

# Tinnitus

Tinnitus is a complex condition caused by damage in the ear which results in random and spontaneous signals being sent to the brain. Tinnitus can be difficult to live with and currently there is no cure. The current prognosis through the primary care pathway focuses on hearing loss with limited emotional support and management of the condition. The development of the Tinnibot App was designed to address this gap through providing a range of tools to support the management of Tinnitus through evidence-based therapy such as Cognitive Behavioural Therapy (CBT), therapeutic soundscapes and mindfulness training.



## HOW HAS THE PARTNERSHIP HELPED THE BUSINESS?

The Tinnibot App was developed through a successful International Partnership between the University of Auckland school of Psychology and Leeds Trinity University. The App is based on scientific research conducted, which was funded through a A\$50000 grant from the Australian Academy of Technology and Engineering. The research conducted by Dr James Jackson (Leeds Trinity University) enabled Dr Fabrice Bardy, Dr Matthieu Recugnat (Co-founders of Hearing Power) and Dr James Jackson (Leeds Trinity University) to develop an accessible and efficient Artificial Intelligence (AI) based App which effectively supports people to manage their Tinnitus condition.

Through a series of qualitative interviews of several Tinnitus Apps the research found that people are more likely to talk with a Chatbot than they are with the therapist. The research team recognised that the quality of Chatbots marketed to people with Tinnitus varied widely and that not all were research-led in design which in some cases excluded some age groups from effectively engaging in the App, particularly the older age range. One of the priorities for the Tinnibot research team was to design inclusive format phrasing, ensuring the Chatbot conversations were pitched to be inclusive for all groups.

Dr James Jackson from Leeds Trinity University continues to engage in knowledge exchange activities such as educational workshops for audiologists and GPs that promote the benefits and effectiveness of Tinnitus interventions, such as Tinnibot, for patients.

Dr Fabrice Bardy, Dr Matthieu Recugnat (Co-founders of Hearing Power) and Dr James Jackson (Leeds Trinity University) have received recognition for the Tinnibot Smartphone App, in the third annual prestigious Hearing Technology Innovator Awards 2022.

## QUOTES

“Hearing Power has developed Tinnibot to help people suffering from tinnitus symptoms accept their condition; understand that no “quick-fix cure” currently exists, despite what some online sources may suggest; and work toward improving their quality of life through therapeutic methods.” Dr Fabrice Bardy, Co-Founder, Hearing Power.

“Tinnibot’s USP as a tinnitus smartphone app is the chatbot function as it enables people to talk with the software, being more honest than they may be with another human being. The app is also a gateway to different treatments as it provides education, sound therapy, mindfulness, and CBT. Users are supported and have an increased understanding of what they are living with and what support is available to them.” Dr James Jackson, Reader in Psychology, Leeds Trinity University.

## SOURCES

[Leeds Trinity University Case Study - Tinnitus Research](#)

[Tinnibot: Your Tinnitus Companion](#)

[A smartphone app that supports tinnitus users wins 2022 global innovation award](#)