**Rachael Joyce**

School of Nursing and Human Sciences

DCU, Ireland

rachael.joyce@dcu.ie

01-7005317

**Dr Louise Hopper**

School of Nursing and Human Sciences

DCU, Ireland

louise.hopper@dcu.ie

01-7008540

**Paulina Piasek**

School of Nursing and Human Sciences

DCU, Ireland

paulina.piasek@dcu.ie

**Dr Kate Irving**

School of Nursing and Human Sciences

DCU, Ireland

kate.irving@dcu.ie

**Conference Theme:** Ethics and the digital future

**Title:** Ethical Challenges Associated with Technology use with People with Dementia

**Background:** With expected increases in dementia prevalence figures as our population ages, there is a great need to find acceptable, efficient, and cost-effective solutions that enable people with dementia to live well at home and to remain integrated with their communities for longer. Technology-based approaches have been suggested as a potential means of meeting these needs; however, some ethical issues associated with their use remain unresolved.

**Methods:** The literature associated with Ambient Assistive Living (AAL), Lifelog and memory aid technologies was reviewed. The findings were combined with the results of three recent dementia-related technology projects undertaken at Dublin City University (DCU), to identify the key ethical issues associated with the use of these technologies and the current state of the scholarly debate surrounding these issues.

**Results:** The potential benefits and the specific limitations of using home-based AAL, Lifelog and memory aid technologies with people with dementia will be explored. We consider their potential mis-use as surveillance tools and the possible exploitation of the data captured during their use. We also explore the possibility of adverse affective outcomes for people with dementia and their caregivers emerging from the use of such technologies. Finally, the challenge of gaining informed consent, including third party consent will be discussed, both in terms of proposed solutions and in light of the current legal framework in Ireland.

**Conclusions:** Using technology as a means of managing cognitive impairments, promoting independence, and facilitating at-home living for longer is likely to increase over the coming years. Providing clear examples of the ethical issues that can arise with the use of these technologies, and the recommendations for alleviating these ethical challenges will, help to protect a vulnerable population.