

# NEURO NEWS

FUNDING LIFESAVING | NEUROSURGICAL RESEARCH

## Brain tumour support nurse announced



An NRF & SA Health jointly funded collaboration has led to a new state-wide Brain Cancer Nurse Consultant role being introduced into the Central Adelaide Local Health Network (CALHN) to enhance access to support and care for patients and their families diagnosed with a brain tumour. South Australians with brain cancer, and their loved ones, will benefit from improved practical and emotional support. This will include care, education, advice and coordination for patients in the clinical setting. The position will operate on a state-wide basis and will focus on the two current metropolitan sites: Royal Adelaide Hospital and Flinders Medical Centre.

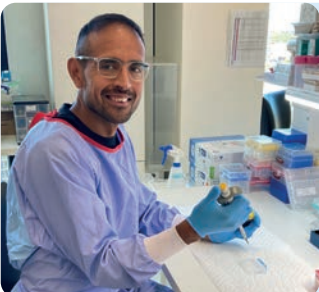
Left: Chloe Drogemuller Fiebig - NRF Ambassador, Ginta Orchard - NRF Executive Officer, Chris Picton MP - SA Minister for Health and Wellbeing, Gabby Vigar - RAH Cancer Program Nurse Lead, Annette Cieslak - RAH Executive Director of Nursing and Patient Experience

## \$3.2M Federal funding win for NRF researchers

Research to find solutions to some of Australia's biggest challenges in health feature in the University of South Australia's latest National Health and Medical Research Council (NHMRC) Investigator and Ideas research grants, collectively valued at around \$15 million.

This NHMRC Ideas grant will help multidisciplinary teams like those led by Assoc Professor Guillermo Gomez and Dr Tessa Gargett.

**Assoc Professor Guillermo Gomez (\$2.12 million) - Harnessing an unexpected new role of the CD47:SIRPA axis to target glioblastoma invasion.**



'The results of this project will provide information to lay the foundations for new and more effective anti-cancer therapies to prevent tumour recurrence'

Glioblastoma (GBM) is the more frequent and lethal type of brain cancer. Invasion of GBM tumour cells into the surrounding healthy brain tissue escape surgery and are the main cause of therapy resistance and tumour recurrence in patients. This project will investigate the mechanisms by which tumour cells become invasive and exploit new vulnerabilities that we may find for the development of more effective therapies for GBM. NRF seed funding allowed the team to establish the resources, collaborations and critical preliminary data for this application.

**Dr Tessa Gargett (\$1.14 million) - Micro-targeting IL-2 delivery to remodel the glioblastoma microenvironment.**



'These clinical trials, supported by the NRF, are the first of their kind in Australia and represent an important step in the quest for a treatment of these devastating diseases'

The diagnosis of a GBM is so devastating because these aggressive tumours have limited treatment options and extremely poor survival rates, with the worst types being fatal. This project will take the very latest developments in cell and gene therapy and apply them to the challenge of treating brain cancer.

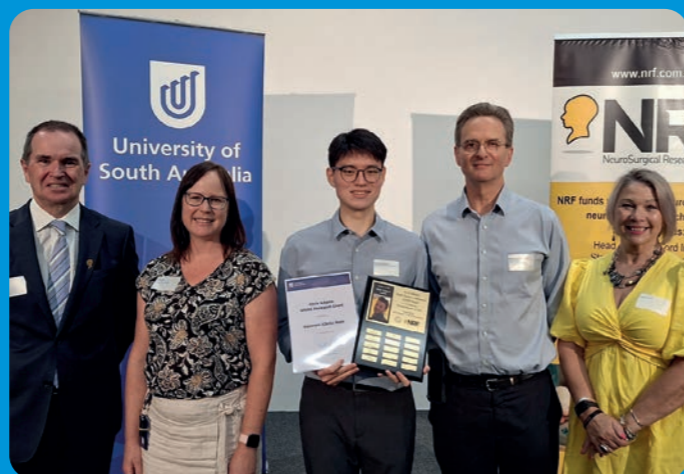
In collaboration with the University of Cambridge (UK), we will develop a gene therapy that produces small molecules known as cytokines only within the brain tumour environment. Cytokines such as IL-2 provide growth and survival signals for CAR-T cells and should improve their function in the brain. We will search for combinations and doses that achieve lasting control of tumour growth, without toxicity.

▶ Scholarships help build a future workforce for brain tumour research in SA. These opportunities expose students to quality research, hopefully encouraging them to choose a career in biomedical research. Thanks to supporters such as the Adams family, the NRF can continue to support the future.

## Chris Adams UniSA Research Grant

### Eunwoo (Chris) Nam - Enhancing CAR T-cells to treat glioblastoma (GBM)

CAR-T cell technology has shown exciting promise but so far has demonstrated limited efficacy against GBM in clinical trials. In this project, we aim to equip CAR-T cells with chemokine receptors that match those chemokines found in GBM. This is expected to enhance the ability of CAR-T cells to specifically migrate to the GBM tumour and thus increase the number of CAR-T cells fighting against cancer cells.



Martin Adams, Assoc Prof Lisa Ebert, Eunwoo Nam, Prof Michael Brown & Cherrie Adams

## Strong Enough to Live PhD

### Bryan Gardam - Investigating the dendritic cell - T cell axis in glioblastoma to explore new combination immunotherapy treatment options

The project investigates white blood cells called dendritic cells which detect foreign substances and present them to other white blood cells called T cells. T cells are the soldiers of the immune system that, once primed by dendritic cells, launch an adaptive immune response. Our research aims to understand which dendritic cells are reduced in GBM, and find ways to fix this problem. We hope to investigate ways to target the dendritic cell - T cell axis to make a difference in the outcomes for people with glioblastoma.

### Dione Gardner-Stephen - Identification and assessment of new treatment options for the childhood cancer medulloblastoma

Medulloblastoma is a devastating childhood brain cancer, it is a difficult disease to study due to its embryonic origins. My project aims to establish a reliable method for maturing human induced pluripotent stem cells into cerebellum-like organoids for systematic study. Using powerful bioinformatics techniques to analyse our models and comparing patient data informing our understanding of how and why medulloblastomas arise.



Cherrie Adams, Assoc Prof Lisa Ebert, Bryan Gardam, Prof Michael Brown & Martin Adams



Cherrie Adams, Assoc Prof Quenten Schwarz, Dione Gardner-Stephen & Martin Adams



# is Brain tumour awareness month!



Brain tumours kill more children and adults under 40 than any other cancer. That is why the NRF is committed to investing in innovative new brain tumour research - to help find better treatments and improve quality of life and survival outcomes for brain tumour patients, right here in South Australia.

In collaboration with Munno Para Foodland, during Grey May you will be able to donate to Brain Tumour Research through tokens at the checkout and have your name displayed on their donor wall. Mandy with her links to the local Foodland inspired them to come on board. Check out the raffle whilst you are there too!

### Patient Story: Mandy Mosely-Greatwich

My name is Mandy and I was diagnosed with a grade 2 astrocytoma in 2015 and had surgery. A few years later during a routine MRI I was told I also now had a meningioma. I came across the Adelaide Brain Tumour Support group last November where I met Ginta. My husband and I went along to the Christmas lunch where we heard different ways people had done their own fundraising. I approached Mell who works at Munno Para Foodland and is passionate about fundraising for the local community about Grey May, not only to raise money but awareness during the month of May.



TURNOVER TO LEARN HOW YOU CAN SUPPORT THE NRF THIS YEAR

## JOIN US SATURDAY 25TH MAY - 10AM

GREY MAY BRAIN TUMOUR RESEARCH UPDATE LAB TOUR AND LUNCH



DR BRIONY GLIDDON



DR NIRMAL ROBINSON



PROF SIMON CONN



CARERS SA



BRAIN TUMOUR NURSE



MS GINTA ORCHARD

Join us for this free event showcasing the latest in South Australian brain tumour research



MORE INFO AND BOOK ONLINE | [NRF.COM.AU/EVENTS/GO-GREY-IN-MAY](http://NRF.COM.AU/EVENTS/GO-GREY-IN-MAY)

#### GREY MAY SPONSORS

JonesRadiology



Adelaide Hospital



The Memorial Hospital  
by ACHA Health



# How to Support the NRF this May!



**Badge \$10**



**May Online Auction**



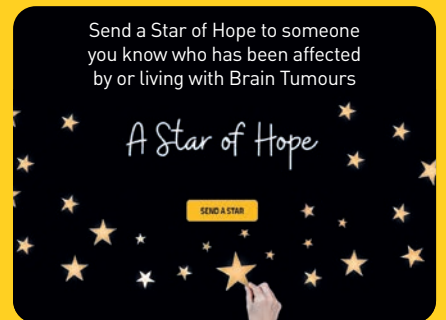
**Raffle**



**Beanies \$25**



**Donate**



**Star of Hope**

## Saturday 25<sup>th</sup> May Brain tumour research Giving Day

All donations matched by our generous sponsors up to \$50K

