Supporting quality of life in smart environments

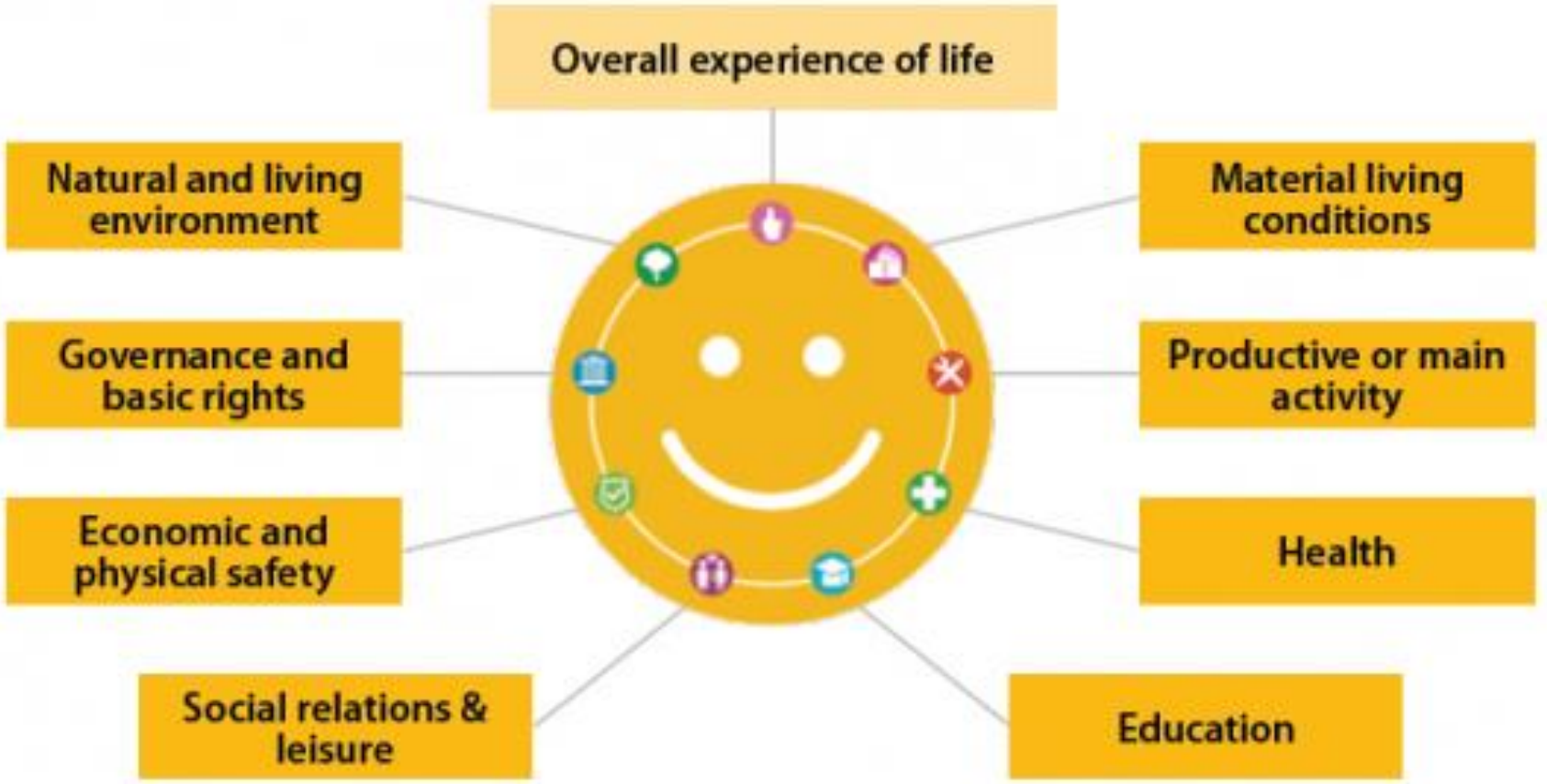
Margherita Antona

Institute of Computer Science (ICS)
Foundation for Research and Technology – Hellas (FORTH)
antona@ics.forth.gr

Quality of life

General well-being of individuals and societies, concerns life satisfaction includin
physical health, family, education, employment, etc.

8+1 dimensions



Trends in ICT use

2010 - Intelligent Environments and Internet of Things

Well-being / QoL

2000 – Mobile and Ubiquitous Computing, Social Media

User Experience / Communication/ Emotions

90’ – Desktop Computing

Usability / Productivity

Intelligent Environments

Technologies which understand human needs
Context-awareness, Unobtrusiveness, Natural Interaction, Personalisation

Ambient Assisted Living

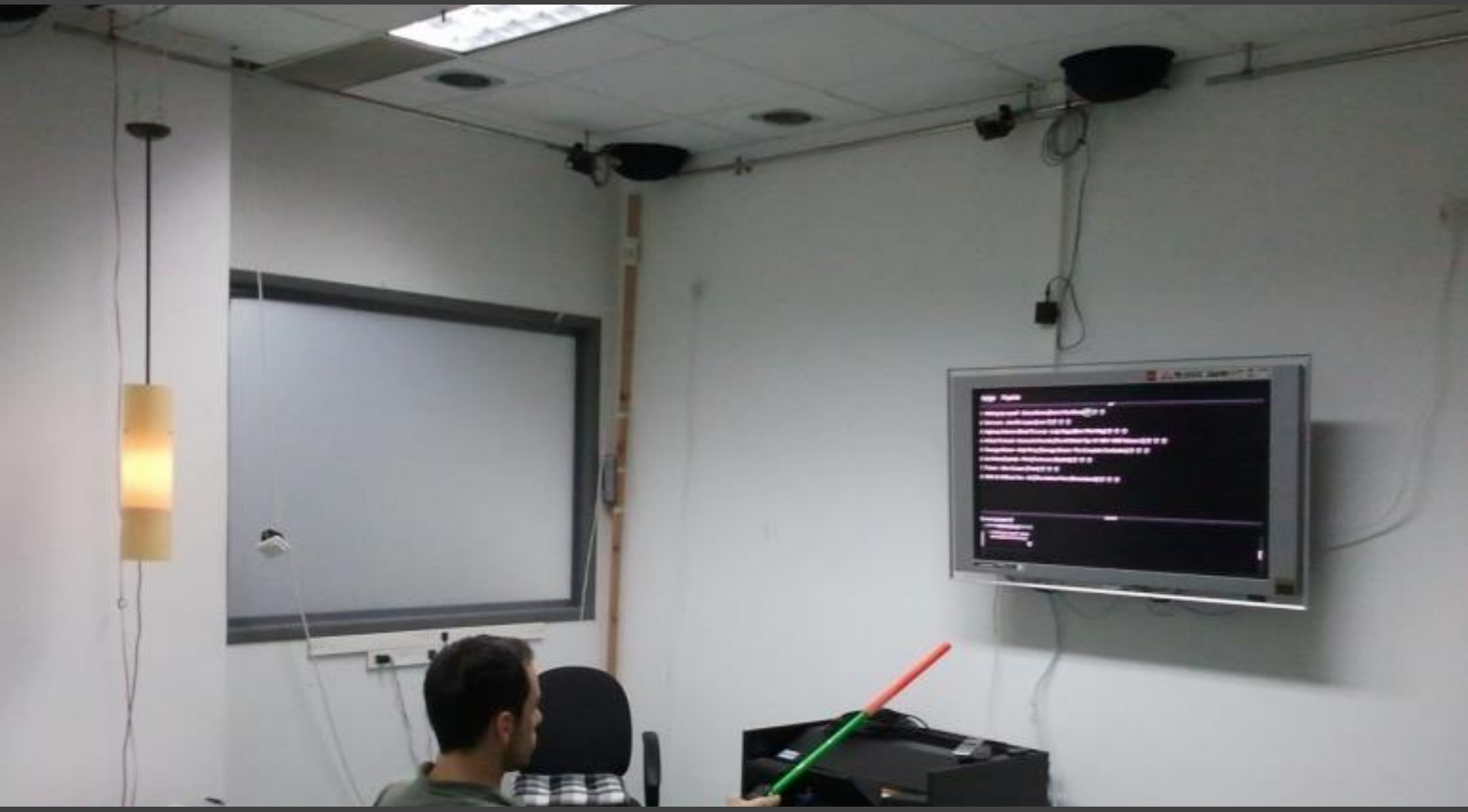
Intelligent systems of assistance for a better, healthier and safer life in the preferred living environment

ICS – FORTH HCI Lab

Domotic control for people with motor impairments

Head movement and breath based and interaction

Magic Wand

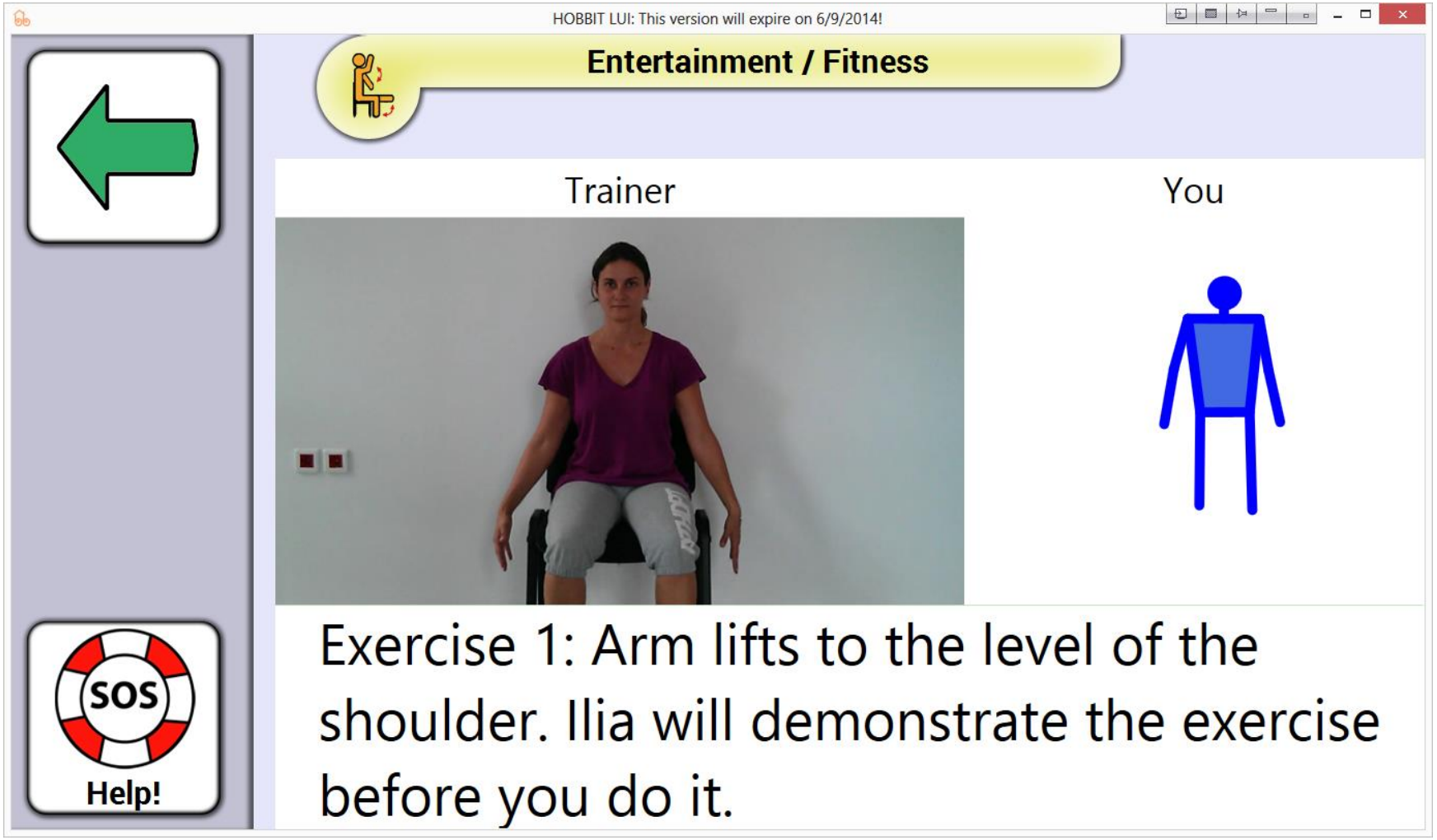


Room control through pointing with auditory feedback

Human – Robot Interaction

Multimodal interaction through touch, speech, gestures, emotion expression

Physical Exercise application

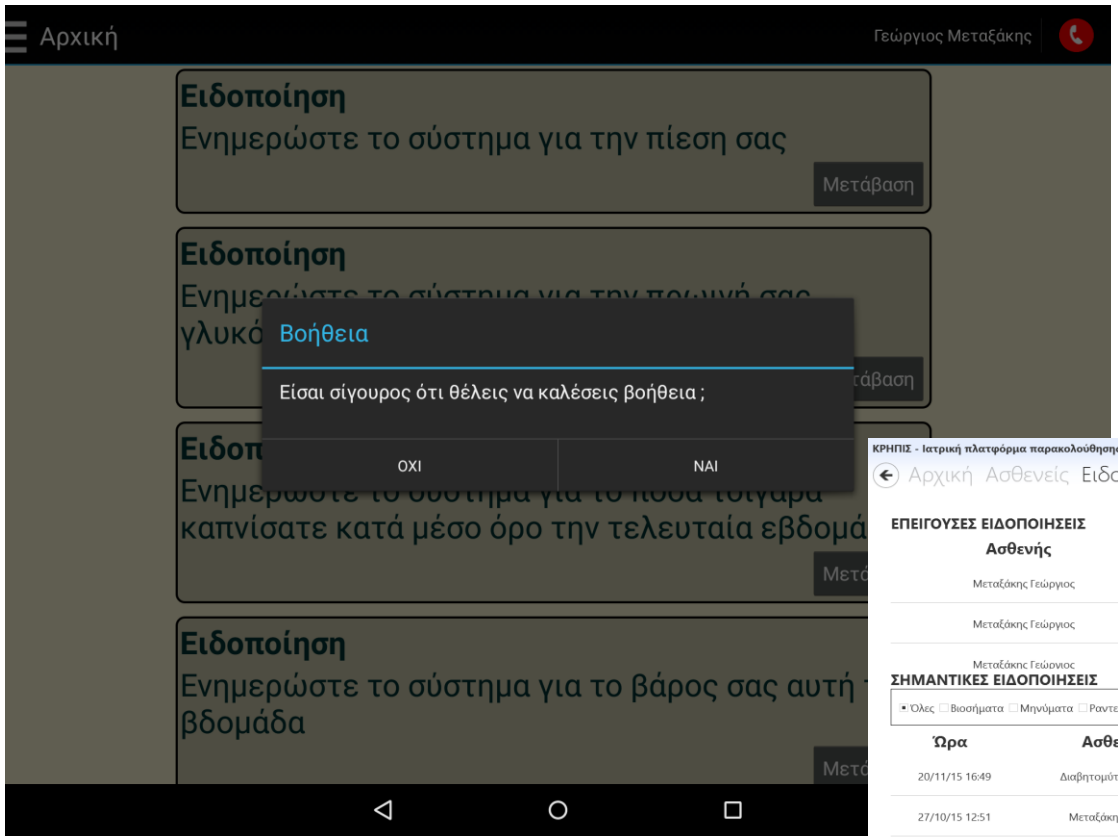


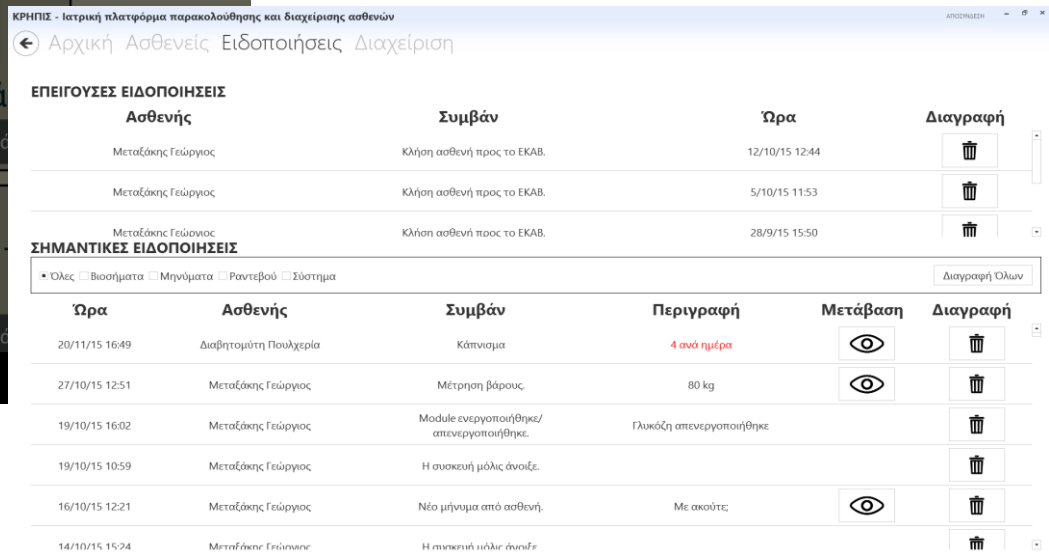
Monitoring of exercise execution and feedback

Intelligent games and applications for children

Monitoring of children development

Home health monitoring

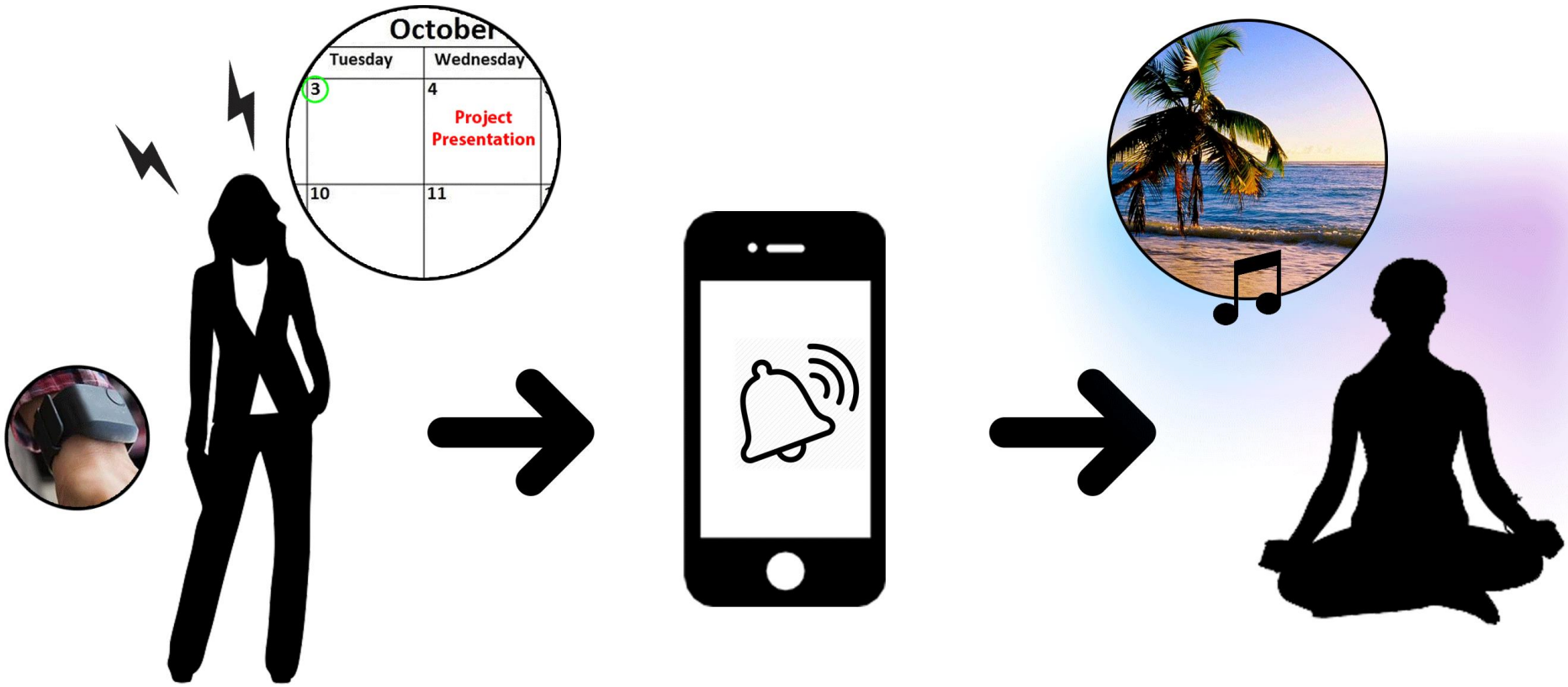




KRIPIS – Quality of life

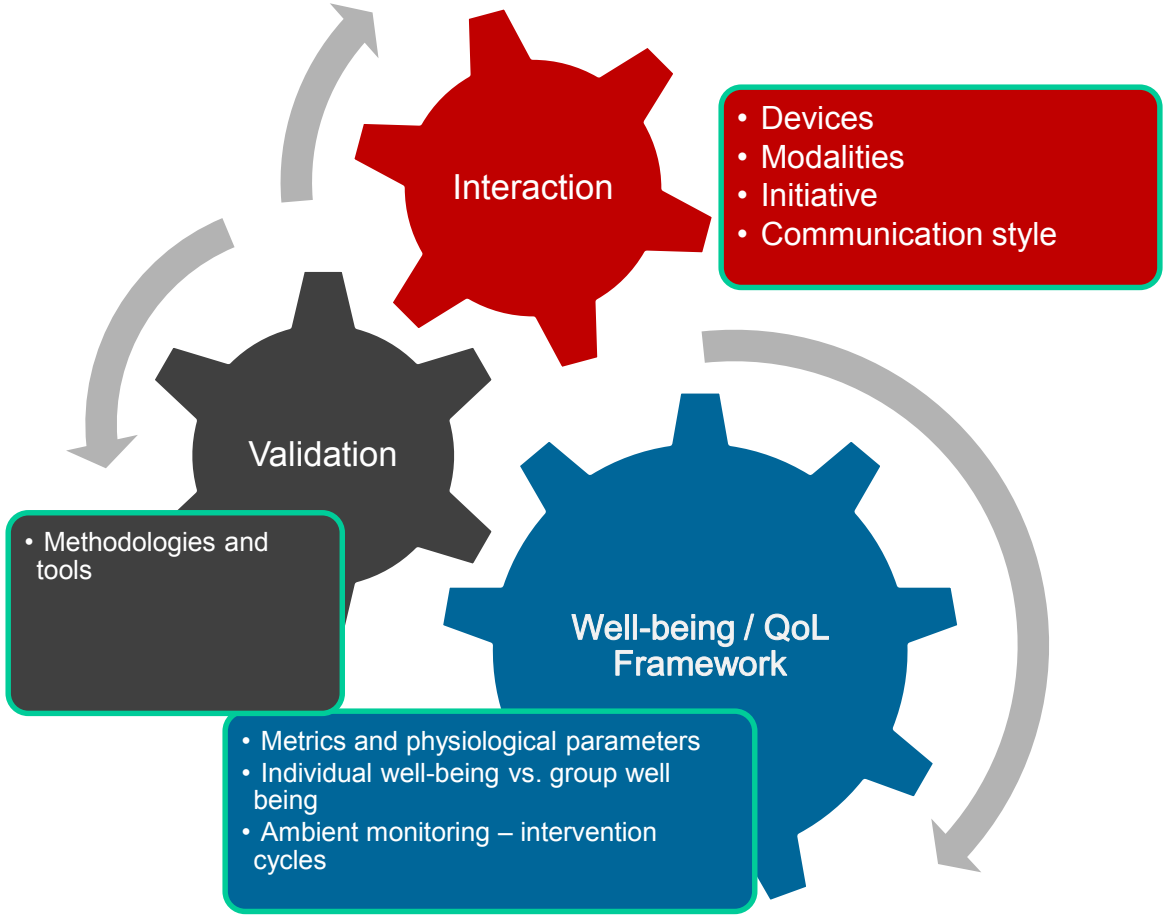
Integrated technological environments to improve the overall quality of life of patients at home

Stress Management



Anxiety levels management through monitoring and ambient interventions cycles

Research Challenges



Margherita Antona

antona@ics.forth.gr