THE UNIVERSITY OF SYDNEY

Brain Matters

Using Our Brains Donor Program **Issue 40 January 2026**

From the Director, Professor Greg Sutherland

It's a highlight of my year to report on what the Brain Tissue Resource Centre (BTRC) team has done over the past 12 months. The reasons are twofold. First and foremost, none of the work that we and our researchers do would be possible without you, our donors. Your interest in research, and legacy for future generations is the ultimate gift. Second, the BTRC all go beyond their job descriptions to honour your gift by seeing that it reaches the best and brightest researchers to solve brain diseases. This includes in-kind support of our affiliated clinicians and members of our tissue review panels. The latter as experts in their fields assess each tissue request application to ensure that BTRC tissue goes to suitable projects.

The BTRC has been funded in some form by the National Institute on Alcohol Abuse and Alcoholism for over 30 years. This came about through the important work of preceding bank directors: Clive Harper and Jillian Kril. They worked on a condition called Wernicke's encephalopathy that was common in chronic alcoholism and occurs due to a deficiency in thiamine (vitamin B1). Clive Harper started the BTRC to provide tissue to other researchers interested in alcohol addiction. Since its inception, the BTRC has facilitated more than 300 alcohol-related papers and close to 800 scientific papers in all. In 2008, Clive and his team started the Using our Brains (UoB) donor program to solve a world-wide problem of insufficient controls for disease studies. The UoB has expanded to have 567 registered donors and has contributed around a third of the cases of our total bank collection of 522 cases. The BTRC is also intimately involved in research, to both modify protocols to better suit the latest technologies but also to use those technologies to help solve why addiction, and neurodegenerative disorders like Alzheimer's disease, affect only certain people. We have published a total of 11 scientific papers in 2025, including two using a technique developed in the laboratory to look at the pathology of Alzheimer's disease and alcohol use disorder across the brain. Images from these two papers are shown in Figures 1 and 2 in the newsletter.

2025 for me has meant a lot of conferences with trips to Paris, Daegu (South Korea) and New Orleans. These conferences were opportunities to discuss global brain banking initiatives, the BTRC, and our research. This has also led to a new collaboration with the brain bank at the Korean Brain Research Institute. I have also been able to promote the importance of brain banking to the Australian public via interviews on radio and in *The Australian* newspaper. Unlike our UoB community, many Australians are not aware that brain donation is possible or think that as organ donors they are already signed up. Increasing public awareness of brain donation for research is a big task and we know that UoB donors are already doing a great job spreading the word amongst your communities. One of our biggest issues is getting people who have had challenges with alcohol use to consider brain donation. We are hoping that a wider greater realisation that all forms of addiction are mental health issues just like depression and anxiety will increase the interest in this key demographic to help us solve this common disease.

Lastly, I would like to shout out to our partners such as the *Drug and Alcohol Services* with the local Sydney Health District, *Hello Sunday Morning, the NSW Organ Tissue Donation Service* and *NSW Coroner and Forensic Medicine* for helping the BTRC to do what we do. But, our best partners are yourselves and therefore, on behalf of the BTRC team, I would like to thank you for your continued support and wish you a prosperous 2026!

Kindest regards,
Greg

Figure 1 Image: *This shows plaques (red) and tangles (yellow; white arrows) in the occipital cortex (vision) of an Alzheimer's disease patient*

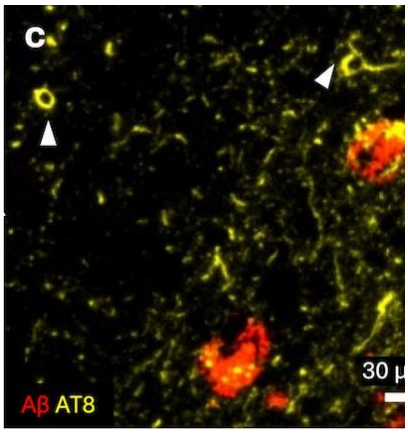
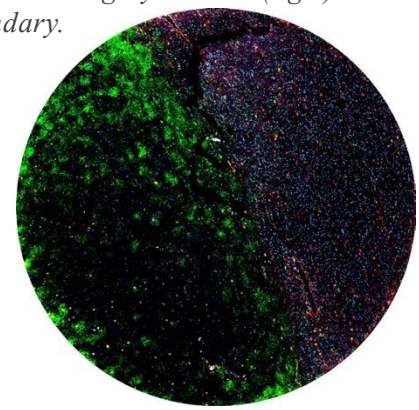


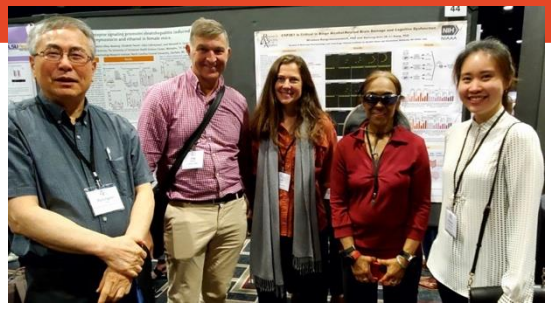
Figure 2 Image: *Shown below are astrocytes (green) in the grey matter of the temporal cortex of a person who had alcohol use disorder. The astrocytes are prominent at the grey matter (right)-white matter (left) boundary.*



Academic Conferences of the Year

RSA, New Orleans

Greg and Julia attended the 47th Annual Research Society on Alcohol Scientific Meeting in New Orleans in June to meet with researchers studying the effects of alcohol on the brain. There was much interest in the work that we do with many presentations where samples from the brain bank had been utilised. Greg presented a talk at a symposium dedicated to the use of postmortem brain tissue in alcohol research and Julia presented a poster reviewing research outcomes from the brain bank.



Left and right images: Streets of New Orleans
Middle image: Greg and Julia standing in the middle with fellow researchers

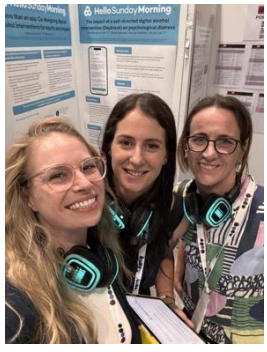


Image: Jenn on the left with APSAD attendees

APSAD, Sydney

Jenn had a fantastic time at the Australasian Professional Society on Alcohol & other Drugs Conference, connecting with a wide range of stakeholders and hearing powerful stories from individuals with lived experiences. These conversations were inspiring and will help guide our work in meaningful ways. We're thrilled to share that this year we'll be stepping it up with our very own booth. Can't wait to see you there!

Recent Publications

This year, the NSW BTRC has published a number of exciting papers. One of which, titled *"Optimization of Brain Tissue Preservation for Nucleic Acid Stability"* explores how we can improve our preservation techniques to improve tissue quality and downstream usability. By changing our freezing methods, we achieved a 3x improvement in tissue quality. These changes help us utilise precious tissue to its full potential and keep up with evolving research techniques and demands.

Below are a couple more research outputs from 2025:

- "Quantification of Alzheimer disease neuropathology using tissue microarrays." Nguyen-Hao HT, et al. (2025) Published in *PubMed*
- "Quantification of the neuropathology of alcohol use disorder using tissue microarrays." Liu J, et al. (2025) Published in *PubMed*

Inside the Mind: Alzheimer's Impact on the Occipital Gyrus

Image: A multiplex immunofluorescence image of an occipital gyrus from an Alzheimer's disease patient. Here, eight different proteins are being visualised to show all major cell types in the brain, including neurons (magenta), microglia (bright green), astrocytes (red), and olidendrocytes (teal). [H-T Nguyen-Hao, unpublished data]

Welcome Jenn B

In August, Jenn joined the team as the new Using Our Brains Donor Program Co-ordinator. Jenn has a background in coronial work and and forensic pathology. Originally from Canada, Jenn likes to stay active by swimming and playing squash.

Farewell Isabelle & Mario

We're saying goodbye to Mario and Izzy who have been an integral part of our team. Thank you for your contributions and dedication. We wish you all the best in your next chapter.

In Memoriam

The Using Our Brains Donor Program deeply appreciates the generosity of our donors and their families.

Choosing to give during a time of loss is an extraordinary act of kindness and foresight, helping advance research and improve lives in the future. To the families of donors who have passed away this year, we extend our heartfelt sympathy and sincere gratitude.

Over the years, many friends and families have honored their loved ones by making memorial donations to the Using Our Brains Donor Program in lieu of flowers. If you would like to support our research through a donation, please contact us for more information.

Test Your Knowledge

(To keep the grey matter sharp! Turn upside down for answers)

1. If Apple made a car, what would be missing?
2. What belongs to you but is used more by others?
3. What can you put in a bucket to make it weigh less?
4. What travels the world while staying in the same place?
5. The more you take, the more you leave behind. What are they?

Answers:
1. Windows
2. Your name
3. A hole
4. A stamp
5. Footsteps

Coming Up

2026 Brain Awareness Week
UoB Webinar - March 19 12:00–1:30 PM

Join us for an engaging Brain Awareness Week seminar in partnership with the Brain Foundation. This event will explore the fascinating relationship between alcohol and brain health, while showcasing UoB and the BTRC. More information will be available on our website in March! A livestream link may be available for remote attendees.

Annual Update 2026

Your Annual Update is included with this newsletter, either by email or post. Please fill it out and send it back to us.

Don't forget to add your next-of-kin details, even if you've done so before. If they've changed, they'll need to complete an authorisation form online or by mail.

Want to change how you receive future updates? Just tick the box on the last page of the annual update.

Thank you for taking the time to complete your form. Your responses are vital to our research and we appreciate your time and effort. All information you provide will be kept strictly confidential.

Recruitment 2026

Want to help spread the word about the Using Our Brains donor program? We'd be happy to provide posters or brochures for your workplace or community group. You can also invite Greg to give an inspiring talk at your workplace, rotary, or community group — just reach out to us!

Connect With Us

For more updates about the team, our work and the field of neuroscience, find us on Facebook and Instagram (@usingourbrains) or scan the QR codes below:

Facebook: *Instagram:*

For more information

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