The Lower Saxony Research Network *Design of Environments for Ageing* (GAL) A Brief Introduction

Reinhold Haux[a], Jens-E. Appell[b], Hans-Jürgen Appelrath[c], Christian Bartsch[d], Thomas Bisitz[d], Jörg Bitzer[d], Matthias Blau[d], Susanne Boll[c], Michael Buschermöhle[d], Felix Büsching[e], Marco Eichelberg[c], Birte Erdmann[f], Uwe Fachinger[f], Juliane Felber[g], Tobias Fleuren[d], Matthias Gietzelt[a], Stefan Goetze[b], Mehmet Gövercin[h], Andreas Hein[c], Axel Helmer[c], Wilko Heuten[c], Volker Hohmann[d], Rainer Huber[d], Manfred Hülsken-Giesler[i], Gerold Jacobs[j], Riana Kayser[k], Arno Kerling[k], Matthias Kiy[j], Timo Klingeberg[l], Yvonne Költzsch[h], Harald Künemund[f], Jennifer Kunze[k], Wolfram Ludwig[a], Michael Marschollek[a], Birger Martens[c], Markus Meis[d], Eike Michael Meyer[c], Jochen Meyer[c], Wolfgang Nebel[c], Franz J. Neyer[g], Petra-Karin Okken[f], Hartmut Remmers[i], Lars Rölker-Denker[c], Thomas Rohdenburg[b], Meinhard Schilling[l], Gisela C. Schulze[j], Bianying Song[a], Jens Spehr[m], Elisabeth Steinhagen-Thiessen[h], Uwe Tegtbur[k], Wilfried Thoben[c], Peter van Hengel[b], Stefan Wabnik[b], Friedrich Wahl[m], Sandra Wegel[h], Olaf Wilken[c], Simon Winkelbach[m], Manfred Wittrock[j], Klaus-Hendrik Wolf[a], Lars Wolf[e], Melanie Zokoll-van der Laan[d].

[a] Peter L. Reichertz Institute for Medical Informatics, University of Braunschweig and Hannover Medical School, Germany
[b] Fraunhofer Institute for Digital Media Technology, Oldenburg, Germany
[c] OFFIS – Institute for Information Technology, Oldenburg, Germany
[d] Center of Competence HörTech, Oldenburg, Germany
[e] Institute of Operating Systems and Computer Networks, University of Braunschweig, Germany
[f] Centre for Research on Ageing and Society, University of Vechta, Germany
[g] Institute of Psychology, University of Jena, Germany
[h] Geriatrics Research Group, Charité University Medicine, Berlin, Germany
[i] Research Group of Nursing Science, University of Osnabrück, Germany
[j] Department of Special Needs, Education and Rehabilitation, University of Oldenburg, Germany
[k] Institute of Sports Medicine, Hannover Medical School, Germany
[l] Institute of Electrical Measurement and Fundamental Electrical Engineering, University of Braunschweig, Germany
[m] Institute for Robotics and Process Control, University of Braunschweig, Germany

Abstract and Objective

Worldwide, ageing societies are bringing challenges for new ways of living and health care. Health-enabling technologies offer new opportunities. In order to identify, enhance and evaluate such new information and communication technologies the "Lower Saxony Research Network Design of Environments for Ageing" (GAL) has been launched in 2008.

Keywords:

Health-enabling technologies, Ambient-assisted living.

Methods

To report on GAL's objectives and its work packages.

Results

Four scenarios (S1) "personal activity and household assistant", (S2) "monitoring of preventive and rehabilitation sports", (S3) "Sensor-based activity determination", (S4) "sensor-based fall prevention and fall recognition" and three cross sectional topics (C1) "technical platform for environments for ageing assistant", (C2) "ICT architectures for new forms of care", (C3) "social, economic and psychological requirements and consequences" as well as a working group on privacy constitute the major work packages of GAL. As far as we can see GAL is because of its size – more than 60 researchers involved – and of its high degree of interdisciplinarity to some extent unique. Details on GAL as well as reports on first results can be found at www.altersgerechte-lebenswelten.de.

Conclusion

It is challenging to initiate and run such a highly inter-disciplinary project. Particularly in the field of new environments for aging, a mainly technical research focus may however lead to biased solutions in terms of user acceptance, economic benefits or quality and efficiency of care. Projects like GAL may help to overcome such bias.