Technology, Norway

S.13 ***International perspectives on technology use: Adoption, proficiency, and relationships with health and well-being***
Convener: **Walter Boot**, Florida State University, United States of America

Participants
Anna Schlomann, University of Cologne, Germany
Simona Hvalič-Touzery, University of Ljubljana, Slovenia

13:00 - 13:05 Break

13:00 - 14:15 Exhibition

Visit our exhibitors using the OnAIR platform

13:05 - 13:50 Poster Group 3

P.3.1 ***Community-dwelling elderly's experience with an educative nutritional intervention***
Jon Arild Aakre[1], Lise Birgitte Holteng[1], Ingelin Testad[1]

[1]SESAM - Centre for Age-Related Medicine

P.3.2 ***Shared Dining as a powerful tool to promote independent life in nursing homes***
Ryoko Fukuda

Benesse Style Care Co., Ltd.

P.3.3 ***Co-creating an application for daily use from scratch: The Novel Assessment of Nutrition and Ageing (NANA)***
Arlene Astell[1], Tim Adlam[2], Faustina Hwang[3], Elizabeth Williams[4]

[1]University of Toronto, [2]Designability, [3]University of Reading, [4]University of Sheffield

P.3.4 ***An Older Adult's Perspective on Social Networking Sites Impact on Loneliness***
Nicole Obrien[1], Yufei Yuan[2]

[1]Suffolk University, [2]McMaster University

P.3.5 ***Tackling Stigma and Social Isolation Through Touchscreen Games: Let's Connect***
Erica Dove[1], Arlene Astell[2], Elicia Chamoun[1], Karen Cotnam[3], Paul Gural[3], Teresa Shearer[3]

[1]Toronto Rehab Canada, [2]University of Toronto, [3]Oshawa Senior Community Centres

P.3.6 ***Social presence in embodied virtual agents among lonely older adults***
Jordan Sasser[1], Daniel McConnell[1], Fernando Montalvo[1], Eva Parkhurst[1], Janan Smither[1], Gabrielle Vasquez[1]

[1]University of Central Florida

P.3.7 ***Computer-based cognitive stimulation and the effects on the Quality of Life in older population***
Ana Bonilha[1], Solange Andreoni[1], Luiz Roberto Ramos[1], Ana Paula Vicentin[1]

[1]Unifesp

P.3.8 ***The assisted living technology for the older adult users- Current application, challenges, and future development***
Sui-Hua Ho[1], Chiuhsiang Joe Lin[1]

[1]National Taiwan University of Science & Technology

P.3.9 ***Towards a Viability Assessment of Smart-Ready and Life-Long Homes for Ambient Assisted Living***
Sumi Hela[1]l, Smith Andrea[2], Andrew Ascroft[2], Christopher Bull[1]

[1]Lancaster University, [2]Lancashire County Council

P.3.10 ***Policy support tool for mobility of older people***
Shahram Chuhdary[1], Davy Janssens[1], An Neven[1], Emily Verte[2], Geert Wets[1]

[1]*IMOB - University of Hasselt,* [2]*Vrije Universiteit Brussel*

P.3.11 ***Use of a non-invasive device to relieve urinary incontinence in vulnerable elders of a geriatric hospital ward: a feasibility study***
Nathavy Um Din[1], Joël Belmin[1], Valérie Gillet[1], Duy Nghiem[1], Yuhei Urabe[2]

[1]*Hôpital Charles Foix,* [2]*Triple W*

P.3.12 ***Searching for the success criteria's and challenges with the new concept "Kampen omsorg +"***
Karin Høyland[1], Lisbet Grut[1], Hilde Thygesen[2]

[1]*SINTEF Community,* [2]*VID vitenskapelige høgskole*

P.3.13 ***Understanding Why Older Adults Use Mobility Devices: Review of the Literature***
Tai-Te Su[1], Shannon Mejia[1]

[1]*University of Illinois at Urbana-Champaign*

P.3.14 ***Give the People What they Want, Feedback: Older adult perceptions about cognitive training features that might increase engagement***
Nelson Roque[1], Erin Harrell[2]

[1]*Pennsylvania State University,* [2]*Florida State University*

P.3.15 ***Nocturnal Wandering Diversion: Preliminary Results from 8 Homes***
Laura Ault[1], Rafik Goubran[2], Frank Knoefel[1], Tarek Nasser El Harake[2], Heidi Sveistrup[1], Brenda Toonders[3], Bruce Wallace[2]

[1]*Bruyere Research Institute,* [2]*Carleton University,* [3]*Champlain LHIN*

P.3.16 ***Measuring user-defined facial features for supporting scientific long-term care***
Kosuke Hirayama[1], Masahide Nakamura[1], Sachio Saiki[1]

[1]*Kobe University*

13:50 - 14:15 Break

14:15 - 15:00 Keynote Presentation

Yeh-Liang Hsu, Yuan-Ze University, Taiwan
A design approach to gerontechnology - From research to daily applications

15:00 - 15:15 Break

15:15 - 16:15 Roundtable

Innovations in Gerontechnology and the 'Human Element.'

Convener: **Sunkyo Kwon**, Hanyang University, ITSA, South Korea
Gloria M. Gutman, Simon Fraser U Gerontology Research Centre, Canada

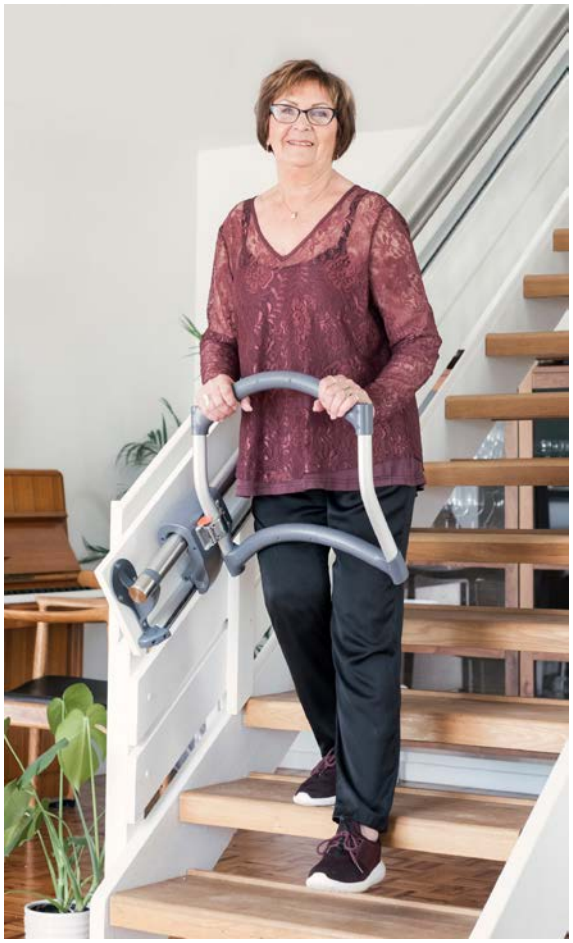
Participants:
Neil Charness, Florida State University, United States of America
James L. Fozard, University of South Florida, United States of America
Song K. Choi, University of Hawaii, United States of America
William D. Kearns, University of South Florida, United States of America
Yeong-Ran Park, Kangnam University, Republic of Korea

16:15 - 16:20 Break

16:20 - 17:00 Closing ceremony

Preview ISG 2022

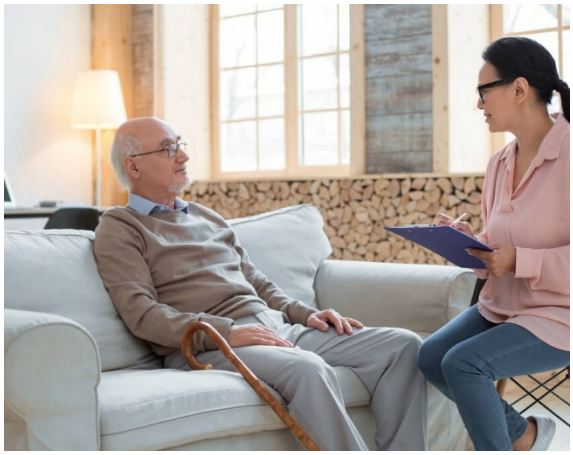
Exhibition



AssiStep

Stay independent in your own home. With the stair aid AssiStep, you have a solid and firm support in front of you when walking up or down the stairs. It reduces the risk of falling and gives you confidence in your everyday life.

Link: https://assistep.com/



EasyCare

WORK-FLOWS IN OCCUPATIONAL THERAPY

The problem

- Mapping of patient needs, selection and handling of welfare equipment in
- the municipal healthcare require large resources
- The service is characterized by manual processes, extensive and
- repetitive documentation, and lack of coordination
- In order to improve quality, reduce waiting lists and unnecessary cost, the
- workflow needs to be streamlined and automated

The solution

- EasyCare® is a modular software that provides mapping and analytical
- tools for occupational therapists and administrates the entire workflow and
- logistics of aid equipment
- Delivered as SaaS, with one common module and several add-on modules
- for specific tasks, enabling customers to tailor-build according to needs.
- The system is scalable to any customer size and with open APIs for co-
- working with other software suites
- The only software suite that handles the entire workflow from incoming
- request to return of equipment after use
- Built on a platform developed for the oil & gas industry (www.taghub.net),
- with extreme functional demands

Link: https://easycare.as/

Motiview

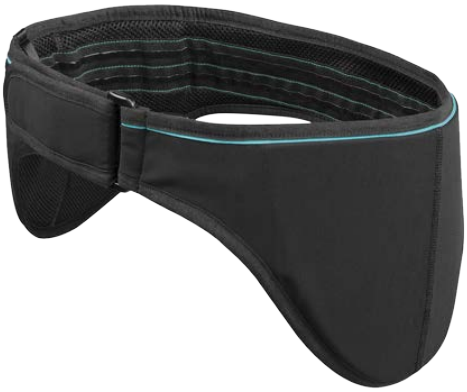
Motitech is the Norwegian company behind Motiview, a motivational tool that stimulates older people and people with dementia to increased physical, mental and social wellbeing.

Using a specially adapted indoor exercise bike, video and sound, the users can take cycle trips through familiar surroundings and childhood memories.

The benefits have been documented through extensive use and several projects; Improved mobility; Fewer falls; Faster rehabilitation; Increased appetite; Reduced obesity; Reduction in aggressive behaviour and medication; Better sleep; Less pain; Improved physical, mental and social well-being; Inspiring for carers and family.

Motiview is now being used in the Nordics, UK, North America, and Australia.

Motitech AS, with the Motiview - focus on abilities instead of disabilities: www.motitech.no, https://motitech.co.uk/



HiP – High Impact Protection - Hip Protector

Falls resulting in hip fractures are one of the main reasons for deteriorating health amongst the elderly. Several studies indicate that use of hip protectors can reduce the number of hip fractures related to falls. However other studies report that low compliance is an issue, with acceptance being as low as 37% and adherence as low as 20% in some cases2. Our hypothesis is that low compliance can be explained by the current design of hip protectors not meeting the needs of the users. In relation to this Protex has together with SINTEF designed the next generation of hip protector.

- HiP is a thin and flexible hip protector that protects the hip bone when falling. It is easy to put on, comfortable to wear and can be worn either over or under clothing.
- HiP is a product that will give people a better life with physical activity. Reduces the risk of hip fractures from falls.
- HiP has received The Award for Design Excellence

Link: https://www.protexshop.no/en/products/hip

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- Mona Kirkeby Eidem, Administration Officer, Dept. Health Research (Webpage administrator)

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- Sylvia Söderström, Professor, Dept. of Neuromedicine and Movement Science
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- Maja Hassel, Consultant, Event and Sponsorship
- Siri Solheim-Kristiansen, Consultant, Event and Sponsorship

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- Frode Strisland, Senior Research Scientist, Dept. Smart Sensor Systems, Leader of Strategic Area "Health and Welfare"
- Anita Das, Research Manager, Dept. Health Research
- Jon Harald Kaspersen, Research Director, Dept. Health Research
- Jenny Melind Bergschöld, Research Scientist, Dept. Smart Sensor Systems
- Health Research at SINTEF

NTNU:

- Magnus Steigedal, Director of NTNU's Thematic Strategic Area of Health, Welfare and Technology
- Artur Serrano, Professor, Dept. of Neuromedicine and Movement Science
- Sigrid Nakrem, Professor, Dept. of Public Health and Nursing

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