



ISG 2024

14. ISG WORLD CONFERENCE OF GERONTECHNOLOGY

Sustainability and Crises – Challenges and Innovation for Gerontechnology

2–4 September 2024

Frankfurt University of Applied Sciences

Frankfurt am Main

FORSCHUNGSZENTRUM
FRANKFURT UAS
FUTURE AGING



Conference Program

INTERNATIONAL SOCIETY FOR GERONTECHNOLOGY



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

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Words of Welcome



Prof. Dr. Helianthe Kort
President of ISG –
International Society for Gerontechnology



Prof. Dr. Barbara Klein
Vice President of ISG –
International Society for Gerontechnology

Societies today face global demographic change with ageing populations and skills shortages. Tremendous developments in technological innovation such as AI, robots, sensor-based systems, etc. only hint at future possibilities. The increasing availability of innovative products requires new approaches to service delivery, architecture, and urban planning. In addition, we are facing multiple and simultaneous crises such as wars in different parts of the world, past and future pandemics, and climate change. These developments call for innovative interdisciplinary approaches, in particular and especially in the field of Gerontechnology. How will Gerontechnology position itself as an interdisciplinary field in the context of increasingly complex contextual developments?

Today, we need to take a holistic view of aging and older people. This means that we must not only develop and apply methods that involve and empower those affected but also take into account the whole socio-technical system if we want to achieve optimal use. This means that the paradigm shift is a continuous process in which we must consider more factors and variables.

The World Conference of the International Society of Gerontechnology will be held for the first time at a University of Applied Sciences. It will offer a diverse range of sessions and events. The conference invites researchers, practitioners, government officials, entrepreneurs, and other experts in Gerontechnology worldwide. Multidisciplinary and multisectoral networking and discussion are the core values of ISG 2024. Symposia, oral presentations, and poster sessions will provide the latest information and insights into societal and technological solutions to the challenges of an aging population. In addition, the Organizing Committee has arranged excellent opportunities for formal and informal meetings to promote networking among participants from different backgrounds.

We wish you an inspiring conference experience filled with innovative and valuable insights into Gerontechnology and a pleasant stay in Frankfurt am Main, Germany.



Prof. Dr. Oliver Schocke
President
Frankfurt University of Applied Sciences
and U!REKA European University



Prof. Dr. Susanne Rägler
Vice President
Frankfurt University of Applied Sciences
and U!REKA European University

It is an honor to welcome you to the 14th World Conference of Gerontechnology in Frankfurt am Main. ISG 2024 is a gathering and celebration for researchers, practitioners, government officials, entrepreneurs, and others in the field of Gerontechnology from around the globe. Together, we will share the latest research findings and visions for active and healthy aging under the headline “Crises and Sustainability: Challenges and Innovation for Gerontechnology.”

For the first time, the World Congress is being held at a University of Applied Sciences. We believe this decision reflects our six key characteristics, which we are deeply honored to be recognized for: practical relevance, social responsibility, sustainability, internationality, digitalization, and interdisciplinarity. These values are central to our work and have enabled us to establish the FUTURE AGING research center, which successfully collaborates with various practice partners on solutions for aging societies. Our Master’s Degree Program in Inclusive Design combines interdisciplinary projects and professional expertise in architecture, computer science, engineering, social work, and health. Our range of laboratories and the permanent exhibition “Hello Freedom! Beyond Barriers” organized in collaboration with the Social Association VdK Hesse-Thuringa and the Frankfurt Foundation for the Deaf and Hearing Impaired, exemplify innovative approaches to engaging students, professionals, and the public with complex topics.

We are pleased to announce that ISG 2024 features 8 keynote speeches, 13 symposia, 160 oral presentations, and 7 poster presentations by multidisciplinary researchers from 35 countries. We are also excited to welcome exhibitors showcasing digital and social innovations that impact the daily lives of older adults, opening up new opportunities and addressing challenges for active and healthy aging.

Frankfurt is the fifth-largest city in Germany, with approximately 765,000 residents and an equal number of commuters. We hope you enjoy the beautiful scenery of Frankfurt, its cultural vibrance and dynamic activities during your stay.

Sponsors

Exhibition Area (Johannes Uthoff-Hall)



Cyberdyne Care Robotics

vitos:

Herborn

Psychiatric and psychosomatic health center



Personal Robotics

Professional Personal Robots



Gerontech R&D Institute

Korean Association of Product and Services for Senior citizens



IT security, data protection and smart home assistance systems

St. Katharinen- und Weißfrauenstift
Stiftung des öffentlichen Rechts



Foundation under public law

USC Leonard Davis

School of Gerontology

University of Southern California
Leonard Davis School of Gerontology

StartUp-Cooperation with



AVA

AVA project – Exploring AI companions as allies against elderly isolation

COGNIShine

Cognishine Therapy and Education Ltd.



Daheim Dank Digital

Research team at the AGAPLESION Bethesda Clinic Ulm



Leben leicht gemacht

Professional advice on care



Virtual experiences for activation and cognitive training in social and health care



your healthcare companion

AI-driven, social robot and therapy-support platform

veli

Veli Care – The smart home emergency call for your home

WINGCOPTER

Delivery drone for healthcare logistics

FORSCHUNGSZENTRUM
FRANKFURT UAS
FUTURE AGING

Research Center FUTURE AGING
Solutions for living and working in an aging society

HALLO FREIHEIT!
ZUSAMMEN ÜBER BARRIEREN



The BAGSO – Federal Association of Senior Citizens' Organizations represents the interests of older generations in Germany



DIALOG MUSEUM FRANKFURT



MELIÄ



Austrian 

brussels 
AIRLINES

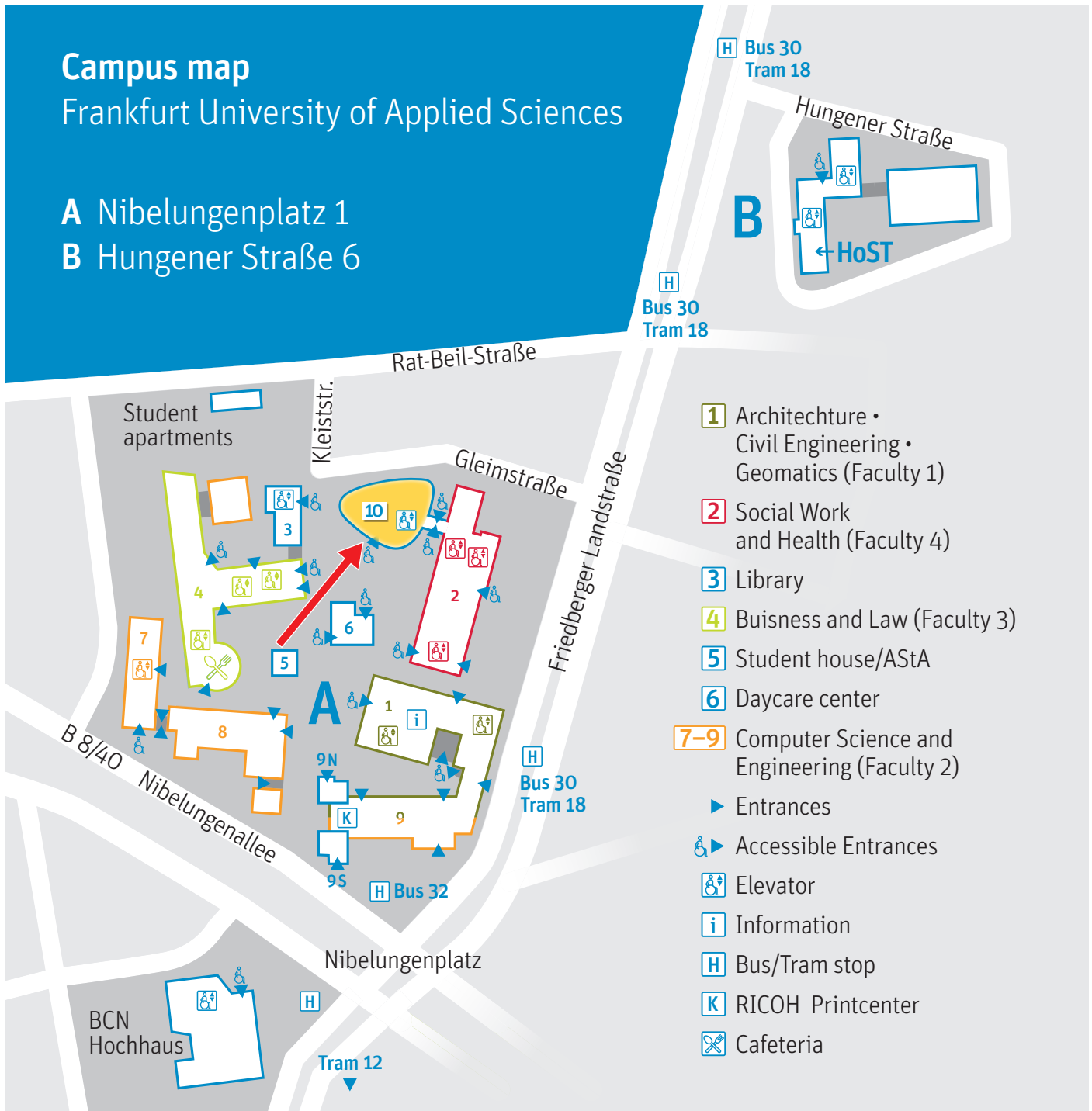
Eurowings 

 **Lufthansa**

 **SWISS**

Campus Map

All events take place in Building 10 (marked in yellow)



Program at a Glance

Time	Day 1 – Monday, 2 September 2024						
08:00-19:00	ISG Registration (Foyer, Building 10)						
10:00-10:30	ISG Opening Ceremony (Johannes Uthoff-Hall)						
10:30-11:30	Keynote 1: Dr. Y. Yon (Johannes Uthoff-Hall)						
11:30-13:00	11A Symposium Application Fields 894 J. B. van Waterschoot (R 309)	11B Symposium Sustainability and Crisis 1137 C. Schmitt / B. Klein (R 310)	11C Oral Dementia Care Technologies 875, 889, 881, 980, 1150 (R 311)	11D Oral Governance and Social Policy 868, 913, 929, 1002, 1053 (R 202)	11E Oral Healing Architecture and Inclusive Environments 926, 1048, 1141 (R 125)	11F Oral Robots, AI and MR 1046, 1110, 1129, 1130, 1158 (R 205)	11G Symposium Criteria and Assessment of Assistive Technologies for Ageing-in-Place 1131 (R 113)
13:00-14:00	Lunch (Cafeteria, Building 4)						
14:00-14:30	Keynote 2: B. Pahlich (Johannes Uthoff-Hall)						
14:30-16:00	12A Oral Application Fields 859, 936, 985, 1000, 1003 (R 309)	12B Oral Sustainability and Crises 855, 872, 877, 928, 1092 (R 310)	12C Oral Others 865, 879, 901, 911, 1096 (R 311)	12D Oral Ethics and DEI 902, 948, 951, 1057, 1018 (R 202)	12E Oral Technology 871, 907, 918, 958, 959 (R 125)	12F Oral Work, Health and Self Esteem 1014, 1087, 1135, 1157 (R 205)	Innovation Forum (R 303)
16:00-16:30	Coffee Break (E 08/09, Building 10)						
16:30-17:00	Keynote 3: Dr. H. Mollenkopf (Johannes Uthoff-Hall)						
17:00-18:30	13A Oral Application Fields 921, 932, 950, 896, 974 (R 309)	13B Oral Crises and Pre- paredness 927, 1074, 1089, 1109 (R 310)	13C Oral Others 943, 1001, 1011 (R 311)	13D Oral Dementia and Technology 984, 1040, 1070, 1076, 1085 (R 202)	13E Oral Ethics and DEI 1108, 1114, 1115, 1116, 1124 (R 125)	Invited only Old Board Meeting 17:00-18:00 (R 112) Editorial Meeting 18:00-18:30 (R 112)	Innovation Forum (R 303)
18:30-20:00	Welcome Reception (Campus, Building 10)						

Program at a Glance

Time	Day 2 – Tuesday, 3 September 2024							
07:30-18:00	ISG Registration (Foyer, Building 10)							
08:30-09:30	Keynote 4: Prof. Dr. T. Shibata (Johannes Uthoff-Hall)							
09:30-10:30	21A Oral Robotics 1021, 1058, 1063 (R 309)	21B Oral Health Monitoring and Wellbeing 981, 1054, 1060, 1080 (R 310)	21C Oral Technology and Cognitive Assessment 873, 987, 995 (R 311)	21D Oral Housing and Daily Living 886, 966, 1035 (R 202)	21E Symposium Health and Self Esteem 949 P. Costa Castro (R 125)	21F Symposium Others 1095 W.-J. Shim (R 205)	21G Round Table Gerontechnology: 30+ Years of Research and Application – Where Do We Stand Today? H.-W. Wahl (R 113)	
10:30-11:00	Coffee Break (E 08/09, Building 10) / ISG Chapter Meeting (Johannes Uthoff-Hall)							
11:00-12:30	22A Symposium Application Fields 990 S. Ipakchian Askari (R 309)	22B Oral Application Fields 1072, 970, 1073, 920 (R 310)	22C Symposium Dementia and Technology 944 F. Abujarad (R 311)	22D Oral Work, Leisure and Social Participation 857, 935, 962, 973 (R 202)	22E Symposium Health and Self Esteem 905 R. M. Mudar (R 125)	22F Symposium Ethics and DEI 1105 M. Pino (R 205)	22G Oral Housing and Mobility 956, 1140, 1145, 1139 (R 113)	
12:30-14:00	Lunch (Cafeteria, Building 4) / Guided Poster Tour (Johannes Uthoff-Hall)							
14:00-14:30	Keynote 5: Prof. Dr. W. Moyle (Johannes Uthoff-Hall)							
14:30-15:30	23A Oral Training and Qualification 1061, 1009, 964, 890 (R 309)	23B Oral Literature Review and Trends 1004, 1078, 1086, 864 (R 310)	23C Oral Application Fields, Leisure 910, 931, 954, 1064 (R 311)	23D Oral Work, Leisure and Social Participation 883, 999, 986, 969 (R 202)	23E Oral Health and Self Esteem 887, 908, 941, 1041 (R 125)	23F Oral Housing and Daily Living 903, 1050, 1107, 937 (R 205)	23G Round Table Gerontechnology for Low- and Middle-Income countries; Experiences, Lessons and Challenges 1148 H. Kort (R 113)	Innovation Forum (R 303)
15:30-16:00	Coffee Break (E 08/09, Building 10)							
16:00-16:30	Keynote 6: M. Früh (Johannes Uthoff-Hall)							
16:30-17:30	24A Oral Mobility and Safety, Transport 893, 988, 1066 (R 309)	24B Oral Others 891, 1075, 1084 (R 310)	24C Oral Social and Caregiver Perspectives 1065, 1056, 1098 (R 311)	24D Oral Housing and Daily Living 895, 968, 1024 (R 202)	24E Oral Health and Self Esteem 938, 953, 977, 1022 (R 125)	24F Oral Application Fields 1123, 1127, 1128 (R 205)	24G ISG General Assembly (Johannes Uthoff-Hall)	Innovation Forum (R 303)
18:30-21:30	Hessian Galadinner (Emperor's Hall (Kaisersaal) of the Römer, Römerberg 23, Frankfurt am Main)							

Program at a Glance

Time	Day 3 – Wednesday, 4 September 2024							
07:30-12:00	ISG Registration (Foyer, Building 10)							
08:00-09:00	ISG New Board Meeting (Invited Only) (R 112)							
09:00-11:00	31A Oral Robots in Nursing Care 885, 888, 945, 947, 957, 1121, 1122 (R 309)	31B Oral Virtual Reality and Gamification 942, 989, 979, 1007, 1068, 863 (R 310)	31C Symposium Dementia and Technology 862 K. Kumagai (R 311)	31D Oral Dementia and Technology 961, 930, 1039, 1081, 914 (R 202)	31E Symposium Health and Self Esteem 1038 H. Kase (R 125)	31F Crises & Preparedness, Sustainability & Crisis 923, 952, 1162 (R 205) 10:00-11:00	31G Round Table Technology & Aging Crossing Borders: Expanding ISG Membership and Chapters Across the World 1159 S.P. Kwon (R 113)	Innovation Forum (R 303)
11:00-11:30	Coffee Break (E 08/09, Building 10) / Guided Tour of the Exhibition (R 304/305)							
11:30-12:00	Keynote 7: Prof. Dr. W. A. Rogers (Johannes Uthoff-Hall)							
12:00-12:30	Keynote 8: Prof. Dr. A. Ternès von Hattburg (Johannes Uthoff-Hall)							
12:30-13:00	Closing and Preview of ISG 2026 (Johannes Uthoff-Hall)							
13:00-13:45	Lunch (Cafeteria, Building 4)							
13:45-18:00	Site visits							

Keynote Speech 1



Empowering Healthy Ageing: Integrating Digital Solutions in Age-Friendly Environments

Dr. Yongjie Yon

Specialist on Aging and Health at the WHO Regional Office for Europe in Copenhagen, leads the WHO Healthy Aging Program in the European Region

Abstract

The United Nations Decade of Healthy Ageing (2021-2030) aims to improve the well-being of older individuals by fostering age-friendly environments that leverage digital technologies. Enhancing communication, information access, and care coordination through digital solutions like smart materials, sensors, robotics, telecommunications, and Artificial Intelligence can transform cities and communities to be more responsive to individual needs, promoting healthier ageing. This presentation will share examples of digital solutions, address the digital skills and literacy gaps among older persons and their carers, and emphasize the importance of financial accessibility to these technologies. Ultimately, creating enabling environments with integrated digital solutions can help individuals maintain their valued activities longer, regardless of age, ensuring no one is left behind in the digital era.

Biography

Dr. Yongjie Yon is the Technical Officer for Ageing and Health at the WHO Regional Office for Europe in Copenhagen, Denmark. Leading the healthy ageing programme for the WHO European Region, he supports 53 Member States in implementing the UN Decade of Healthy Ageing. Dr. Yon was a Doctoral Fellow with the Social Sciences and Humanities Research Council of Canada and holds a PhD in Gerontology from the University of Southern California. He has published extensively on public health and ageing and prior to his current role, he served as a Policy Analyst for ageing policies with the Federal Government of Canada.



The Sustainable Use of Drones: From the Provision of Urgently Needed Medical Supplies in Africa to the Day-to-Day Care of the Elderly in Germany

Benjamin Pahlich

Senior Business Development Manager Wingcopter GmbH

Abstract

Patients in remote areas often lack access to quality healthcare. This affects marginalized communities in rural Africa and older people in rural parts of Germany in a similar way. Wingcopter's delivery drones provide fast and efficient last mile deliveries of medical supplies to patients, wherever infrastructure or a lack of transportation options present a challenge.

Biography

For almost 15 years, Benjamin Pahlich has been working in international development cooperation. After graduating with a master's degree in political sciences from Johann-Wolfgang-Goethe University Frankfurt, he worked for various organisations and companies, namely Gesellschaft für Internationale Zusammenarbeit (GIZ), SOS Children's Villages and Africa GreenTec. Benjamin coordinated projects in more than 10 African countries, among them Ethiopia, Gambia, Liberia, Rwanda, Togo and Senegal. In 2024, he joined Wingcopter as a Senior Business Development Manager to leverage the use of drone delivery services in African markets. At Wingcopter, he can combine his passion for Africa with his interest in innovative technologies which he believes are key for sustainable development.

Keynote Speech 3



Gerontechnology through the Ages – Past Problems and New Challenges

Dr. Heidrun Mollenkopf

BAGSO Management Board, President of AGE Platform Europe, Civil Society Delegate to the Standing Working Group on Ageing (SWGA) at the UNECE

Abstract

This speech will take us back to the beginnings of the International Society for Gerontechnology (ISG) in the late 1990s, the goals set and topics discussed at that time and the question of what challenges the International Society faces today with regard to research and development of technologies for older people.

Biography

Dr. Heidrun Mollenkopf is President of AGE Platform Europe and Board Member of BAGSO, the German National Association of Senior Citizens' Organisations.

Heidrun Mollenkopf is a sociologist and gerontologist. Before she retired, she was Senior Researcher at the German Centre for Research on Ageing (DZFA) at the University of Heidelberg. Her main research focus was the interplay among personal, societal, technical, and environmental conditions regarding quality of life in old age. She has pursued this interest in several large-scale research projects on technology and ageing, first at the University of Mannheim, then at the Social Science Research Center Berlin (WZB) and the Free University of Berlin, and finally at the former DZFA.



PARO as a Psychophysiological Biofeedback Medical Device to Improve Behavioral and Psychological Symptoms of Neurocognitive Disorders

Prof. Dr. Takanori Shibata

Chief Senior Research Scientist

National Institute of Advanced Industrial Science and Technology (AIST), Japan

Abstract

PARO is a biofeedback medical device in the US, Europe, the UK, Australia, Singapore and Hong Kong. Many counties and municipalities have incorporated PARO in their medical and welfare systems. In the US, substituting for medications, PARO can be prescribed for biofeedback therapy for patients with dementia, cancer, PTSD, brain injury, Parkinson's Disease, etc. when they are diagnosed as pain, anxiety, depression, agitation (violent behaviors, abuse words, walking about, etc.), insomnia, etc. Then, the costs of treatments of "biofeedback therapy with PARO" by medical professionals can be reimbursed by the public and private medical insurances. There is a lot of clinical evidence of the therapeutic effects of PARO by the results of many clinical trials including randomized controlled trials (RCTs) and their meta-analysis. In the case of elderly with dementia, interaction with PARO improved "behavioral and psychological symptoms" and "sociability", and reduced dosage of medications. PARO can be used both at home and in institutions such as hospitals, hospices and skilled nursing faculties.

Biography

Prof. Takanori Shibata received B.S., M.S. and Ph.D. in Electronic and Mechanical Engineering from Nagoya University in 1989, 91 and 92, respectively. He was a research scientist at AIST from 93 to 98. Concurrently, he was a visiting research scientist at the Artificial Intelligence Lab., Massachusetts Institute of Technology from 95 to 98, and a visiting research scientist at the Artificial Intelligence Lab., Univ. of Zurich in 96. At the AIST, Dr. Shibata was a senior research scientist from 98 to 13. Concurrently, he was the Deputy Director for Information and Communication Technology Policy, Cabinet Office of Japan in 2009 and 2010. Since 2013, he has been in the current position, and concurrently, a Professor at the Dept. of Computer Science, Tokyo Institute of Technology, and a visiting fellow, at the AgeLab, MIT. He was also a visiting research scientist at the National Cancer Center of Japan in 2022 and 2023. He has been a visiting Professor at the Tohoku University since April 2024.

He was certified as the inventor of a seal robot named PARO, the World's Most Therapeutic Robot, by the Guinness World Records in 2002. He received many awards including the Japanese Prime Minister's Award in 2003, and The Outstanding Young Person of the world by Junior Chamber International in 2004. In 2015, PARO was awarded the "Patient Trophy" as innovation of non-pharmacological therapy for dementia by AP-HP, France. In 2018, Prof. Shibata was awarded the "Ryman Prize" that is the most prestigious award in the fields of geriatric medicine, welfare and health in the world. In 2022, he was awarded the 10th Anniversary Special Robot Award by the Gov. of Japan.



Transforming Opportunities for People living with Dementia and Reducing the Societal Crisis and Impact of Cognitive Impairment

Prof. Dr. Wendy Moyle

School of Nursing and Midwifery, Griffith University, Brisbane, Australia

Abstract

Despite many improvements in quality of life, our failure to maximize the potential of technological advancements can lead to a negative perception of technology and reduced sustainability. Griffith University tackles these challenges by involving end-users throughout the technology lifecycle, starting from conceptualization to practical evaluation. Our approach involves understanding needs, rigorous development and feasibility testing, piloting, and conducting extensive trials of social robots to enhance dementia care and ensure product sustainability. This presentation will emphasize the pivotal aspects of our research and the tangible impact this is making in real-world applications for people living with dementia and their carers.

Biography

Professor Wendy Moyle is the Director of the Australian Aged Care Technology Collaborative (AACTC) and oversees LAZAR, a social robotics laboratory at Griffith University, Brisbane, Australia. She has received international recognition, winning two International Women's Day Awards and being inducted into the STTI International Nurse Researcher Hall of Fame in 2019. Wendy has also been honoured by Robohub and Analytics Insight for her contributions to robotics. In addition, she serves as the Specialty Chief Editor at the Frontiers Dementia Care Journal. Wendy's extensive academic career includes over 300 peer-reviewed manuscripts, 300 conference presentations (141 as keynote speaker), \$18 million in research funding, 15 television appearances, and over 145 radio and social media interviews discussing her research.



A Multi-Functional Robot for the Healthcare Sector – Potentials and Challenges Learned from Real-Life Applications

Michael Früh

CEO of F&P Robotics

Abstract

The shortage of skilled workers and demographic trends make it urgently necessary to relieve the burden on healthcare professionals and to find new ways to keep up service quality. Assistance robots such as Lio, developed by the Swiss company F&P Robotics, can already provide support today. But what are the specific challenges in everyday use? Where are the limitations and where lie the opportunities? Michael Früh gives an insight into the everyday life of Lio in health care facilities.

Biography

Michael has been with F&P Robotics AG since its foundation in 2014 and is CEO and board member of the company.

After his initial education in electronics, he studied business, finance and health economics. Next to F&P Robotics, he is co-founder of two companies in the healthcare domain that focus on improving quality of life in social institutions and ensuring high-quality postnatal care for every family.

Michael is driven by the question of how technology can best be used to make our lives more self-determined, joyful and healthy. He is 40 years old and lives nearby Zurich, Switzerland.



Designing Robots to Improve Quality of Life for Older Adults

Prof. Dr. Wendy A. Rogers

Khan Professor of Applied Health Sciences
University of Illinois Urbana-Champaign

Abstract

Advances in robot design have potential to support older adults but often are not designed with consideration for their interests, capabilities, limitations, needs, and preferences. I will describe a framework for human-robot interaction that can guide the design process. I will provide examples of our research focused on social and assistive robots supporting activities in the home including cognitive and physical support as well as telehealth applications. I will discuss how robots can enable autonomy and independence for older adults with varying levels of cognitive and physical abilities.

Biography

Wendy A. Rogers, Ph.D., is Khan Professor of Applied Health Sciences at the University of Illinois Urbana-Champaign. She is a Certified Human Factors Professional (BCPE #1539). She is Director of the McKechnie Family LIFE Home; Program Director of CHART (Collaborations in Health, Aging, Research, & Technology); and Director of the Human Factors and Aging Laboratory. Her research focuses on advanced technology design to support autonomy of older adults, with and without disabilities. She explores the benefits of technologies including robots, smart-home technology, digital health, wearables, and telehealth for cognitive, physical, and emotional health.



Towards a Sustainable Future: Transforming Aging Societies for the Next Generation

Prof. Dr. Anabel Ternès von Hattburg

SRH Berlin University of Applied Sciences,
Director of the Institute for Sustainability Management,
Club of Budapest, President Germany, Sustain Plus GmbH, CEO

Abstract

Prof. Dr. Anabel Ternès delves into the pressing challenges faced by aging populations worldwide and proposes transformative strategies for creating sustainable societies. She explores innovative approaches in healthcare, and social systems that prioritize long-term sustainability. By fostering collaboration across sectors, the presentation outlines a vision for reshaping aging societies to not only meet the needs of older generations but also ensure a thriving future for younger ones.

Biography

Prof. Dr. Anabel Ternès is a leading figure in sustainability, innovation, and leadership. Hypovereinsbank calls her “one of Germany’s outstanding managers and entrepreneurs”. She is a futurist, speaker, author, founder – CEO of Sustain Plus, of SRH Institute for Sustainability Management, and professor of communication. She is a member among other at Plant for the Planet advisory board and Club of Rome. She has received many awards such as Google Impact Challenge Award and LinkedIn Top Voice.

Detailed Scientific Program

Day 1 – Monday, 2 September 2024

08:00-19:00 ISG Registration (Foyer, Building 10)

10:00-10:30 ISG Opening Ceremony (Johannes Uthoff-Hall)

10:30-11:30 Keynote 1 (Johannes Uthoff-Hall)

Dr. Y. Yon:

Empowering Healthy Ageing: Integrating Digital Solutions in Age-Friendly Environments

11:30-13:00 7 Parallel Sessions

Symposium 11A: Application Fields (R 309)

J. B. van Waterschoot:

Innovative technologies for health equity in marginalized groups and underserved communities (894,1)

J.B. van Waterschoot, P.J. Gramberg:

Virtual Living Coach assistant for older adults living longer independently (894,2)

M. Bults, N. Zuidhof, G.H. van den Berg, D van der Linden, J. Stokkers-Scholten, L. Liu, M.E.M den Ouden:

Sustainable implementation of technology in healthcare using the Non-Adoption, Abandonment, Scale-up, Spread and Sustainability instrument (894,3)

P.P. Morita, D. Istrate, V. Zalc, P. Rumeau, N. Vigouroux, E. Campo:

Sustainable AAL Technology for Supporting Seniors in Independent Living Shared Homes (894,4)

A.R. Rincón, A.M. Cruz, C. Daum, L. Liu:

Conducting agetechnology research with marginalized and underserved communities: Challenging Assumptions (894,5)

Symposium 11B: Sustainability and Crisis (R 310)

C. Schmitt:

Bridging Disaster Risk Reduction, Community Work, and Gerontechnology. Potentials, Ambivalences, Challenges (1137,1)

P. Hollenbach:

Post-Disaster Reconstruction – the role of the elderly within a “building back better” approach (1137,2)

K. Paldán:

How can gaps in human-technology interaction be closed to allow older people to participate in digital solutions? (1137,3)

C. Schmitt:

Intersectional approaches to disaster relief, the role of community and (digital) support structures. The example of the flood disaster in the Ahr Valley in Germany (1137,4)

Oral 11C: Dementia Care Technologies (R 311)

A. Moreno, CIMA-Q:

A ten-year systematic review of gerontechnologies tested among community-dwelling older adults living with dementia and their family caregivers (875)

S. Walzer; I. Schoen, H. Marx, S. Ziegler, C. Kunze:

Enhancing Geriatric Care: Insights from a Mixed Method Study on In-Bed Real-Time Motion Monitoring (881)

L. Liu, C. Daum, Y. Tola, A. Miguel Cruz:

Evaluating a mobile application to support persons living with dementia at risk of going missing and their care partners (889)

G. Cook, A-M. Salai, L.E. Holmquist:

Re-purposing voice assistant technology for use by people living with dementia and their carers (980)

K. Yasuda, M. Nakamura, S. Chen:

Developing Low-Tech Assistive Technology to support Daily Activities for Older People (1150)

Oral 11D: Governance and Social Policy (R 202)

S. Hiltunen, S. Lakoma, P. Torkki, E. Laukka, M. Jansson, H. Härkönen, A. Verho, P. Pennanen, R.-L. Leskelä:

The experiences of Finnish people over 75 years old with digital health and social services (868)

A. da Silva Pinto, J. Doll:

Connection to the world – older afro-brazilian quilombolas and their information and communication technologies (913)

W. Shim, C.-H. Choi, Y.-J. Lee:

A Social and Environmental Impact of the TV Program ‘Golden Girls’ on Viewers (929)

M. Larivière:

Siloed and fragmented: Understanding communities of design and implementation involved in English technology-enabled care services (1002)

S. Brink:

E-Government impact on the grey digital divide (1053)

Oral 11E: Healing Architecture and Inclusive Environments (R 125)

C. Günther, A. Röder:

Emotional Living Spaces - The significance of Emotional Spaces for dwelling and well-being (926)

C. Günther, C. Grieshaber, D. Helmer, A. Röder:

Healthcare-Platform - Inclusive Working and Living (1048)

A. Plath, K. Böhm, P. Neis, A. Rolwes, M. Schaffert, S. Corsten:

Biography Work in Long-Term Care: How to Stimulate Digital Geographic Storytelling? (1141)

Day 1 – Monday, 2 September 2024

Oral 11F: Robots, AI and MR (R 205)

N. Davey:

GaitKeeper: Revolutionizing Gerontechnology with Artificial Intelligence and Augmented Reality for Enhanced Gait Analysis (1046)

S. Broeder, B. Filtjens, L. Stulens, D. Vargemidis, V.D. Stefanova, B. Vanwanseele, M. Deschodt, J. Lebleu, K. Gilis, B. Vanrumste:

Perspectives of Older Adults and Their Caregivers on the Development of a Robotic Exercise Coach (1110)

W. Sun, Z. Husain, T. Crasto, S. Saunders, F. Rahman, S. Pistritto, S. Omlin, J. Calver, R. Inguino, A. Quevedo:

Exploring the physical, social and educational benefits of virtual reality exergame for people with dementia through co-designing to promote hand hygiene and influenza vaccine uptake (1129)

K. Waldhör, J. Bauer, B. Ristok, R. Lütze: Contextbot:

Integration of Smart Home, Robotics and Smartwatches (1130)

K.-T. Huang, J. Francis-Levin, C. Ball:

Assessing VR technology adoption and use among mid-life and older adults (1158)

Symposium 11G: Health and Self Esteem (R 113)

H. S. M. Kort:

Criteria and Assessment of Assistive Technologies for Ageing-in-Place (1131,1)

H. S. M. Kort, T. Marquie Raymundo:

Older adult and Care Professionals' view on Ageing-in-place with Assistive Technologies (1131,2)

D. Laan, M. van Tilborg, H. Nap, H. S. M. Kort:

Assessment Criteria for Assistive Technology in Aging-in-Place (1131,3)

M. I. Zegwaard, H. H. Nap:

Developing value assessment metrics for Assistive Technologies for older people (1131,4)

M. Dülp, J. E. M. H. van Bronswijk:

Vital Oldies with Adapted Old Martial Arts (1131,5)

13:00-14:00 **Lunch (Cafeteria, Building 4)**

14:00-14:30 **Keynote 2 (Johannes Uthoff-Hall)**

B. Pahlisch:

The Sustainable Use of Drones: From the Provision of Urgently Needed Medical Supplies in Africa to the Day-to-Day Care of the Elderly in Germany

14:30-16:00 **7 Parallel Sessions**

Oral 12A: Application Fields (R 309)

B. Kebir, K. Barczik:

Unveiling the Digital Horizon: Perspectives and Progress in Digital Adoption among German Geriatric Care Facilities (859)

N. El Hajj, D. Kairy, C. Auger:

Understanding digital technology usability in home-based neurorehabilitation: a realist review (936)

Y. Nameki, N. Kurashima, K. Chin:

Digital Platform for improving Older Adults' Quality of Life in Today's Super-Aging Society (985)

J. W. Alberts, M. Vastenburger, H. H. Nap, W. A. IJsselstein:

Towards a digital intervention to support older adults with malnutrition: Findings from a design exploration with home care professionals (1000)

J. Alberts, X. van Megen, M. van Riel, H. H. Nap:

Enhancing Elderly Care through Technology Adoption: A Case Study of the 'Anders Werken in de Zorg' Project (1003)

Oral 12B: Sustainability and Crises (R 310)

Y. Afacan, B. Barshan:

Attitudes of Older Turkish Adults toward Incorporating Radar Technologies into Geriatric Bathroom Design (855)

E. R. Dulce Villarreal, J. Garcia-Alonso, J. A. Hurtado Alegria:

An MDE approach for the generation of Smart Contracts for elderly care (872)

C. H. Jim, L. M. K. Sit, S. H. U. Fan, L. Y. Tse, L. M. Tang, A. Lau, C. H. Chow, H. H. Shin, C. K. A. Tong, S. Y. Wong, P. M. Li, W. K. Chow, T. N. Kwong, C. M. Ho, K. M. Au:

Addressing Accessibility Crisis: A Gerontechnology Education Project among Patients in a Hong Kong Hospital Setting (877)

J. Lange, J. Ludwig, D. Dhungana, M. Reiner, M. Golla:

Climate Change in the Context of Informal Care – The Development of an App for Caregivers (928)

I. Zorn, J. Krieser, B. Levering, A. Herold-Majumdar:

Empowering Family Carers: Discovering and Sharing Creative Ideas to Navigate Daily Life (1092)

Detailed Scientific Program

Day 1 – Monday, 2 September 2024

Oral 12C: Others (R 311)

M. G. Coriolano, C. Lins, V. Silva, A.K. Borba, T. Nascimento, R. L. Batista:

Satisfaction of elderly people from Brazilian Northeast about digital inclusion program (865)

M. G. Coriolano, C. Lins, V. Silva, A.K. Borba, T. Nascimento, R. L. Batista:

Age and income influence the digital proficiency by elderly people from Brazilian Northeast (879)

L. Goebel, M. R. Jokisch, D. Leopold, M. Doh:

Understanding the feeling of being overwhelmed by the internet: The role of digital literacy among older adults (901)

V. Silva, A. Furtado, C. Lins, A.K. Borba, T. Nascimento, M. G. Coriolano:

Proficient use of mobile devices for communication among Northeastern Brazilian older adults and associated factors (911)

S. Nauman Ghazi, P. Anderberg, J. S. Berglund:

Wired and not Tired? Internet Use and Sleep in Older Adults (1096)

Oral 12D: Ethics and DEI (R 202)

A. Kim, H. Lee, H. Kim:

Digital Technology Attitude and Life Satisfaction: Mediating through Digital Information Utilization and Social Capital among Middle-aged and Older Adults (902)

T. Hanjahanja-Phiri, G. Bin Noon, F. Manning, J. Teague, P. Pelegrini Morita:

Prioritizing Older Adults: Ethics and Equitability Reflections in Implementing and Deploying Active Assisted Living Systems (948)

M. Pinheiro:

Digital Defender 60+: Perspectives on Digital Literacy for the Elderly (951)

R. White, E. Stone, A. Sixsmith, M.-L. Fang, J. Sixsmith, H. Lore, G. Gutman:

Ethical Considerations in AgeTech: Towards Inclusive and Equitable Solutions (1018)

B. Kraft, T. Kuscher, L. Rothmann, S. Zawatzki, S. Hofstetter, J. Schildmann, P. Jahn:

Exploring Digital Care: Developing Ethical Competencies (1057)

Oral 12E: Technology (R 125)

K. Chaitika, Z.-L. Wu, H.-F. Chieh, C.-J. Lin, K.-N. An, F.-C. Su:

Enhancing Eye-Hand Coordination in Older Adults: A Nature-Inspired Drone Training Approach (871)

J. A. Sasser, N. A. Roque:

User Perceptions of Emotion for Robot Digital Faces Across Ages (907)

S. Merkel, S. Schorr:

Older adults as users of conversational agents in health and social care: designers' and developers' motivations and images of ageing (918)

K. Kumagai, N.P. Miyake, T. Horigome, Y. Yamamoto, Y. Eguchi, M. Otake-Matsuura:

Robot Voice Calls Asking Older Adults Daily Life Difficulties for the Prevention of Early Dementia (958)

L. T. Ferraz, D. M. Frohlich, E. A. Barley, P. C. Castro:

Augmented Health Education for older adults (959)

Oral 12F: Work, Health and Self Esteem (R 205)

M. Mitsuoka, R. Watanabe, R. Mitsuoka, H. Murayama, S. Tokuga, R. Otsu, C. Yamaguchi, S. Ishihara:

Morning SNS roll-call message and elders' replies: Word-based analysis on seasonal change (1014)

E. J. Lim, Y. J. Lee:

Brain Mapping-Based Interhemispheric Brain Coordination Exercises and Gerontechnology for Improving Cognitive Function in the Elderly (1087)

J. Francis-Levin, N. J. Webster, S. G. Brauer, T. J. Armstrong, T. C. Antonucci:

Experiences and Contexts of Remote Work among Older, Mid-Life and Young Adults: The Case for Age-Specific Remote Work Interventions (1135)

Y.-R. Park:

Digital literacy and health of older people in a Korean rural village (1157)

Innovation Forum: Insights and Presentations from Pioneering Organizations (R 303)

16:00-16:30 **Coffee Break (E 08/09, Building 10)**

16:30-17:00 **Keynote 3 (Johannes Uthoff-Hall)**

Dr. H. Mollenkopf:

Gerontechnology through the Ages – Past Problems and New Challenges

Day 1 – Monday, 2 September 2024

17:00-18:30 7 Parallel Sessions

Oral 13A: Application Fields (R 309)

O. Kozlova, A. Baumeister, S. Reutzel, E. Gardo, P. Tolle:

User Acceptance As Key Factor For Development And Risk Management Of An AI-based Robot Arm Control (896)

D. Gibietz, D. Helmer, E. Godehardt, H. Hinkelmann, T. Hollstein:

Self-learning AI method for anomaly detection in ambient assisted living environments (921)

T. Roos, C. F. Purps, N. I. Schmidtman, K. Michael, M. Woelfel, C. Kunze:

AI in ambulatory care: stakeholder needs, challenges and anticipations towards a hybrid, multimodal interaction AI-system (932)

M. Le Bot, M. Rimeur, A. Regalado-Ceballos, A. Schmaus-Klughammer:

AI-Powered Mobile App with AR Glasses for Remote Chronic Wound Management and Expert Consultation (950)

M. Jesús-Azabal, J. Galán-Jiménez, J. García-Alonso:

AI for Quality Enhancement of Video Streaming for Ageing Adults' Entertainment in Rural Disconnect (974)

Oral 13B: Crises and Preparedness (R 310)

E. T. Remillard, K. T. Mumma, W. A. Rogers:

Challenges with Safety, Security, and Emergency Preparedness for those Aging with Long-Term Disabilities (927)

I. T. Frimpong, D. Y. A. Duah, A. B. Marful, T. E. Kwofie:

Digital Acceleration: Exploration of Gerontechnological Research Needs Towards the Promotion of Successful Ageing (1074)

S. M. Issa Abdou:

Could Healing Architecture Help in Acquiring a Healthy Inclusive Environment? (1089)

E. Førsund, J. C. Torrado, S. E. Fæø, H. Reithe, M. Patrascu, B. S. Husebo:

Active ageing in a community-based living environment (1109)

Oral 13C: Others (R 311)

F. Orsi Medola, V. Ramunno:

Exploring opportunities for the development of innovative projects in Gerontechnology: a design education experience (943)

S. van de Hoef, C. Kloek, K. Recourt, C. Veenhof:

Developing a quality assessment framework for health technology in human movement care: A E-Delphi study (1001)

M. A. F. Mello, F. M. Cohrs, A. L. M. Dal Boni, V.B.Oliveira, A. P. Silva, F. M. Almeida:

Economic analysis of the use of a technological platform in the promotion of the health of adults and elderly people in Brazil (1011)

Oral 13D: Dementia and Technology (R 202)

A. Sponselee, M. de Rijke, E. Sitzen, I. La Maire, R. Tournoij, E. Ulrich, R. Smith, F. Smith-van Schijndel:

Caregivers' and families role in the implementation of a multi-sensory room in a nursing home (984)

S. Freeman, S. Sousa, D. Banner-lukaris, K. Skinner, E. Rossnagel, R. McAloney:

Supporting provision of quality of care through sustainable implementation of AgeTech for persons living with dementia in rural areas (1040)

D. Piroballi, G. Mas Vall-Iloera, M. Ivirico, L. Ortiz, K. Fauria, M. Suárez-Calvet:

Caregivers and technology: need assessment to improve digital contents on Alzheimer's disease (1070)

B. Baidjnath Misier, J. Kleine-Deters, H.J.Wörtche, S.I.M. Janus, S.U. Zuidema:

Monitoring challenging behaviors in dementia with Sensortechnology (1076)

L. D. Boyle, B. S. Husebo, B. Marty, K. Haugarvoll, O. M. Steihaug, M. Patrascu:

Digital phenotyping for changes in activity at the end of life in people with dementia (1085)

Oral 13E: Ethics and DEI (R 125)

T. Harra, A. Kaipainen: Developing Sustainable and Ethically Valid Gerontechnology:

A Comprehensive Approach to Aging, Diversity, and Participation (1108)

Y. Sun, H. William, T. Allen, H. Yadav, D. Dobbs, W. D. Kearns:

The Center for Innovation, Technology and Aging (CITA) (1114)

C. Paul, V. Haaning, D. Bracher, A. G. Oliveira, A. Pinto, L. Spiru:

Profiling Older Adults for Understanding Their Technology Adoption (1115)

J. Kah:

Bridging Experiential Learning and Empathy in Co-Design of Gerontechnology (1116)

C. Paul, V. Haaning, A. Pinto, L. Spiru:

Technology Adoption by Professional Caregivers (1124)

Invited only: Old Board Meeting 17:00-18:00 Uhr (R 112)

Editorial Meeting 18:00-18:30 (R 112)

Innovation Forum: Insights and Presentations from Pioneering Organizations (R 303)

18:30-20:00 Welcome Reception (Campus, Building 10)

Detailed Scientific Program

Day 2 – Tuesday, 3 September 2024

07:30-18:00 ISG Registration (Foyer, Building 10)

08:30-09:30 Keynote 4 (Johannes Uthoff-Hall)

Prof. Dr. T. Shibata:

PARO as a Psychophysiological Biofeedback Medical Device to Improve Behavioral and Psychological Symptoms of Neurocognitive Disorders

09:30-10:30 7 Parallel Sessions

Oral 21A: Robotics (R 309)

L. Blavette, M. Pino, A.-S. Rigaud:

Social and assistive robotics in hospitals: evaluation of the usability, acceptability and ethical issues associated with the use of these new technologies in geriatric institutions (1021)

A. Ziltener, J. Frei, K. S. Lohan, T. Ospelt, M. Wüst:

Service Robot for Laundry Transport and Drink Distribution in Nursing Homes (1058)

A. E. Könnecke, R. Harmann, E. G. Kaigom:

Human-Follower Mobile Robot with High Payload for Cross-Domain Assistance using Shared Autonomy (1063)

Oral 21B: Health Monitoring and Wellbeing (R 310)

A. S. Fischer, S. Kaiser, A. Münzing, A. R. Osmaston, M. J. Schmachtel & M. Sailer:

Video-based patient monitoring in long-term inpatient care (981)

K. Cheng Kian Tan, Y.-S. Hsu:

Impact of music on wellbeing of older persons and their technology acceptance of IoT Ring as the measuring device (1054)

L.M. Wirth, M. Peters, N. Will, M. Tabie, T. Rossol, N. Pfeiffer, T. Wittenberg, J. Behrens, S. Lienenbrink, C. Thron:

Measuring Stress Factors: Sensor Technology for Outpatient Nursing Staff and Exoskeleton Development (1060)

I. Nowak, D. Zühlke, N. Nikzad-Khasmakhi, D. A. Kring, T. Grüb-Okkan, J. Steinborn, I. Zorn:

Variants of knowledge-based chatbots in family caregiving – human evaluation and comparison (1080)

Oral 21C: Technology and Cognitive Assessment (R 311)

A. Moreno, CIMA-Q:

The relationship between neurocognitive impairment, technology experience, and mobile device proficiency: A cross-sectional exploratory study in older adults (873)

N. Um Din, F. Maronnat, G. Loup, F. Badra, S. Otmane, J. Belmin:

Cognitive testings on a touch-screen tablet for older adults: a feasibility study (987)

G. Hohenberg:

Digital cognitive stimulation therapy for people with dementia (995)

Oral 21D: Housing and Daily Living (R 202)

K. Wang, S. Cao, J. Kaur, P. P. Morita:

Remote Heart Rate Monitoring with Contactless Ambient Technology Using Machine Learning for Aging Population (886)

B. M. Mathunjwa, Y.F. Chen, T.C. Tsai, Y.L. Hsu:

A Lifestyle Monitoring System for Older Adults Living Independently Using Low-Resolution Smart Meter Data (966)

Y.-L. Hsu, B. M. Mathunjwa:

Feasibility Study for Lifestyle Monitoring of Older Adults Living Independently at Home Using Smart Water Meter Data (1035)

Symposium 21E: Health and Self Esteem (R 125)

P. C. Castro:

Exploring the Potential of image diagnosis exams at home: The Health2Home Project (949,1)

G. F. Costa, H.S.B. Novais, L.J. Lorenzi, H. S. M. Kort, T. M. Raymundo, P. C. Castro:

Health2Home – Mapping home-based diagnostic imaging services around the world: a market research (949,2)

L. J. Lorenzi, G. F. Costa, T. M. Raymundo, H. S. M. Kort, P. C. Castro:

User satisfaction with an imaging diagnostic service performed at home (949,3)

L. F. Belo, A. Itria, R. Esteves, P. C. Castro:

Carrying out imaging and chart exams at home: a cost analysis (949,4)

Day 2 – Tuesday, 3 September 2024

Symposium 21F: Others (R 205)

W.-J. Shim, Y.-J. Lee:

An Academic Approach for Private Gerontechnology Certification and Establishment of Gerontechnology Graduate Schools in Korea (1095,1)

W.-J. Shim:

Introduction of Gerontechnology Graduate Schools in Korea and Comparison with Other Courses (1095,2)

S.-J. Chang:

Introduction and Potential of the Gerontechnology Planner in Korea (1095,3)

H.-G. Kim:

Introduction and Potential of the Gerontechnology Toolkit (1095,4)

C.-H. Choi:

Case Study on Gerontechnology Planning (1095,5)

Round Table 21G (R 113)

H.-W. Wahl, B. Klein:

Gerontechnology: 30+ Years of Research and Application – Where Do We Stand Today?

O. von Stryk:

Hazard reduction through rescue robots (1163)

10:30-11:00 **Coffee Break (E 08/09, Building 10) / ISG Chapter Meeting (Johannes Uthoff-Hall)**

11:00-12:30 **7 Parallel Sessions**

Symposium 22A: Application Fields (R 309)

F. Barbarossa, R. Bevilacqua, G. Amabili, A. Margaritini, S. Ipakchian Askari, N.E. Stolwijk, H.H. Nap:

HAAL Symposium (990,1)

N. Morresi, G. Tombolini, L. Acciarri, F. Marconi, G.M. Revel, S.Casaccia:

Designing an Integrated Dashboard for the Comprehensive Measurement of Well-being in People with Dementia: A Multidimensional Approach (990,2)

D. R. M. Lukkien, S. Ipakchian Askari, N. E. Stolwijk, B. M. Hofstede, H. H. Nap:

Moving from principles to practice: navigating responsible AI-assisted decision-making in the care for older adults (990,3)

N. E. Stolwijk, S. Ipakchian Askari, B. Hofstede, H. H. Nap:

Co-Designing a decision support system for Longterm healthcare: an interactive session (990,4)

Oral 22B: Application Fields (R 310)

M. Firouzi, R. Gavrilu Laic, R. Claeys, I. Bautmans, E. Swinnen, D. Beckwée:

Advancing Healthy Aging in Times of Sustainability: The Role of Lower-Limb Exoskeletons in Gerontechnology (920)

R. Weil, D. Helmer, L. Hahn, H. Hinkelmann, T. Hollstein:

Low power activity monitoring using accelerometer data from an inertial measurement unit (IMU) (970)

A. Ferreira, B. Gomes, R. Pereira, C. S. Gomes, E. Fittipaldi, J. Fernandes:

Exploring the Association Between Wearable Device Metrics and Frailty Syndrome in Community-Dwelling Older Adults (1072)

R. Claeys, E. Embrechts, A. Bourazeri, R. Debeuf, M. Eggermont, M. Firouzi, B. Filtjens, T. Verstraten, E. Swinnen, D. Beckwée:

Guiding Exoskeleton Development for Healthy Ageing: Co-Design Insights from Older Adults (1073)

Symposium 22C: Dementia and Technology (R 311)

F. Abujarad:

Technology for Enhancing the Wellbeing and Quality of Life for People Living with Dementia (944,1)

F. Abujarad, C. Edwards, J. Neugroschl, U. Hwang, R. Marottoli:

Enhancing Elder Abuse Detection for Older People Living with Dementia with a Digital Intervention (944,2)

A. Agboji, S. Freeman:

Combating apathy in long term care facilities with eReaders: A pilot study (944,3)

S. Freeman, S. Sousa, D. Banner-Lukaris, K. Skinner, E. Rossnagel, R. McAloney:

Supporting provision of quality of care through sustainable implementation of AgeTech for persons living with dementia in rural areas (944,4)

A. Moreno:

A theoretical model for the development and introduction of gerontechnologies for use by dyads of older adults living with dementia and their family caregivers (944,5)

B. Hofstede, S. Ipakchian Askari, D. R. M. Lukkien, J. Alberts, H. H. Nap:

Human-Robot Interaction: enhancing co-design with responsible innovation (944,6)

Detailed Scientific Program

Day 2 – Tuesday, 3 September 2024

Oral 22D: Work, Leisure and Social Participation (R 202)

M. Colombo, E. Rolandi, A. Guaita:

Cyberschool for grandparents: an innovative crowdfunded intergenerational educational program. Effects on grandparents' self-reported digital competences (857)

G. P. Cruz, P. C. Castro, T. M. Raymundo, W. R. Boot:

Digital Skills of Older Brazilians: An Analysis using the Cross-Culturally Adapted Questionnaire of Proficiency in Information and Communication Technology (935)

K. Dijkstra:

Future Work Skills for Older Workers (962)

P. Lim:

An evaluation study on the Gerontech Ambassadors' training program: A Technology Acceptance Model-Based Study (973)

Symposium 22E: Health and Self Esteem (R 125)

R. M. Mudar:

Technology to support persons with cognitive impairment with everyday activities (905,1)

W. A. Rogers, S. J. Czaja, W. R. Boot, N. Charness:

Developing an adaptive system for supporting personal activities and reinforcing cognition (SPARC) (905,2)

N. Charness, M. Prevratil, D. Kossowska-Kuhn, H. Na:

Designing Tutorials to AUGMENT Mobility for Aging Adults with Cognitive Impairment (905,3)

R. A. Mudar, W. A. Rogers, J. K. Lee, K. C. Insel:

Developing a Mobile Health Medication Self-Management System for Persons with Mild Cognitive Impairment (905,4)

M. M. A. van Tilborg, V. Lamers:

Self-management; the ability to use eyedrops preventing visual impairment for people with Parkinson Disease (905,5)

Symposium 22F: Ethics and DEI (R 205)

M. Pino, A.-S. Rigaud:

Ethical dimensions in human-robot interactions in the field of gerontechnology (1105,1)

S. Dacunha, C. Ware, A.S. Rigaud, M. Pino:

Ethical challenges in integrating social robots in geriatric care: development and assessment of an educational module for health and social care professionals (1105,2)

R. Vallee, V. Auberge:

Designing trustful and empowering human-robot interactions using a living lab approach (1105,3)

T. Ogawa:

Effects of different cognitive functions on the understanding of robot speech (1105,4)

M. Choi:

Public perceptions of care robots (1105,5)

L. Blavette, S. Dacunha, C. Harzo, M. Pino:

Participatory design for gerontechnology solutions: Developing and assessing social robots for their integration in geriatric care institutions (1105,6)

Oral 22G: Housing and Mobility (R 113)

A. Keuken, A. Subramanian, S. Mueller-Schotte, J.L. Barbur:

Age-related normal limits for visual acuity and contrast sensitivity in different lighting conditions (956)

A. C. M. Doro:

Aging cities: Assessing the Urban Impact on the Active Mobility of the Elderly Population (1139)

B. Glunde, M. Hilbig, S. Kautz:

Interdisciplinary, technology-supported, climate-friendly professional housing advice as a contribution to improving the living environment in Brandenburg (1140)

S. Mayer, P. Wiegand, B. Kohn, M. Fotteler, F.M. Verri, D. Dallmeier, M. Denking:

Benefit and usability of a senior tablet and an emergency smartwatch for older adults and their relatives: results from a prospective user study (1145)

12:30-14:00 Lunch (Cafeteria, Building 4) / Guided Poster Tour (Johannes Uthoff-Hall)

14:00-14:30 Keynote 5 (Johannes Uthoff-Hall)

Prof. Dr. W. Moyle:

Transforming Opportunities for People living with Dementia and Reducing the Societal Crisis and Impact of Cognitive Impairment

Day 2 – Tuesday, 3 September 2024

14:30-15:30 8 Parallel Sessions

Oral 23A: Training and Qualification (R 309)

G. Koelwijn, M. Hennis, H. Kort, J. Frenkel, T. van Houwelingen:

Game-based learning to enhance clinical reasoning skills in health professions education (964)

C. Kloek, S. van de Hoef, C. Veenhof:

Usage and acceptance of digital health among Dutch physiotherapists: a cross-sectional study (1009)

K. Uchida, E. Kobayashi, M. Watanabe:

Development of a Training Program to Educate Care Workers Utilizing Digital Transformation in Japan (1061)

E. Rutledge, A. Comeau, C. Daum, A. Miguel-Cruz, L. Liu:

ARIA index to assess the quality of mobile health apps: A usability and reliability study (890)

Oral 23B: Literature Review and Trends (R 310)

A. Ptak-Wojciechowska, A. Gawlak:

Senior involvement to validate criteria and metrics for assessing the quality of urban space (864)

A. van Berlo:

What has changed in nearly 3 decades of technical developments for persons with dementia? (1004)

K. Ebisawa:

A Bibliometric Literature Review on International Trends in Robotic Technology Research in the Field of Dementia (1078)

A. Winkler, M. Pallauf, S. Krutter, P. Kutschar, J. Osterbrink, B. Krause, N. Nestler:

Sensor-based prevention of falls and pressure ulcers: a scoping review (1086)

Oral 23C: Application Fields, Leisure (R 311)

D. F. Alves, A. C. M. Gratão, P. C. Castro:

Usability of Remote Digital Interventions: An Analysis from the Perspective of Caregivers of Elderly Individuals with Dementia (931)

J. A. Moreno, S. Belhouari, C. Rigoulat, A.N. Dieumen:

Co-construction of a Canadian virtual reality technology to manage pain and anxiety in palliative care units in the province of Quebec (910)

E. C. Khor, M. Choi:

Uncovering diverse internet use patterns among baby boomers using machine learning (954)

K. Deisenhofer, T. Wörle, B. Wenzel, J. Geiselhart:

New Ways of Helpcoordination: Results of an Implementation Study on the Digitalization of Neighborhood Assistance for the Elderly (1064)

Oral 23D: Work, Leisure and Social Participation (R 202)

N. Cabanel, L. Schmidt, T. Kircher, N. Alexander:

Post-COVID symptoms and managing return-to-work (883)

R. Werny, M. Leontowitsch, F. Oswald:

Participatory research on digital (in)equalities in care relationships among older people living alone (969)

K. Ishihara, J. Tadani, H. Hirata, M. Kochi, S. Ishihara:

Re-acquisition of Leisure Activities by Motorized Braiding Machine for the Physically Challenged and Its Effects (986)

E. Kohlrausch, M. A. S. Nascimento, J. Doll:

Bridging Participation and Work in a Mature and Older People Community on Facebook in Brazil (999)

Oral 23E: Health and Self Esteem (R 125)

A. K. Borba, M.G. Coriolano, C. Lins, V. Silva, J. Ribeiro, T. Nascimento:

Association of Age, Education, and Cognition with Digital Health Literacy in Older Adults (887)

C. Lins, M.G. Coriolano, V. Silva, A. K. Borba, T. Nascimento, R. L. Batista:

Influence of the educational of Northeastern Brazilian older adults on their proficiency with mobile devices (908)

E. O. Rossi de Carvalho Goulart, K. B. Agostinho, R. C. S. Kuroishi, L. S. Silva Neto, C. da Silva Santana Castro:

Perceptions of older adults about the influence of physical activity on aging-in-place (941)

K. B. Agostinho, C. da Silva Santana Castro, R. C. S. Kuroishi:

Food demands for the Health and Well-Being of the Elderly: contributions of Gerontechnology to aging-in-place (1041)

Oral 23F: Housing and Daily Living (R 205)

N. Fleckenstein:

Autism-specific housing for adults (903)

A. T. Gbogbo:

Identification of universal design elements for the development of inclusive kitchens (937)

J. A. Sanford:

Universal Design as an Approach to Sustainable Gerontechnology (1050)

A. Hanson and the Pillar 1 Workgroup:

A Scoping Review for Assistive Technologies for Healthy Ageing: A Conversation (1107)

Detailed Scientific Program

Day 2 – Tuesday, 3 September 2024

Round Table 23G (R 113)

H. Kort:

Gerontechnology for Low- and Middle-Income countries; Experiences, Lessons and Challenges (1148)

Innovation Forum: Insights and Presentations from Pioneering Organizations (R 303)

15:30-16:00 **Coffee Break (E 08/09, Building 10)**

16:00-16:30 **Keynote 6 (Johannes Uthoff-Hall)**

M. Früh:

A Multi-Functional Robot for the Healthcare Sector – Potentials and Challenges Learned from Real-Life Applications

16:30-17:30 **8 Parallel Sessions**

Oral 24A: Mobility and Safety, Transport (R 309)

E. Aartolahti, E. Matikainen-Tervola, P. Nyländen, S. Sihvonen, N. Cronin, T. Finni, M. Rantakokko:

Minimal toe clearance in older adults when walking on level, uphill and downhill conditions (893)

D. Helmer, R. Weil, H. Hinkelmann, E. Reh, K. Szilvas, T. Hollstein:

Accessible Routes: Evaluation and Implementation of an Inclusive Indoor Navigation App for People with Disabilities (988)

C. Auger, N. El Hajj, N. Bier, L. Demers, W. C. Miller, S. Ahmed:

Intervention Mapping of a Mobility Outcomes Monitoring System for Geriatric Patients (1066)

Oral 24B: Others (R 310)

E. Dijk, T. van Houwelingen, H. Kort:

Washable, absorbent underwear with low environmental impact for long-term care (891)

E. Rolandi, L. Valla, M. Rossi, A. Gaia, M. Colombo, A. Guaita:

Internet Access, COVID-19 and Psychosocial Health Changes: a Longitudinal Cohort Study on Oldest-Old (1075)

T. Ayabe:

A Study on Care Management Practices for Supporting Low-Income Elderly People in Japan (1084)

Oral 24C: Social and Caregiver Perspectives (R 311)

M. Salzwedel, S. Zuidema, H. Kort, S. Janus:

The role of sex and gender in the adoption of assistive technology in dementia care (1056)

J. Damant, D. King, M. Karangiannidou, M. Dangoor, P. Freddolino, B. Hu, R. Wittenberg:

Unpaid carers of people living with dementia: ICT-use, non-use and sources of digital support (1065)

F. N. Mozoglu, N. Zayim:

Dementia in social media: Content Analysis of YouTube Videos (1098)

Oral 24D: Housing and Daily Living (R 202)

J. Ewert:

Exploring the Invisible: The Vital Role of 'Doing Nothing' in the Digital Age for Older Adults' Agency (895)

B. Pottharst:

Generation, Inequality and Technological Competence in Later Life (968)

C. da Silva Santana Castro, K. B. Agostinho, R. C. Sadako Kuroishi, J. M. de Castro, J. F. V. Guimarães, C. J. Zanon, N. Meiners:

Financial challenges for successful aging-in-place: feelings and concerns of a group of Brazilian older adults (1024)

Oral 24E: Health and Self Esteem (R 125)

J. G. Silva, S. E. Betiulli:

Validation of audiovisual educational gerontechnology content for elderly people with chest pain (938)

S. Okudan, J. Smith, H. Tiwana, A. Selinger, A. Sixsmith, L. Hedden:

Optimizing Virtual Health to Empower Caregivers: Informal Caregivers' Experiences of Virtual Care (953)

S. K. Mateus, L. J. Lorenzi, P. C. Castro:

Participation of U3A students in virtual activities during the Covid-19 pandemic (977)

T. Wiesent, C. Heidl, J. Alnator, B. Seeberger:

Health-related consumer wearable use for elderly people (1022)

Day 2 – Tuesday, 3 September 2024

Oral 24F: Application Fields (R 205)

C. J.J. Kloek, E. Boonstra, C. Veenhof, F. Groen, B. Cijs, M. Klein:

Towards an AI-driven selfmanagement app for patients with hip and knee osteoarthritis: development of a theory-driven model as a first step (1123)

H. S. Jo, Y. Park, S. M. Jung, Y. S. Hwang, S. K. Kim:

Designing of Digital Tool for Hospital-to-Home Transitional Care for Older Adults with Chronic Obstructive Pulmonary Disease (1127)

S. B. Choi, J. Choi, S. Ham:

Analyzing Energy Consumption Patterns for Solitary Death in Single-Person Elderly Households (1128)

ISG General Assembly (Johannes Uthoff-Hall)

Innovation Forum: Insights and Presentations from Pioneering Organizations (R 303)

18:30-21:30 Hessian Galadinner (Emperor's Hall (Kaisersaal) of the Römer, Römerberg 23, Frankfurt am Main)

Day 3 – Wednesday, 4 September 2024

07:30-12:00 ISG Registration (Foyer, Building 10)

08:00-09:00 Invited Only: ISG New Board Meeting (R 112)

09:00-11:00 8 Parallel Sessions

Oral 31A: Robots in Nursing Care (R 309)

M. Schmidt, L. Kuesters, B. Klein:

Telepresence robots in mental health care to enable digital participation: a qualitative exploratory pilot study (885)

B.M. Hofstede, T.R.C. van Hoesel, S. Ipakchian Askari, I.S. Lelieveld, I. Bierhoff, L. de Witte, H.H. Nap:

Combining daytime structure, lifestyle-monitoring and social companionship in socially assistive robots for gerontechnology (888)

Y.-L. Tsai, S. Olatunji, H. Mahajan, R. Mudar, W. Rogers:

Evaluating robot effectiveness for older adults and their care partners (945)

R. Hervás, L. Villa, C.C. Dobrescu, T. Mondéjar:

Holistic Care System based on Affective and Proactive Robots For Older Adults (947)

S. Park, M. Choi, H. Cho, J. Kim, S. Lee, D. Jung:

The impact of utilizing care robots on sustainability (957)

D. Moroz, K. Baumgärtner, J. Schoch:

"Navel is like a friend." – Acceptance of a social robot in long-term care (1121)

J. Schoch, K. Baumgärtner, D. Moroz:

A social robot in long-term care – Use Cases, challenges and expectations from the employees' perspective (1122)

Oral 31B: Virtual Reality and Gamification (R 310)

S. Kai Wah Chu:

Implementing Socratic Questioning Techniques and the PIRLS framework in a gamified learning activity to enhance Cognitive Functioning and Psychological Well-being in Older Adults (863)

M. Hasa:

Addressing Social Isolation and Cognitive Decline in Care Homes with Virtual Reality: Challenges and Early Benefits in Germany and Czechia (942)

S. L. Hsu, H. M. Hua, H. Hayes, J. Gardner, S. M. Wan:

Enhancing the Aging Experience with VR360 Technology (979)

J. Sehrt, M. Rafati, C. Cheema, D. Garofano, D. Hristova, E. Jäger, V. Schwind:

Auto-REBA: Improving Postural Ergonomics Using an Automatic Real-Time REBA Score in Virtual Reality (989)

P. Rolfes-Gehrmann, G. Hohenberg, D. Noll, S. Jörgens, L. Große, J. S. Lange, S. Fischer:

Therapy Laboratory for Activation of Neuromotor Skills through Serious Games in Education and Research (1007)

R. Debeuf, R. Claeys, M. Berlangier, M. Bunt, A. Debain, D. De Vlieger, M. Eggermont, M. Firouzi, S. Guida, K. Kostkova, S. Lieten, L. Omelina, S. Zaccardi, B. Jansen, E. Swinnen, D. Beckwée:

Ghostly, an electromyography-based serious game to counter muscle mass and strength loss in hospitalized older adults (1068)

Detailed Scientific Program

Day 3 – Wednesday, 4 September 2024

Symposium 31C: Dementia and Technology (R 311)

K. Kumagai, N.P. Miyake, M. Otake-Matsuura:

AI for Dementia Prevention and Personalized Care (862,1)

H. Ozono, S. Chen, M. Nakamura, K. Yasuda:

Implementing "PC-Mei" System for Assisting and Monitoring Elderly People at Home (862,2)

H. Horie, S. Chen, M. Nakamura, K. Yasuda:

Developing Reminiscence Conversation Service Using Spoken Dialogue Agent and Interesting Images (862,3)

S. Saiki, R. Sekimoto, N. Kodama, A. Sato, M. Nakamura:

EVIDENT: A comprehensive platform for digitizing drawing-based neuropsychological assessments (862,4)

K. Kumagai, S. Simon, N. P. Miyake, M. Otake-Matsuura, W. Stork:

Development of dialogue and voice-call robot system for personalized dementia prevention and care (862,5)

S. Stock, M. Schinle, M. Gerdes, W. Stork:

A Data-Driven Approach towards an E-Health Platform for Dementia Intervention (862,6)

Oral 31D: Dementia and Technology (R 202)

R. Fukuda, Y. Edamatsu, F. Harada, C. Matsumoto, T. Iwaida:

Development of "Maji-Kami AI": Service for care staff training and care support (914)

P. Held, F. Röhrl, N. Schnell, P. König, C. Kunze:

Exploring the Potential of an Interactive Soundscape Tabletop in Dementia Care: Insights from Collaborative Development (930)

C. Huisman, H. Zheng, R. Brankaert, M. Loomans, H. Kort:

Sleep and indoor environmental quality in homes of people with dementia and informal caregivers: a pilot study (961)

A. Agboji, S. Freeman:

Combatting apathy in long term care facilities with eReaders: A pilot study (1039)

S. Wang, I. S. H. Leung, A. Fan, C. H. Au-Yeung:

Portable EEG guided meditation for people with mild to moderate dementia: feasibility exploration (1081)

Symposium 31E: Health and Self Esteem (R 125)

H. Kase:

Preventing isolation of people with dementia: Effectiveness and challenges of communication robots (1038,1)

Y.-S. Ri:

Phenomenological reduction with robotic media to relearn how to encounter others: Social robotics as philosophy in practice (1038,2)

X. Y Liu, R. Yamazaki, J. Yang, H. Kase:

Intervention Experiment of Reminiscence Group Therapy by Humanoid Robots for People with Dementia (1038,3)

J. Yang, H. Kikuchi, H. Kikuchi:

The effect of variation in repetitive utterances on users by a chat-oriented communication robot (1038,4)

R. Makino, A. Yamamoto, K. Uchida, K. Kadota:

How can interaction analysis research contribute to the development of a conversation system between a robot and an older person with dementia? (1038,5)

M. Furukawa:

Challenges in Family Support Systems for Older Adult Individuals Living Alone Using Communication Robots (1038,6)

Oral 31F: Crises & Preparedness, Sustainability & Crisis 10:00-11:00 (R 205)

O. C. Elimelech, S. Rosenblum, N. Demeter:

Older Adults Everyday Technology Use During COVID-19: Three-Dimensional Perspective (923)

A. Ternés von Hattburg:

Sustainable Solutions for Aging Populations: Navigating Technological Progress (952)

A. A. Sterns, J. W. Hughes, B. Grimm, L. Larsen, R. Ranjan, O. S. Muir, F. Ma.:

Technology-enhanced medication taking and symptom monitoring (1126)

Round Table 31G (R 113)

S. P. Kwon: Technology & Aging Crossing Borders: Expanding ISG Membership and Chapters Across the World (1159)

Innovation Forum: Insights and Presentations from Pioneering Organizations (R 303)

11:00-11:30 **Coffee Break (E 08/09, Building 10) / Guided Tour of the Exhibition (R 304/305)**

11:30-12:00 **Keynote 7 (Johannes Uthoff-Hall)**

Prof. Dr. Wendy A. Rogers: Designing Robots to Improve Quality of Life for Older Adults

12:00-12:30 **Keynote 8 (Johannes Uthoff-Hall)**

Prof. Dr. Anabel Ternés von Hattburg: Towards a Sustainable Future: Transforming Aging Societies for the Next Generation

12:30-13:00 **Closing and Preview of ISG 2026 (Johannes Uthoff-Hall)**

13:00-13:45 **Lunch (Cafeteria, Building 4)**



Guided Poster Tour:

Day 2 – Tuesday, 3 September 2024 12:30-14:00 (Johannes Uthoff-Hall)

<i>The Union for Senior Services VALLI:</i>	Konstikoppa® Traveling Technology Exhibition for the Older People	(866)
<i>The Union for Senior Services VALLI:</i>	Older people's evaluation panel for development of digital and technology	(867)
<i>D. Völz, G. Benderoth, U. Schulze:</i>	On-demand system to support patients in home-parenteral nutrition	(899)
<i>S. Resch, A. Röhl, A. Malech, V. Schwind, D. Sanchez-Morillo, D Völz:</i>	Walking Aid with Haptic Feedback for Combined Use with a Smart Foot Orthosis	(917)
<i>C. Grieshaber, M. Özay, A. Ritz, D. Sagir, J. Schäfer, M. Willner:</i>	Influencing Bacharach's quality of life: Inclusive sustainable measures for Bundesgartenschau 2029 integration and enhancement	(946)
<i>J. Schneider, D. Völz:</i>	Advancing Diabetic Foot Care: Incorporating Horizontal Shear Forces in Orthopaedic Insoles through Generative Design	(978)
<i>S. Apkhazishvili:</i>	Tutorials for continued use of mHealth application among older adults: Research proposal	(1134)

Information about Frankfurt:

<https://www.visitfrankfurt.travel/en/>



A selection of restaurants in Frankfurt:

<https://www.meetfrankfurt.de/en/event-planning/restaurant-selection>





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