

H. Bouma, V. Taipale, J.L. Fozard, D.G. Bouwhuis, J.E.M.H. van Bronswijk. *Concepts and significance of gerontechnology: past, present, future (symposium). Gerontechnology 2008; 7(2):77.* Gerontechnology is the study of technology and ageing for providing an optimal technical environment for all ageing and old people up to a high age. It is an interdisciplinary effort for a purpose: an optimal life for ageing people in their dynamic society. Its origin necessity stems from the rapid innovation of technological products and services and the gradual absolute and relative increase of older people in many countries. The task at hand is to let ageing people profit fully from available technological options. So technology is directed at the ambitions and needs of ageing people in their daily environments and ageing people are made aware of and trained in the use of suitable products and services. This effort is receiving systematic, valid underpinning by proper theory and methods. **Session outline** The present workshop selects achievements and challenges of two types. First, insights strengthening the theoretical foundations, resting on theories and methods of an existing human discipline (physiology, psychology, sociology, medicine) as applied to relevant technology (chemistry, building, communication, mechatronics, design, management), and vice versa. This is plotted in a matrix with human disciplines as rows and technology disciplines as columns. The cells indicate actual progress in understanding the field^{1, Table 1}. Secondly, the actual products and services and environments that have added value for life are selected. These are plotted in a matrix with types of added value as rows and domains of daily life as columns². The cells indicate actual fruits to be reaped by our target group (Table 1). Aspects covered in the session are specifics of interdiscipline, the user perspective, essential communication, technology acceptance, the social perspective, and an educational curriculum, as related to the present and the near future.

References

1. Bouma H, Fozard JL, Bouwhuis DG, Taipale V. Gerontechnology 2007;6:190-216
2. Bronswijk JEMH van, Bouma H, Fozard JL. Gerontechnology 2002;2:169-172

Keywords: perspective, concepts, cross-fertilization, impact matrix

Address: Eindhoven University of Technology, the Netherlands; E: heebouma@xs4all.nl

Table 1. Impact matrix of gerontechnology with selection of obtained fruits

GOAL	LIFE DOMAIN				
	Health Self-esteem	Housing Daily living	Mobility Transport	Communication Governance	Work Leisure
Enhancement Satisfaction	Telemedicine	Wireless/remote	Navigation	Mobile phone Internet	Digital camera
Prevention Engagement	Healthy Diet Home trainer	Smart ventilation	Car automation	Video links	Focussed lighting
Compensation Assistance	Passive/Active alarms	Smart IADL	Rollator Pedelec	Smart hearing aid	Power tools Robot pet
Care support Organisation	PDA	Electronic keys	Powered lifting	Care networks Video links	Robots