

## SUPPORTING MOBILITY SUPPORT DOGS

Creating tools for dogs to support humans better and for longer

Across the country, thousands of assistance dogs are loading washing machines, opening doors, collecting the post and operating switches. Trained to help their disabled owners with a range of challenging tasks, assistance dogs transform lives – providing increased independence, autonomy and life satisfaction. Yet whilst making the lives of their owners undeniably easier, the tasks required of the dogs are demanding.

The Open University's Animal-Computer Interaction (ACI) team is working with Dogs for Good to develop initial prototypes for a portable suite of wireless controls for a range of domestic appliances, which dogs can take with them to their new home at the end of training. This has the benefit of establishing continuity for the dog between training and life after deployment. The ultimate aim of the project is to deliver a



production-ready set of domestic controls for canine use, which can be purchased and easily integrated into the home environment.

OU research aims to change lives. This suite of controls has the potential to impact thousands of people living with disabilities, streamlining and supporting the

work of assistance dogs in an entirely new way. This advancement in technology will also mean dogs can be trained more quickly and easily. The resulting reduction in training costs would mean that more people currently stuck on long waiting lists can receive the life-changing help and companionship that assistance dogs offer.

### OU research student Grainne and her loyal support dog Tori

Grainne's multiple sclerosis (MS), a common neurological condition, means she has difficulty walking, gets numb hands and feels fatigued. Grainne says, "Before Tori came to live with me, the idea of studying a research degree was unthinkable."

Tori and Grainne rely on teamwork to get books, retrieve dropped crutches and open doors, but

buttons and security entrances create problems on a daily basis. Tori can use a push pad with a nose or a paw, but many buttons and switches are needlessly difficult; imagine trying to turn on a light switch while wearing a boxing glove.

Grainne has tested out the ACI prototype devices, and can see the widespread potential they have to help others live independently.

