



## **\*\*\*Media release\*\*\***

### **Australian-first study tests home-based rehab for spinal cord injury patients**

An Australian-first study will test live online rehabilitation with video gaming to give spinal cord injury patients the hope of regaining the movement of their hands.

The ReJoyce workstation is being used for the first time in Australia in tele-rehabilitation which allows patients to get real time specialist physiotherapy over the internet.

The patient wears a glove that enables electrical impulses to stimulate the muscles in the hand to grasp and release, in the hope of sprouting new connections in the spinal cord and re-establishing hand function.

"It's possible that stimulating both the brain and the muscles in the hand could create new nerve growth in the spinal cord," said Professor Mary Galea, a researcher at Austin Health and The University of Melbourne, who is coordinating the study.

"The majority of spinal cord injury patients in Australia are young men aged between 16 and 35. Giving them home-based access to computer games as part of their rehabilitation is a great motivator for them to practice hand exercises," she said.

Austin Health patient Mr Gabriel Moraitis is the first person in Australia to have a ReJoyce workstation in his home.

"I've noticed quite a bit of an improvement already. The way I grip and grab things is a lot stronger and firmer. It's quite amazing to see your hand go from having no movement at all to have it open and close," Mr Moraitis says.

"A lot of spinal cord injury patients live in regional and rural areas. Even for people who live in the outer suburbs of Melbourne, travelling to rehab centres can be difficult," Professor Galea said.

"The ReJoyce workstation enables better access to spinal rehabilitation specialists at Austin Health without having to travel long distances. It also enables spinal cord injury patients to get on with their lives and gain more independence."

The project is funded by the Victorian Neurotrauma Initiative.