



**NeuRA**

*Discover. Conquer. Cure.*

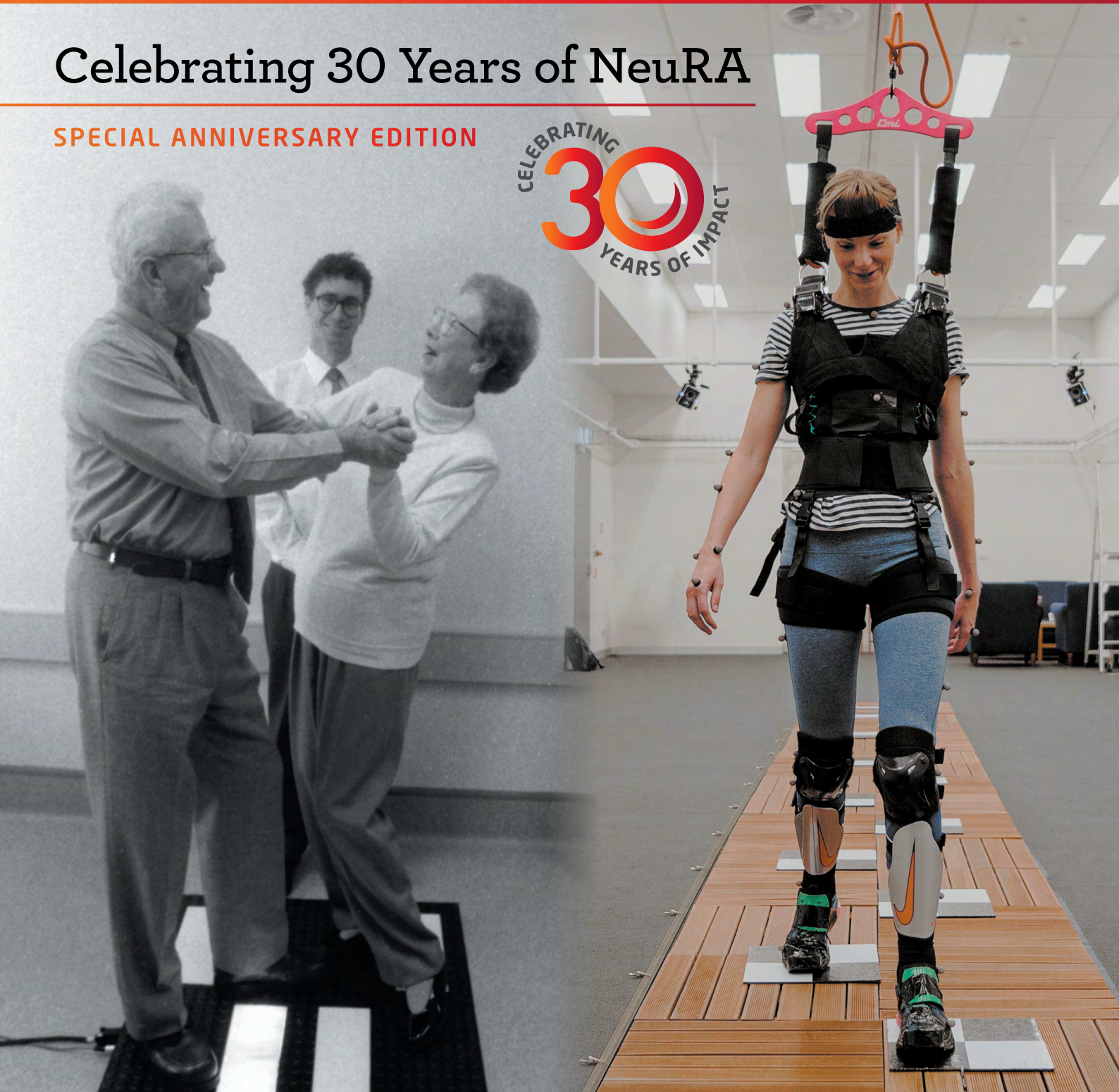
# the NeuRA

magazine

Issue 40 | Winter 2022

## Celebrating 30 Years of NeuRA

SPECIAL ANNIVERSARY EDITION





## Message from our CEO

Professor Peter  
Schofield AO



Prof Peter Schofield AO

This special edition of NeuRA Magazine is dedicated to celebrating our 30th anniversary and looking forward to our future. From four founding scientists, NeuRA

has grown into a 300-person strong institute with 28 research groups and purpose-built facilities that enable us to remain at the forefront of neuroscience.

We look back at key moments in our history - including some of the landmark scientific, clinical and consumer impacts achieved by our incredible researchers.

Our resident cerebral cartographer, Scientia Professor George Paxinos AO, shares what it's like to discover new regions of the brain - or 94 of them in his case.

PhD student Yuchen Xie tells us about her work to help older people and their families navigate the complexities of the home-based aged care system. And we also profile vital research being done by Scientia Professor Kaarin Anstey and her team to help older drivers stay safer on the road for longer, via their multi-dimensional *Better Drive Study*.

NeuRA's journey so far would not have been possible without our generous supporters - so my sincerest thanks for your continued commitment as we head into our next 30 years of impact!

A handwritten signature in black ink, reading 'P. Schofield'.

Prof Peter R Schofield AO FAHMS PhD DSc  
CEO

## Celebrating 30 years at NeuRA



NeuRA CEO, Professor Peter Schofield AO, Mrs Margaret Ainsworth and NSW Chair of Schizophrenia Research, Professor Cyndi Shannon Weickert.



NeuRA CEO, Professor Peter Schofield AO, Chancellor of the University of New South Wales, David Gonski AC, and Chairman of NeuRA Foundation Board, Colin Tate AM.



NeuRA PhD Pearl students Harrison Hansford, Dae Uk Han, Sophie Debs, and Mahsa Seydi.



Scientia Professor Kaarin Anstey

## A green light to drive

Most of us want to keep driving for as long as possible. It gives us a sense of freedom, while allowing us to easily go places and catch up with people. But unfortunately this gets more challenging and riskier as we get older. Recent research has shown that while road fatalities have generally decreased, there has been an increase in serious road accidents and fatalities for people over 65 years old<sup>1</sup>.

But fear not, Scientia Professor Kaarin Anstey and a team of expert researchers from NeuRA and UNSW are here to drive change in this area with a world-first randomised clinical trial. The team understands that people can experience sensory, cognitive and physical changes as they get older which can ultimately impact their ability to drive safely.

To combat this, they have developed the *Better Drive Study* to examine the effectiveness of skills-based interventions to safely keep people on the roads as long as possible.

Over the course of two years, the team of researchers will assess 384 people to observe the effectiveness of tailored driving lessons, road-rule workshops and

direct feedback on a participant's driving errors. If these engaging and cost-effective solutions prove effective, then they could be implemented in a range of settings like rehabilitation centres and driving schools to reduce traffic accidents and mortality in older drivers.

The team is now recruiting volunteers to take part in this ground-breaking study to help improve driver safety in older Australians. You simply need to be a licensed driver aged over 65 years, who drives regularly and plans to keep doing so. ●

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**If you tick the boxes and you're interested in participating in this influential study, then please contact the *Better Drive Study* research team on [betterdrive@neura.edu.au](mailto:betterdrive@neura.edu.au) or call 02 9399 1135.**

Your involvement in this randomised study could help save a life.

<sup>1</sup> <https://www.abc.net.au/news/2018-05-15/older-drivers-in-more-fatal-crashes/9761756>



# 30 Years of Impact at NeuRA

What started in 1990 as discussion around a kitchen table between four scientists has, by 2022, become a 300-person strong institute with 28 research groups and purpose-built facilities that enable us to remain at the forefront of neuroscience.

**1993**

POWMRI research facilities are officially opened.

**2002**

Former US President Bill Clinton headlines a national fundraising tour that raises \$1 million for five Australian charities including POWMRI.

**2007**

Prof Stephen Lord develops *FallScreen*, the falls risk calculator and assessment tool, now used worldwide.

**2009**

The Sydney Brain Bank opens, the only bank in Australia focused on neurodegenerative disorders.

1990

2000

2010

**1991**

Prince of Wales Medical Research Institute (POWMRI) is established, supported by Eastern Sydney Area Health Service & UNSW.

**2000**

A new and expanded POWMRI opens, doubling research capacity. HRH The Prince of Wales sends his congratulations.

**2003**

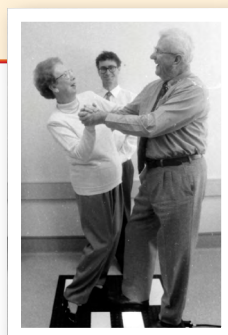
The Mayne Clinical Research Imaging Centre opens. Since then, NeuRA Imaging has contributed to the publication of more than 350 papers.

**2008**

Prof Tony Broe AM commences the *Koori Growing Old Well Study*, which shows the prevalence of dementia is three to five times higher in Aboriginal Australians.

**2010**

POWMRI becomes Neuroscience Research Australia (NeuRA) and begins construction of purpose-built facilities with Federal and State Government support.



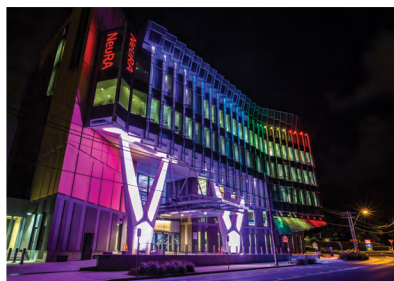
*“It’s my great hope that our next 30 years will be even richer than the last, generating new research outcomes that meet and help the community, that transform health into the future, and make an impact.”*

– NeuRA CEO Professor Peter Schofield AO

## 2012

The Dominantly Inherited Alzheimer Network reveal the progression of biomarkers allowing their use as surrogate end points in clinical trials.

Profs Jacqui Close and Ian Harris set up the Australian and New Zealand Hip Fracture Registry, improving clinical care.



## 2015

NeuRA and the Schizophrenia Research Institute merge.

2015

## 2013

Transformational philanthropy from Mrs Margarete Ainsworth enables the fit-out and opening of the new building named in her honour.

Prof Lynne Bilston & A/Prof Julie Brown launch the inaugural National Child Restraint Guidelines with Kidsafe. The adoption of NeuRA's research in legislation across Australia has reduced child fatalities in motor vehicles by 45%.

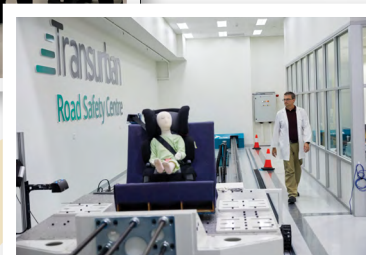
## 2017

The Transurban Road Safety Centre opens at NeuRA, accelerating reducing the risk of injury on the road.



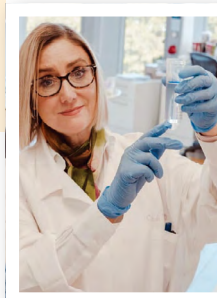
## 2019

Prof Kaarin Anstey and A/Prof Ruth Peters contribute to the World Health Organization guidelines on dementia risk.



## 2018

Prof Cyndi Shannon Weickert discovers immune cells from the blood at increased levels in brains of many people with schizophrenia, opening new avenues for treatment.



## 2020

NeuRA's new Spinal Cord Injury Research Centre opens. A year later the landmark eWALK trial commences, using neurostimulation to help people with incomplete spinal cord injury regain movement.



## 2022

NeuRA celebrates 30 years of impact with staff and supporters.

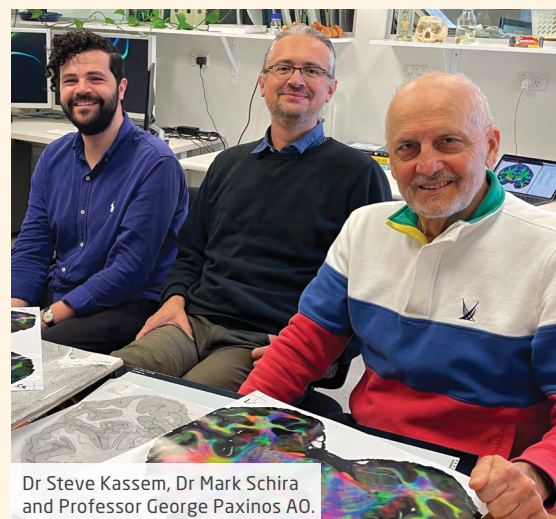


*Scan the QR code for a retrospective of 30 years of Neuroscience at NeuRA.*





Professor George Paxinos AO (left) with Charles Watson constructing The Rat Brain in Stereotaxic Coordinate in 1981.



Dr Steve Kassem, Dr Mark Schira and Professor George Paxinos AO.

## PROFILE: Scientia Professor George Paxinos AO

*A famed cerebral cartographer, a psychologist, an author and an environmentalist. At the age of 78, Scientia Professor George Paxinos AO has definitely achieved more than most.*

**Professor Paxinos has spent the majority of his career relentlessly mapping brains, with his cerebral atlases laying the foundation for almost all neuroscientific research.**

As George explains, "In the trade that I'm in, finding an area of the brain is the nicest thing that can come my way".

And he has experienced that thrill more than most, having discovered more brain areas than anyone in history.

**These days, he and his team of researchers at NeuRA are working on an ambitious project to develop a 3D map of the living human brain that's accessible in the palm of your hand and will support clinicians and researchers in their work.**

Having studied and practiced research around the world, George wryly explains how he ended up at NeuRA: "I applied for a fellowship and they supported me at NeuRA to put the application through. I got it for research only, which is getting to paradise without dying."

He has now been with the organisation for 21 years and has no plans of slowing down.

These days, he and his team of researchers at NeuRA are working on an ambitious project to develop a 3D map of the living human brain that's accessible in the palm of your hand and will support clinicians and researchers in their work.

While that would be enough for most, George recently took his passion for the human brain to a new high and used his incredible knowledge as the basis for a novel. His book, *A River Divided*, is about a scientist who successfully

clones Christ to produce two twins. The novel tracks both boys as they grow up on opposite sides of the world and their responses to global warming and deforestation. Ultimately George poses the compelling idea of how Christ himself may respond to this global environmental crisis. He uses it as an opportunity to explore how our brains dictate who we are, while simultaneously championing the urgent need for environmental change.

With all this in the works, what are his hopes for the next 30 years of NeuRA? "Well greater funding for the place. Because there's good science, but the funding has always been a bit problematic."

Having seen the worldwide impacts his own research has made, it's no surprise that George is spending his time championing for funding to allow future generations of researchers to make a difference too. ●

# Researcher in Profile: Yuchen Xie

To mark our 30th anniversary we are showcasing some of our PhD students who are undertaking unique research to solve some of our biggest health challenges.

Yuchen Xie is one of our promising PhD students who has set out to improve equitable access and resources to aged care services.

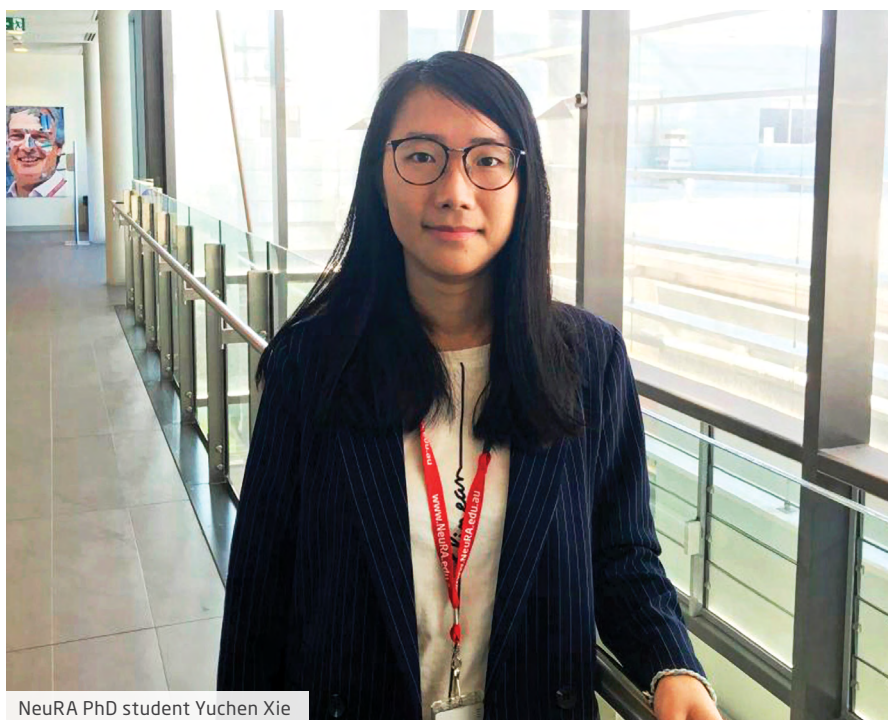
**“Everyone will age, but the key is to age well. My previous interactions with older adults have positively inspired my interest in aged care research, and through this project I hope to support older adults, as they have supported me.”**

– Yuchen Xie

Having previously studied in the United States, Yuchen joined NeuRA in July 2020 as a visiting PhD student and is researching how older people and their families navigate the home-based aged care system.

It's no surprise that older adults and their families work hard to find appropriate resources and care for the person in need. There are so many stakeholders to deal with from doctors, hospitals and various home care service providers.

Yuchen's research examines the complexities of navigating this system faced by older Australians



NeuRA PhD student Yuchen Xie

and the additional challenges faced by culturally and linguistically diverse communities.

As Yuchen explains, “Everyone will age, but the key is to age well. My previous interactions with older adults have positively inspired my interest in aged care research, and through this project I hope to support older adults, as they have supported me”.

This valuable research could not have come at a better time as the population continues to age. It will help inform clinicians about how they link older Australians with

the right services in the future and will inform policy makers about how resources are applied and how these different people's needs are supported.

**We are now calling on our community of benefactors to help the next generation of researchers through the NeuRA PhD Pearl Program. This will see donors give \$15,000 per annum for four years to a PhD student to help supplement their living and research expenses. ●**

**For further information on NeuRA's PhD Pearl Program contact Carole Renouf, Executive Director of the NeuRA Foundation on 0410 611 446 or via email at [c.renouf@neura.edu.au](mailto:c.renouf@neura.edu.au)**



# DONATION FORM

☐ Yes, I would like to donate to research at NeuRA

*All gifts over \$2 are tax deductible*

Title:	First Name:
Surname:	
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State:	Postcode:
Phone:	
Email:	

## How I choose to give my gift:

☐ Please accept this one-off gift to support research at NeuRA

☐ I would like to invest in the future and become a *Discovery Partner* with a regular donation of

\$ \_\_\_\_\_ ☐ monthly / ☐ quarterly (please select)

☐ \$50 ☐ \$100 ☐ \$250 or \_\_\_\_\_

☐ A cheque payable to the NeuRA Foundation is enclosed OR

☐ I wish to make my gift by credit card:

☐ Visa ☐ Mastercard ☐ American Express ☐ Diners

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☐ If you do not require a receipt, please tick here

Please send me:

☐ Details about how I can support NeuRA in my Will

- Mail this coupon in the reply paid envelope
- Call us on **1300 888 019** to make a donation over the phone
- Make a secure online donation at [foundation.neura.edu.au/magdonate](https://foundation.neura.edu.au/magdonate)

**A message from the NeuRA Foundation:** The NeuRA Foundation may co-operate with other like-minded reputable Australian charities to promote our work to our respective donors. If you'd prefer that NeuRA does not share your information with other charities, please phone us on **1300 888 019**, email us at [foundation@neura.edu.au](mailto:foundation@neura.edu.au) or write to us using the enclosed envelope.

*Thank you for generously supporting our research into diseases*

If you wish to update your preferred communications from NeuRA, please call 1300 888 019.

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## NeuRAtalks



On May 11th we were delighted to hear from leading experts in Resilience, Wellbeing and Mental Health, facilitated by special guest host Sophie Scott.

- ▶ Associate Professor Justine Gatt (NeuRA and UNSW) shared her insights on the neuroscience of wellbeing, resilience and positive mental health.
- ▶ Scientia Professor Richard Bryant AC (UNSW and The Westmead Institute for Medical Research) talked about stress, trauma, anxiety, grief disorders and the interventions he's developed to assist people, as well as his work at the Traumatic Stress Clinic.
- ▶ Kate Connors (PwC & Corporate Mental Health Alliance Australia) opened up about the work she's doing to help corporate leaders support positive mental health and wellbeing in the workplace.

▶ **Didn't catch their discussion live?**  
Tune in at your own convenience: <https://www.youtube.com/watch?v=EwwlmH-kil8>

## Thank you for your continued support

Thank you so much to all of you who supported our first fundraising appeal of 2022 and gave by mail, online or over the phone. Our autumn appeal raised over **\$40,000** to further our research into intergenerational practice, bringing young and old together to help older Australians lead healthier, more fulfilling, independent and connected lives as they age.

**We are very grateful for your generosity, and look forward to keeping you informed of progress through this magazine. •**

If you would like to discuss in confidence leaving a gift in your Will to NeuRA please call **Deborah Smith, Gifts in Wills Manager** on **02 9399 1270**, email [d.smith@neura.edu.au](mailto:d.smith@neura.edu.au) or visit [wills.gatheredhere.com.au/c/neura](https://wills.gatheredhere.com.au/c/neura) to start your online Will now.