

## Media release

Under embargo until Thursday, 3 November

### Treatment for depression could be the key to fighting memory loss in Alzheimer's

The Bionics Institute is preparing to launch a world-first clinical research trial to investigate whether a treatment for depression could be the key to fighting memory loss in Alzheimer's disease, the most common form of dementia.

A devastating condition, not only for the individual but also their loved ones, Alzheimer's causes decline in most areas of cognition, including memory.

There are 55 million people worldwide living with dementia today, but despite billions of dollars and decades of research, there are still no effective treatments.

However, that is set to change with a potentially ground-breaking treatment being investigated by Bionics Institute researcher [Professor Kate Hoy](#).

Professor Hoy, a clinical neuropsychologist by training, found that a brain stimulation treatment called Transcranial Magnetic Stimulation (TMS), which is an effective treatment for depression, may also improve cognition.

Explaining the painless, non-invasive procedure, Hoy says that TMS uses magnetic pulses to induce an electrical current in the brain, causing cells to fire.

Applied regularly over days and weeks, these magnetic pulses give rise to lasting changes in the brain cells that, in turn, can restore brain connectivity leading to an improvement in cognitive function.

Hoy said: "Results from initial research using TMS to improve cognition and fight memory loss in Alzheimer's are promising and we're about to launch a large-scale clinical trial to establish a personalised treatment approach – the first of its kind in the world."

Bionics Institute CEO Robert Klupacs says [this research](#) is incredibly exciting, not only because it could improve the lives of millions of people around the world, but also improve quality of life for their carer.

He said: "With the right funding from donors and the government, we can get this trial moving and make this Alzheimer's treatment available in clinics in the future, if shown to be effective."

For Cheryl Conway, who has seen her 92-year-old mother deteriorate from Alzheimer's over the past ten years, supporting research into a new treatment is incredibly important.

She says that with Alzheimer's: 'you lose your parent while they're still alive'.



“Before my mother went into the nursing home it was awful. She’d ring me 20-30 times a day. She couldn’t remember how to use the oven or the washing machine. She ate like a bird and the weight just fell off.

“I just want mum to enjoy her final years, come to family gatherings, hold her great grandchildren.”

To donate to this research, go to: <https://fundraise.bionicsinstitute.org/alzheimersappeal>

**Available for interview:**

- Mr Robert Klupacs – Bionics Institute CEO
- Professor Kate Hoy – Bionics Institute Head, Cognitive Disorders Treatment Program
- Cheryl Conway – carer for mother with Alzheimer’s

**About the Bionics Institute**

The Bionics Institute is an internationally recognised, independent medical research institute that solves medical challenges with technology. We lead the world in the research and development of innovative medical devices and therapies to transform the lives of people with hearing and vision impairment, autoimmune and chronic conditions, and conditions affecting the brain. For more information, go to: [www.bionicsinstitute.org](http://www.bionicsinstitute.org)