Meet our new ambassador

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221

AUTUMN 2024

World-first Crohn's disease treatment

38 years of groundbreaking hearing research

Bionics Institute

Latest News

A world-first for Crohn's

disease treatment

A Bionics Institute electrical stimulation device to treat Crohn's disease is now in clinical trials and the first patient is doing well after implantation. There is currently no cure for Crohn's disease and this device is a significant step towards preventing the recurrence of disease

after bowel surgery and gives patients the hope of continuing their lives without the fear of further surgery and debilitating symptoms.



Supporting superstar researchers of the

future

The Passe & Williams Foundation have continued their longstanding support of Bionics Institute hearing researchers with the award of 2 prestigious Fellowships. Congratulations to Anu Sabu (pictured) who was



awarded the Early Career Researcher Fellowship and Demi Gao who was awarded the Mid-Career Research Fellowship. It will also allow further investigation into how a combination of cochlear implants and hearing aids might give a more unified perception of sound for improved speech understanding.

A boost for tinnitus

research

Thanks to a generous grant from the William Angliss Charitable Foundation and kind supporters like you, Dr Mehrnaz Shoushtarian and her team are progressing their objective tinnitus test to the next stage – a



comprehensive clinical trial needed to get approval for use of the test in clinics. The test will give clinicians a way to accurately diagnose tinnitus for the first time and pave the way to developing life changing treatments.

Government funding to advance groundbreaking nerve research

A \$1 million NHMRC Grant awarded to Professor James Fallon will enable our research team to continue development of novel technology for continuous monitoring of peripheral nerve activity. The research aims to record and analyse different fibre types of the vagus and sciatic nerves, with limited impact on the nerve to develop treatments for hard to manage conditions such as incontinence.

Thank you for helping to fund breakthrough discoveries with the potential to change the world for those living with hearing loss. Read all our latest news and updates here.



Professor James Fallon



A word from our CEO

Welcome to your Autumn edition, it is full of inspiring updates on how you are contributing to the development of ground-breaking technology and treatments – and sharing the gift of hearing – through your wonderful support.

I am particularly excited to share with you a world first: our vagus nerve device to treat Crohn's disease was implanted into the very first patient at the Austin Hospital in November. Huge congratulations go to Professor James Fallon who has led this research, with Dr Sophie Payne and their collaborators.

It brings me great joy to introduce our newest ambassador, Australia's national goalkeeper Mackenzie Arnold. Mackenzie is a dedicated advocate for people with hearing loss and we are thrilled to have her championing our world-leading hearing research.

Mackenzie will be helping us promote our first ever Giving Day on March 5. Our goal is to raise significant funds for our hearing research and I hope that I can count on your support to help make that possible.

Thank you for your compassionate and committed support for the vital work of the Bionics Institute. It truly does inspire and empower our researchers to give hope to people with challenging medical conditions, and I look forward to updating you on the progress you help make possible.

Best wishes,

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Robert Klupacs Bionics Institute CEO

Bionics Institute launches

first ever Giving Day

To celebrate National Hearing Week 2024, we will be holding our Hearing Research Giving Day on March 5. It's your opportunity to have an even bigger impact on life-changing research that is giving hope to millions of people around the world who are living with hearing loss. If you donate on March 5, every dollar you give will be matched by a caring group of Bionics Institute supporters, so you can double the difference you make by donating.

Douate to hearing research



people around the world live with hearing impairment

1.5 billiou

Cochlear implants have given the gift of hearing to over

750,000



people worldwide

Meet our New Ambassador, Mackenzie Arnold

The Bionics Institute is delighted to announce that Mackenzie Arnold has joined us as a hearing research ambassador.

Mackenzie Arnold has 44 caps for the Australian national team since her debut in 2012 and is the Captain of English heavyweights, West Ham United FC.

A wearer of hearing aids, Mackenzie knows firsthand how important the joy of sound is.

"I'm such a proud ambassador of the Bionics Institute and hopefully I can put the awareness out there and get behind the researchers for the 1.5 billion people with hearing loss."

With Mackenzie's support, we look forward to progressing our pioneering hearing treatments into the clinic to improve the lives of millions of people affected by hearing loss around the world.

"I know what it's like to live with hearing loss. The world leading team at the Bionics Institute are doing incredible research work behind the scenes however they need our help. If you're in a position to support the Bionics Institute and help give the gift of hearing, please donate to their Giving Day on March 5."

Founded by **Professor Graeme** Clark to develop the cochlear implant, the Bionics Institute has a long, proud history in the development of medical devices to diagnose and treat hearing loss. With your generous support, our researchers continue to be world leaders in hearing research.

> Here are some of the breakthrough research projects you are helping to fund through your donations.

An objective test for tinnitus

Dr Mehrnaz Shoushtarian and her team are developing a groundbreaking test that will clinically show the presence of tinnitus for the first time and reliably assess if a treatment is working. It will give researchers the information needed

to develop new treatments to stop the torment of tinnitus.

"If I was free of tinnitus, I'd be able to sleep and enjoy a peaceful walk in the park. For 46 years I've had to live with the fact that there's no cure and no treatment for tinnitus. This test gives me hope."

- Kevin, tinnitus patient.

A test to give babies the chance to speak

Current newborn hearing tests do not provide information about a baby's ability to discriminate between sounds, meaning it is challenging for audiologists to determine whether that baby requires a hearing aid or needs



to be referred for a cochlear implant. Professor Colette Mckay and her team are developing EarGenie®, a new hearing test that will give babies the best chance of hearing clearly and learning to speak.

"When we found out Charlie couldn't hear us call his name we were devastated. We will do everything we can to support research that gives deaf children like Charlie the chance to learn to speak and live life to the fullest."

- Ash, baby Charlie's mum

A drug treatment for hearing loss

Professor Andrew Wise and his team are using nanotechnology to deliver drugs into the inner ear to repair damaged cells in people with hearing loss. The treatment shows great promise in the treatment of hearing loss, which can have wide ranging impacts such as social isolation, depression, loneliness and cognitive decline associated with dementia.

"I lost my hearing suddenly and there's no treatment available. A treatment to restore the damaged hearing cells in my ear would be amazing."

 Patient with hearing loss



Improving speech for cochlear implant users

The sound heard through a cochlear implant is very different to natural hearing. While most people using a cochlear implant are able to understand speech and make sense of other sounds with relative ease, people can struggle to hear if there's a lot of background noise and music can sound distorted and often unpleasant. Dr Rachael Richardson and her team are investigating how a combination of electricity and light stimulation could improve sound and enjoyment of music for people with a cochlear implant.

The gift of hearing has opened many doors in my life and given me countless opportunities that would otherwise have not been available to me. I am grateful and humbled to be just

one of the near million success stories that the innovation of the cochlear implant has brought since its invention at the Bionics Institute."

Sam McLarty,
Cochlear implant
recipient





The Power of a Gift in your Will

"The research of the Institute changed our lives, and I hope that by leaving a gift in my Will, then even when I'm gone, I can leave a legacy to help change someone else's life for the better."

Belinda Rodman, a longstanding supporter and ambassador of the Bionics Institute, shares how receiving a cochlear implant enabled her son Simon to achieve his dreams of becoming a pilot.

"Simon received a cochlear implant when he was only three, after contracting a severe form of meningitis and becoming profoundly deaf in both ears," Belinda explains.

Tests showed that there was unfortunately no chance of Simon's hearing regenerating and as he became so profoundly deaf hearing aids were not an option, making his future initially look very uncertain.

However, the cochlear implant developed by the Bionics Institute provided another chance for Simon to hear and after just three months he received a cochlear implant in one ear, as was most common at the time.

Simon was able to attend rehabilitation in Sydney where, alongside the clinical team, Belinda and his family helped him adjust as quickly as possible to his new hearing and ensure he didn't fall behind with language development.

"He adapted really, really quickly, finishing all of the rehab in just a few weeks and fully adapting to hearing in just one ear", Belinda says with pride. "Thanks to receiving a cochlear implant, Simon was able to attend a mainstream school and university, and has gone on to achieve his dream of becoming a commercial airline pilot. He is, to the best of our knowledge, the first implant recipient in Australia and possibly in the world with a cochlear to become a commercial pilot working for a major airline, something we are incredibly proud of," Belinda explains.

"We can't thank the Institute enough for their hard work in creating the opportunity for Simon to have this device and lead the life he does. It's transformed our lives. Not just Simon, but all of us as a family."

Although her initial motivation for supporting the Bionics Institute stemmed from gratitude for what the research made possible for Simon, Belinda has kept up to date with the many innovative advancements being made by the Institute over the years and wanted to continue her support through a gift in her Will.

"It's just so incredible to see all of the devices and treatments the teams are developing. Having personally experienced the power of that research and what it has done for us, leaving a gift in my Will is a way for me to consolidate my gratitude. It has given me the comfort of feeling that I am giving back."

"It's a nice feeling to think that even when I'm no longer here, I am helping something continue that other people are going to benefit from, just like Simon."

To learn more about leaving a lasting gift to help us make breakthrough discoveries in the years to come, visit the website.



Join our community of donors and help us develop life-changing treatments. Please give this Autumn at bionicsinstitute.org/donate

