

## Less invasive brain surgery for our brave young heroes



Thanks to the kind generosity of our NRF Community and the Wilkins Family Foundation, the Women's and Children's Hospital is now able to offer minimally invasive endoscopic resection of some deep seated

brain tumors. New equipment offers hope to young patients who need brain surgery, allowing for a much smaller 1cm incision, less hair removal, quicker recovery times and less scarring.

Ella Vaccaro, pictured with her neurosurgeon Dr Xenia Doorenbosch, was the first patient in SA to undergo surgery with this type of endoscope in 2020, which at the time had to be borrowed from interstate. Ella's first symptoms were numbness and pain in her limbs, vomiting and loss of smell. After months of appointments doctors discovered Ella had a pilocytic astrocytoma brain tumour, which was operated on the day before her 16th birthday.

Dr Doorenbosch commented "Traditionally we would have to do an open operation which involves traversing through

sensitive brain tissue which can potentially cause neurological impairment. The endoscopic approach can be safer because it causes less disruption of normal brain tissue and allows a much closer view of our target area. Specifically, the new endoscope allows us to work on the abnormal tissue with more than one instrument at a time, therefore making the operation not just safer but also more efficient."

The surgery was a success and Ella is now recovering well, "I think it's really good for future kids that need the surgery. I left hospital with no notice of any scars or bald patches." Ella recently graduated high school and celebrated her 18th birthday. Thanks to her experience she plans to pursue paediatric nursing so she can give back and provide the same support that she received throughout her treatment and recovery. The NRF is so proud of our dedicated community whose compassion and generosity continue to fund life-changing research and vital equipment to improve outcomes and quality of life for South Australian children and adults with a neurosurgical condition.

> READ ELLA'S FULL STORY HERE: nrf.com.au/patient-stories/ella

# Clinical trial giving children the superpower to fight brain cancer





Professor Michael Brown and Dr Tessa Gargett are leading the fight against childhood brain cancer with the Phase 1 clinical trial Levi's Catch - Leveraging GD2-specific CAR-T cells in children with Diffuse Intrinsic Pontine Glioma (DIPG). DIPG is the most aggressive of all childhood cancers. The position of the tumour inside the brain makes it incredibly difficult to treat with conventional means like surgery and sadly, all children with DIPG succumb to the disease within one to two years. In this trial, the research team will utilise the patient's own cancer fighting T-cells, super powering them in the lab to specifically attack and destroy the cancer cells. In addition to this, Professor Brown and Dr Gargett with the team at the Center for Cancer Biology Translational Oncology Lab are concurrently working on another project to make this CAR-T cell immunotherapy even more effective, by utilising cholesterol depleting agents to stiffen cancer cell membranes making them less able to evade treatment. This groundbreaking work is being supported by an NRF grant and your continued support helps progress these exciting breakthroughs from the lab to helping real patients. We are thrilled to announce the LEVI'S CATCH trial is now open to all children across Australia.

 TRIAL OPENS - READ FULL STORY HERE:
 >

 nrf.com.au/news/dipg-clinical-trial-opens
 >

## Give hope and donate today



SCAN ME

#### BRAIN CANCER CAUSES MORE DEATHS IN CHILDREN THAN ANY OTHER CANCER

- Sadly, the worst survival rates are in children under 5.
- Brain cancer is one of the toughest cancers to treat, with current treatments posing high-risk for complications and life-long side effects.
- SA research and new clinical trials are providing hope for more effective treatments.

#### **HOW TO REACH US**

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#### Inaugural Strong Enough to Live Research PhD Scholarship awarded



L-R Marty Adams, Annaliese Thompson, Cherrie Adams

## 5th Chris Adams Research Grant awarded



L-R Cherrie Adams, Dr Chloe Shard, Marty Adams

# Critter's legacy lives on

## YOU WERE GIVEN THIS LIFE BECAUSE YOU ARE STRONG ENOUGH TO LIVE IT

Chris "Critter" Adams was just 25 and in the prime of his life when he started experiencing headaches and occasional nausea. He saw a GP and was sent for scans and, whilst on holiday interstate, his parents Marty and Cherrie received a call every parent dreads. Doctors had found something which turned out to be a grade 3 anaplastic astrocytoma, requiring surgery. Chris remained positive and started fundraising, creating a platform from a saying he was using to focus on living his best life. That saying was "You were given this life because you are strong enough to live it". Eleven months later, Chris sadly passed away, but his family willingly accepted the fundraising baton that he passed to them. Since that time, Strong Enough to Live has undertaken a series of fundraisers, raising over \$220,000 for brain tumour research to date. These funds are now being used to foster the next generation of passionate researchers through the Chris Adams UniSA Research Grant and the newly established Strong Enough to Live Research PhD Scholarship.

An awards presentation was recently held at the University of South Australia, and Cherrie and Marty Adams were delighted to present the Inaugural Strong Enough to Live Research PhD Scholarship to Annaliese Thompson. Annaliese will be working on improving CAR-T cell therapy options by generating and testing CAR-T cells that can target multiple parts of the tumour and recruit additional components of the immune system, to achieve lasting tumour control.

The Adams family were also delighted to present the 5th annual Chris Adams UniSA Research Grant to Dr Chloe Shard. Chloe is a postdoctoral early career researcher who is working to identify the metabolic fuel sources that support glioblastoma tumour growth and its resistance to therapy in order to identify new therapies to improve brain cancer patient survival and guality of life. The \$5000 research grant will enable her to attend the world-class Metabolomics Analysis Training Course at EMBL-EBI in the UK to acquire skills and expertise in this rapidly developing field not currently available in SA, as well as the Society for Neuro-Oncology (SNO) Annual Scientific Meeting in Vancouver, the top conference in brain cancer research worldwide. This will allow Chloe to present her research on a global stage, connect with leading experts, gain feedback, and network with potential future collaborators to facilitate translation of research findings through international clinical trials. Chloe treated attendees to a fantastic presentation on her research, followed by a lab tour at the Centre for Cancer Biology.

TO DONATE:: inmemory.nrf.com.au/page/SETLChrisAdams





# Fostering the next generation of brilliant minds

Congratulations to all 7 recipients of the 2023 NRF Vacation Scholarships! These scholarships provide students the opportunity to work on world-class research projects during their summer break to gain real-world experience and entice the brightest minds to pursue a future research career. Our recipients spent the summer working on ground-breaking research projects in their area of interest including stroke, traumatic brain injury, spinal cord injury and glioblastoma research.

#### Richard Buttery NRF Glioblastoma Research Vacation Scholarship



The Richard Buttery NRF Glioblastoma Research Vacation Scholarship was named in honour of Richard Buttery who lost his battle to glioblastoma in 2015. His wife Kerry, a passionate member of the NRF, works both behind the scenes in the

L-R Kevin He, Kerry Buttery

office and as a dedicated fundraiser. Kerry said, " When Richard was diagnosed, we were lucky enough that he was placed on a trial based in the USA. I have no doubt that this trial medication gave Richard a longer, better quality of life. I fundraise because I truly believe in research. The prognosis given to patients is dire - we have to do better."

Kerry presented the scholarship to this year's recipient Kevin He, who gained experience working within the Translational Oncology Lab at the Centre for Cancer Biology, to determine if selected cytokines and epigenetic drugs can enhance the tumour destroying potential of T cells.

### NRF Vacation Scholarship Recipients Australian Institute for Machine Learning



L-R Biao Wu, Ginta Orchard

**Biao Wu** - Automated quantification of brain haemorrhage volume on CT head imaging

#### **University of South Australia**



Pictured L-R Kerry Buttery, Cherrie Adams, Marty Adams, Ishika Mahajan, Annaliese Thompson, Dr Chloe Shard, Prof Stuart Pitson, Kevin He, Kieran Benn, A/Prof Lisa Ebert, Prof Michael Brown, Dr Guillermo Gomez

Kevin He - Improving T cell immunotherapy through cytokines and epigenetics drugs

Kieran Benn - Molecular characterisation of glioblastoma

Ishika Mahajan - Tumour-Stroma Interactions As New Targets For Glioblastoma

## The University of Adelaide

Translational Neuropathology Laboratory



Pictured L-R A/Prof Francis Corrigan, Eliza Le Mire, Samuel Stewart, Michelle Kruszewski, Dr Anna Leonard

**Eliza Le Mire** - Investigating pituitary dysfunction after traumatic brain injury

Samuel Stewart - Investigating neurotransmitter dysfunction as a possible link between TBI and later neurodegeneration

Michelle Kruszewski - Investigating the effects of peripheral nerve stimulation with a novel graft antennae to reduce neuroinflammation following spinal cord injury



## DONATE NOW

### Neurosurgical Research:

- Brain Tumour
- Neurodegeneration
- Neurotrauma TBI & SCI
- Vascular conditions Stroke & aneurysms
- Paediatric research

### How to donate:

- Online nrf.com.au
- Use enclosed donation form
- **QR Code below**



## NRF shining stars, fundraising for change

## **Team Matalone walks for Phil**

Phil Matalone tragically lost his battle with brain cancer - stage IV glioblastoma in May 2021. He is remembered as full of love, and his wife Kellie and her family are passionate about raising money and awareness to stop this terrible disease, and creating a community of support for those who are facing a similar situation.

"Phil was forever hopeful of what was around the corner so we need to dig deep to make sure this cancer is never ever overlooked. He would be so proud that we are still working hard for a cure for this debilitating disease for future patients and their families."

Over 80 friends, family and supporters rallied together on a beautiful November Sunday morning to walk in memory of Phil and raised over \$3600! Every dollar raised supports vital brain cancer research.



Thank you to each and every one of our incredible **fundraisers** 

Did you know you can easily create your own fundraising event, or support an existing fundraiser?

- Set a personal challenge and raise support
- Organise a walk, BBQ or other fun get together
- Arrange a morning tea with friends or coworkers
- Request donations in lieu of birthday gifts
- Dedicate a star of hope
- Give a gift in memory

Got a great idea but not sure where to start? We'd love to help! Call the NRF team direct on 08 8371 0771

#### nrf.com.au/fundraise





## **Brave for Dave - Never Out of the Fight**

Dave Fiebig was just 41 when he first started experiencing Six brave lads volunteered symptoms like memory loss, daily headaches and vomiting. A trip to the emergency department revealed Dave had a stage IV glioblastoma. He threw everything into the fight against cancer, supported by his wife Chloe and their two young boys Duke and Banks, just 4 and 11 months old at the time. Sadly, Dave lost his battle last July, just 7 months after his diagnosis. Now his family are continuing the fight. Chloe is a passionate advocate for glioblastoma awareness and created the Brave for Dave Foundation to fight brain cancer and find a cure, and keep Dave's memory alive for their boys.

to shave their heads for the cause, and friends, family and supporters rallied together on the 6th of November for The Brave for Dave Walk for Brain Cancer and Shave for a Cure in Barmera, raising over \$12,000 for the NRF! 100% of these funds raised will be used to support world-class brain tumour research right here in SA.

Adelaide UniBar and raising over \$3400 for TBI research!

Keep an eye on the NRF events page for details of Tylers

next event. You can also check out his website Project 19,

where he educates and promotes brain injury awareness.

"I have been given a second chance, and I want to ensure

I use my new and very different life for a good purpose.

I want to use this experience for the advantage of every

other person who has experienced a brain injury, and for

families and friends to better understand someone with a



## The Big Gig goes off with a bang for TBI research



Tyler Fuller suffered a traumatic brain injury at just 19 when he fell from a cliff at Middleton, which left him in a coma for 19 days followed by months of rehabilitation. He is now passionate about raising

awareness for TBI and his latest fundraiser The Big Gig was a rocking success, attracting over 150 attendees to the

brain injury."