



Gift of Hearing

2025-2030

DONOR APPEAL

OVERVIEW

At Ear Science Institute Australia, we strive to continually deliver our promise of pushing boundaries when developing treatments and therapies to improve hearing health for West Australians and the world. This is only possible thanks to the generous supporters of our Gift of Hearing Appeals.

This new opportunity to support Australia's first and only Australasian Biobank and Hearing Registry, **The Aussie Ear Bank**, to tackle hereditary hearing loss is no exception. The Aussie Ear Bank will be the first biobank in the world, solely dedicated to storing ear tissue samples related to genetic-associated hearing loss, with the aim to advance personalised care and develop new treatments for ear and hearing disorders. To do this, we need to raise \$10M by 2030.

We've successfully secured \$1.5M in seed funding: \$500,000 from the Western Australia Future Health Research and Innovation grant, \$150,000 from The Ian Potter Foundation, and generous donations to our Gift of Hearing donors. We've also applied for an additional \$3.6M from State and Commonwealth grants. This vital funding will equip us to tackle the 50% of all childhood-onset hearing losses and significant portion of age-related hearing losses that are transferred through genes within families.

We have assembled a network of the brightest minds across the country to contribute to The Aussie Ear Bank, and the data it produces will give us limitless opportunities to refine our drug and gene therapies to potentially prevent or reverse hearing loss at its source in both children and adults.

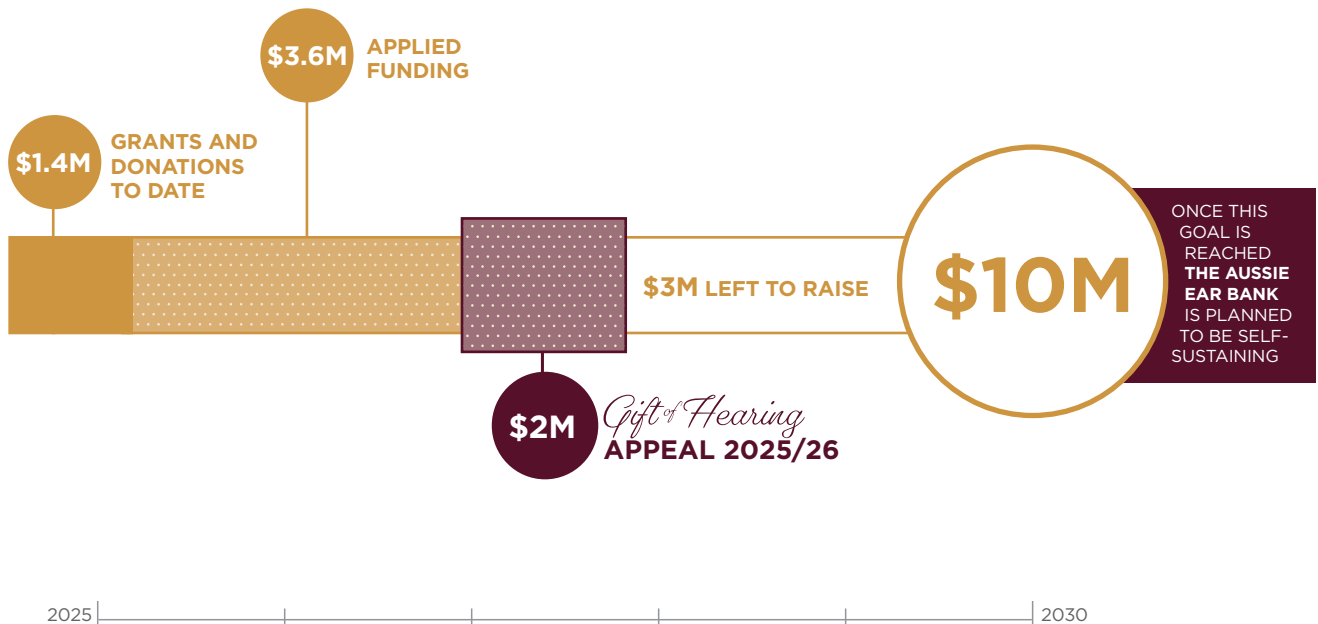
SELF-SUSTAINING VISION

Our vision is to make The Aussie Ear Bank self-sustaining by 2030. To make this a reality, our funding goal is to raise \$10M within the next 5 years.

By supporting Ear Science, you will make our model of self-sustainability a reality and advance research into genetic conditions such as Ushers syndrome and many others that lead to ear and hearing disorders worldwide.

We need your support to help us reach our 2030 goal by raising \$2 Million in this Gift of Hearing Appeal.

THE AUSSIE EAR BANK FUNDRAISING TARGET



"The emerging research around the world and particularly at Ear Science is that genetics is the big new factor in hearing loss. This is not what we thought before, and it is a game-changing finding. Together with your support and the development of The Aussie Ear Bank, we can potentially find a cure for hearing loss."

Professor Marcus Atlas



RESTORING HEARING THROUGH GENE THERAPY



Keenan was fitted with two hearing devices through our Change a Life program.

World Breakthrough!

In February 2024 at the Children's Hospital of Philadelphia, an 11-year-old child with a rare form of congenital deafness regained hearing using a revolutionary gene therapy technique developed by an Italian team.*

The child's deafness was caused by a mutation in the OTOF gene, which affects otoferlin production, a protein essential for hearing. Gene therapy was used to replace the defective OTOF gene with a functional one, enabling proper hair cell function in the inner ear, and restoring hearing.

Despite this genetic condition being extremely rare, this world-first achievement represents a major step forward in treating genetic forms of hearing loss and offers hope for others with similar conditions, such as Keenan, one of our 'Change a Life' hearing aid recipients. Keenan was diagnosed with the rare genetic condition Waardenburg syndrome which resulted in him losing his hearing. The success of The Aussie Ear Bank could change the life of Keenan and millions of people across Australia and the world.

*<https://www.nature.com/articles/d43978-024-00032-3>

GIFT OF HEARING APPEAL TARGET

\$2M by **2026**

This can be broken into 2 distinct areas of activity:

Genetic counselling and
collecting genetic data

\$500,000

Identification and testing of
gene and small molecule therapies

\$1.5 MILLION

GENETIC COUNSELLING & COLLECTING GENETIC DATA

\$500,000

GENETIC COUNSELLING

What is involved?



FAMILY HISTORY ASSESSMENT

Identifying patterns of genetic conditions.



GENETIC TESTING OPTIONS

Discussing available tests and the benefits and limitations of testing.



RISK ASSESSMENT

Evaluating genetic conditions; visualising family history.



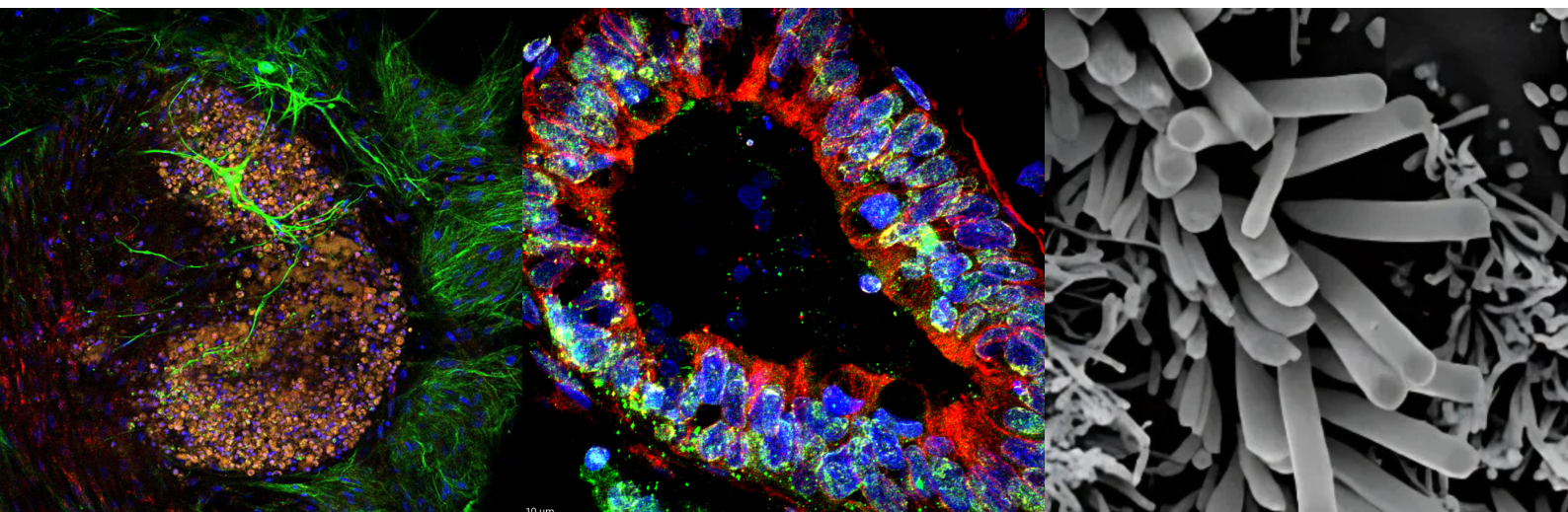
INTERPRETATION OF RESULTS

Explaining test results, potential outcomes and next steps.



SUPPORT AND RESOURCES

Providing further information and support.



Human Inner Ear Organoid



"The Aussie Ear Bank is special to me, because it's about more than just research - it's about giving kids like me a future with hope." Eamon Doak

Eamon, and his brother Kealan, were both born profoundly deaf due to a condition called Usher syndrome. The genetic analysis performed through The Aussie Ear Bank offers the opportunity for potential cures for conditions such as Usher syndrome.

COLLECTING GENETIC DATA

How we do this



ADVANCING GENETIC RESEARCH

Ongoing considerations on regulations and ethical standards.



COLLECTING SAMPLES

Blood, saliva, buccal (inner cheek), tissue samples - DNA extraction.



INFORMED CONSENT

Data processing and storage. Analyses and research.



DATA SECURITY AND ETHICAL CONSIDERATIONS

Robust cybersecurity measures. Ownership of genetic data.

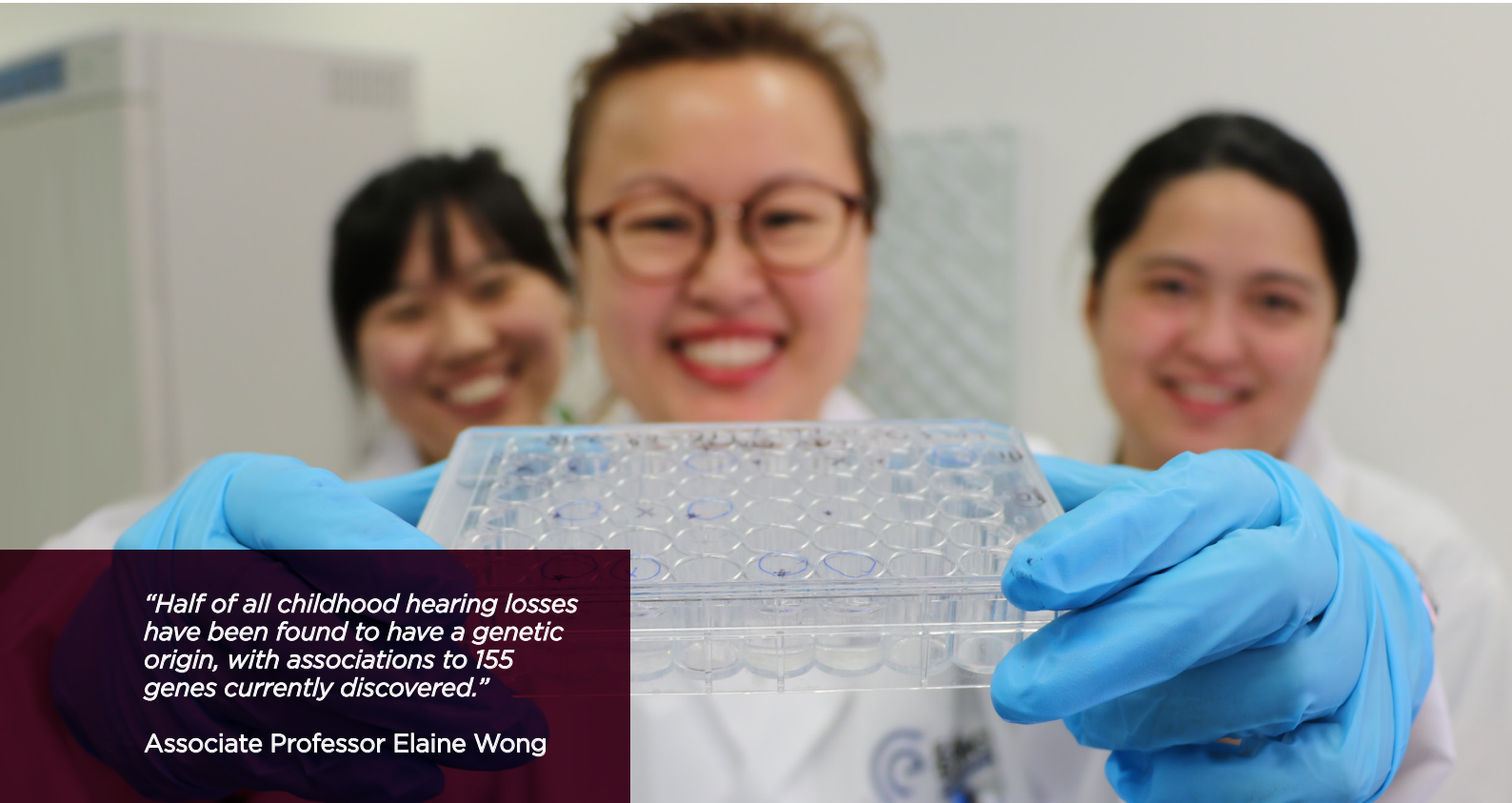
IDENTIFICATION & TESTING OF GENE & SMALL MOLECULE THERAPIES

\$1.5 MILLION

FUND WORLD CLASS RESEARCHERS

**APPOINT TWO WORLD-CLASS RESEARCHERS
AT \$150,000 PER ANNUM OVER 5 YEARS.**

With your support already, Ear Science has been working behind the scenes to identify genes and small molecule therapies. What was missing was the ability to test these. The Biobank will now allow this to happen, bringing us ever closer to a cure for some hereditary hearing losses.

A photograph of three researchers in a laboratory setting. In the foreground, a person with glasses and blue gloves holds a clear multi-well plate. Two other researchers are visible in the background, smiling. The image is partially overlaid with a dark purple box containing text.

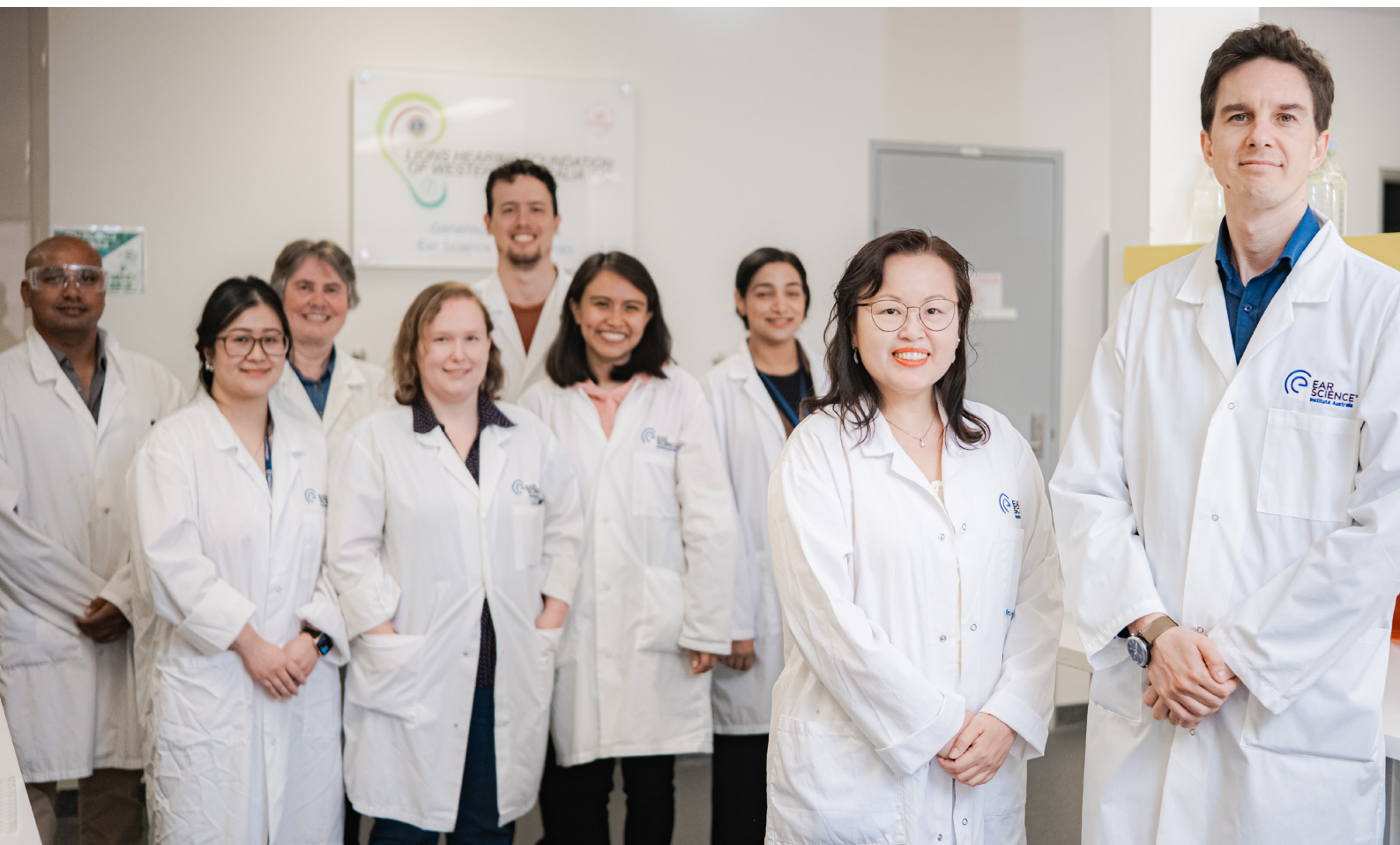
"Half of all childhood hearing losses have been found to have a genetic origin, with associations to 155 genes currently discovered."

Associate Professor Elaine Wong

BRINGING TOGETHER SCIENTIFIC MINDS TO FIND A CURE.

Collaboration with **Lions Eye Institute, Perth Children's Hospital, WA Health, Murdoch Children's Research Institute, Monash University** and **University of Sydney**.

Headquartered in Western Australia, at Ear Science, we have assembled a collaborative team of expert scientists from around Australia. The data we collect will give us limitless opportunities to refine our drug and gene therapies, with the potential to prevent or reverse hearing loss at its source for both children and adults.





Gift of Hearing


We aim to raise \$2M by 2026, towards our 2030 goal of \$10M, in order to establish Australasia's first and only Biobank solely dedicated to ear and hearing disorders, The Aussie Ear Bank. This research will change lives, and we invite you to be part of it.

Contact the *Gift of Hearing* team on:

Email: **Giftofhearing@earscience.org.au**

Mobile: **0409 092 285**

Tel: **1300 847 395**



Eamon Doak has always dreamed of flying a plane, and one of our generous Gift of Hearing donors made his dream come true.

All donations to Ear Science Institute Australia of \$2 or more is tax deductible in Australia.

Ear Science Institute Australia Incorporated is a registered charity with the Australian Taxation Office as a Deductible Gift Recipient (DGR: CC20474).

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THANK YOU FOR HELPING US FIND A CURE FOR HEARING LOSS

Your generosity allows us to continue our life-changing research to find treatments for today and cures for tomorrow.

