Hearing problems take many forms from age to noise induced hearing loss (NIHL) and tinnitus. Hearing injury also can affect people of any age.

Audiology section
This team researches a wide variety of hearing issues, including the anatomy and physiology of the ear, mechanisms of inner ear disease, psychoacoustics, acoustics, hearing aids, cochlear implants, tinnitus, psychosocial issues of deafness and auditory evoked potentials. The team also participates in joint research between the University and private industry partners.

Auckland Auditory Neuroscience Group
This group has developed treatments for noise induced hearing loss (NIHL) and related inner ear pathologies. They’re focusing on developing safe topical and systemic treatments that can be effective both as prophylactics and therapeutics.

Tinnitus and Hearing Technology Group
Hearing technology research at the University is being conducted across three major themes – accessible hearing technologies, tinnitus and perceptual training for hearing disorders.

The Tinnitus and Hearing technology research group has a strong history of national and international collaborations in hearing health and technology, including:

- Universities in North America and Europe
- The Polymer Electronics Research Centre (PERC) and the Materials Accelerator at The University of Auckland
- Large multinational companies in hearing aid design and manufacturing.

The big picture
Why researching and solving hearing problems is so important

- Hearing loss affects up to 17 percent of the population.
- Hearing loss ranks with asthma, diabetes and musculoskeletal diseases in terms of burden of disability.
- It is estimated that about two of every 1,000 children are born with significant hearing impairment.
- Claims to ACC for workplace noise-induced hearing loss have been steadily increasing, costing around about $50 million annually in rehabilitation costs for hearing impaired workers.
- Noise exposure accounts for 16-30 percent of the adult hearing loss and is mostly preventable.
- Glue ear affects about one in four children.
- It is estimated that 30-40% of those in prison have some form of hearing impairment.
- Hearing loss is significantly more prevalent among Maori and Pacific people.

Source: National Foundation for the Deaf
Hearing and Tinnitus Clinic

This clinic is a world-leader in tinnitus research and treatment as well as a top training centre for New Zealand audiologists. It is a teaching clinic where supervised students can gain real world experience during training, along with skills in the areas of clinical practice and client care that come only from practice. The clinic also works with patients with hearing impairments such as tinnitus, conducts assessments for adult cochlear implants and advises on hearing protection. Because the clinic is at the cutting edge of hearing science, it offers patients a number of unique hearing therapies. It also has a database of research volunteers and is developing hearing health programmes with Pacific communities.

Oticon Foundation Hearing Education Centre

The Audiology section at Tamaki is also home to this centre which:

- supports postgraduate education in audiology
- provides continuing audiology education
- facilitates the transfer of research knowledge into clinical audiology
- promotes community education in hearing and hearing loss
- promotes graduate research in audiology
- provides equipment and facilities for training and professional development.

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Contact

innovation@auckland.ac.nz

Auckland UniServices Limited

Level 10, UniServices House, 70 Symonds Street, Auckland Private Bag 92019 AMC, Auckland 1142, New Zealand

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