

C.C.M. HUMMELS. *Empowerment for wellbeing @ TU/e*. *Gerontechnology* 2012;11(2):271; doi:10.4017/gt.2012.11.02.667.00 **Purpose** The smart environment is one of the health-related themes of the TU/e (Eindhoven University of Technology) that focuses on empowerment for healthy living, from prevention to (acute) care. It focuses on designing, developing, and researching environments – including the built environment – systems, products, services, and processes that stimulate personal, social and societal health and wellbeing. The smart environment strives to dispel people's feeling of being a patient and involuntarily dependent on others, by supporting people in their daily environment to live healthy, to be in charge of their health care, and to participate in society throughout their lives. The prototypes and movies shown in this Leading-Edge Technology Event explore and test new physical propositions to empower healthy living and wellbeing. For example, Bouncers (*Figure 1*) is social wallpaper for a smart phone, which allows people to gain a better awareness of their lifestyle and activities as well as those of others in their group. It strengthens social motivation for active, healthy living and changing behaviour if needed. Another example is OOHOO, a company concept to invite senior experts to work voluntarily in intergenerational teams on societal challenges. OOHOO is part of a three-year project of exploring and testing with students and people older than 55 years, the possibility of creating new societal systems where all generations are valued and needed, and where we can exchange knowledge and skills across generations. **Method** Most of the prototypes shown in this event are part of larger research projects that use a research-through-design approach. This can be seen as an iterative process in which scientific knowledge is generated through, and fed back into, consequent cycles of designing, building, and testing experiential prototypes in real-life settings. As these real-life settings are inherently diverse and rich in subtlety and detail, doing design research in these contexts demands developing detailed, wealthy, experience-able design prototypes that allow for this diversity, subtlety, and richness whilst confronting the world¹. **Results & Discussion** All prototypes shown during this Leading-Edge Technology Event have been validated by users, preferably in real-life settings. The prototypes give an impression of what current state-of-the-art technology can offer for healthy living and a healthy society. During this session the prototypes are used to enhance discussions about technological, ethical, economical, and social aspects of active and healthy aging.

References

1. Hengeveld B. Designing LinguaBytes: A tangible Language Learning system for non- or hardly speaking toddlers. Doctoral dissertation. Eindhoven: Eindhoven University of Technology; 2011

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Figure 1. Bouncers, a dynamic lifestyle visualisation for groups to stimulate active and healthy living