



NRF
NeuroSurgical Research Foundation

ANNUAL REPORT

2016/2017

MISSION STATEMENT

BOARD MEMBERS

To promote, foster, develop and assist the study of all matters related to neurosurgery.

To encourage, stimulate and aid research and investigation into such matters and to stimulate public interest in neurosurgery.

To cooperate with other organisations in neurosurgical work and research.

To encourage Post-Graduate medical study in neurosurgery.

To assist the NRF Chair of Neurosurgery.

To raise funds for the above purposes.

BOARD MEMBERS 2016/17

Prof Robert Vink

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Mr Mel Zerner

Ms Ginta Orchard

Mr Francis Donlan

Ms Melanie Cooper

Mr Lindsay Hick

Ms Nadia Kingham

Mr James Litt

Dr Mathew McDonald

Dr Cindy Molloy

Dr Nick Vrodos

Mr Stephen White

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Vice President - Chair Scientific Committee

Hon Treasurer

Secretary - Executive Officer

Chair Investment Committee

ADVISORY MEMBERS 2016/17

The Hon Catherine Branson QC

Assoc Prof Renée Turner

Patron

NRF Director of Neurosurgical Research



Cover image courtesy of Neuroscape University of California, San Francisco - Adam Gazzaley, Roger Anguera, David Ziegler, Rajat Jain, Tim Mullen, Christian Kothe, Oleg Konings, John Fesenko

Neuroscape is a translational neuroscience center engaged in technology creation and scientific research to better assess and optimize brain function of both healthy and impaired individuals.

THE HON CATHERINE BRANSON QC

Patron's Report

The year 2016/2017 has been another year of achievement for the NRF.

Funding research into all aspects of neurosurgery is at the heart of the NRF's mission. Over the past year a number of wonderful medical scholars have had their vital research financially supported by the NRF. Their research has focused on areas as diverse as brain-swelling following strokes; chemotherapy treatment for a particularly lethal brain cancer; the chronic problems such as depression and cognitive impairment that can follow traumatic brain injury; Parkinson's Disease; and chronic traumatic encephalopathy, a neurodegenerative disease related to repeated instances of concussion.

You can hear from many of the researchers supported by the NRF by going to the NRF's revitalised website (www.nrf.com.au). On this site you will find short videos in which the researchers speak of their research and explain its importance in language that we can all understand.

I wish to express my grateful thanks first to Ms Ginta Orchard, Executive Officer of the NRF, for her ongoing hard work and secondly to the Board Members of the NRF for their important voluntary work in overseeing the operations of the Foundation.

Finally, I wish to acknowledge all of the very many donors to, and supporters of, the NRF. Without your generosity and willingness to undertake critically important voluntary work the successful record of the NRF could not be maintained. I thank you all most sincerely.



The Hon Catherine Branson QC
Patron



Photo by Shane Reid

PROF ROBERT VINK

President's Report

It has been another busy year for the Neurosurgical Research Foundation, continuing its support of innovative translational research and raising the profile of the NRF as a body that supports neurosurgical research.

One of the major events of the year was the fundraising dinner in memory of Chris Adams, the proceeds of which will support the research of Prof Stuart Pitson and his brain cancer research team at the University of South Australia. Organised by Chris's family with the support of the NRF, the fundraising event was very successful and is likely to be followed up with another dinner next year to continue the fundraising effort to support this important research. What was particularly noticeable was the younger demographic of those attending the dinner and being made aware of the work of the NRF. The family also raised funds to support the purchase of research equipment that will allow automated robotic in vitro screening of cancer treatments and will accordingly significantly speed the drug discovery process in Stuart's laboratory.

Other research groups funded by the NRF over the last year included the catastrophic haemorrhage research in Prof Peter Wormald's laboratory, the ongoing paediatric neurosurgical research of Dr Amal Abou-Hamden, as well as the basic science projects at the University of Adelaide being led by Dr Lindsey Collins-Praino, Dr Frances Corrigan, Dr Anna Leonard and Dr George Opie. The support of such high-quality, neurosurgically-relevant research is the primary mission of the NRF, with the ultimate goal being to improve the quality of life of those who have been affected by conditions that affect the brain and spinal cord, as well as to discover life-saving interventions.

The "Dinner with a Scientist" event, a part of National Science Week, was also supported by the NRF. Guests shared dinner on tables hosted by a scientist, while four research scientists, all of who have previously received research support from the NRF, delivered an overview of their research. Held at SAHMRI, it was a very interesting evening that certainly raised the profile of the NRF in the community.

The Abbie Simpson Memorial Lecture was held in October, 2016 with Dr Mike Tymianski of the University of Toronto presenting a lecture entitled "Anatomy of stroke drug development: A David and Goliath Story". The lecture was well attended by researchers and the public alike. A subsequent dinner hosted by the Executive Dean of Health Sciences at the University of Adelaide, Prof Alastair Burt, and attended by key NRF researchers was particularly enjoyable.

The City to Bay fun run continues to be a big success, with the NRF having the largest team at the 2016 event. Once again, several of the NRF supported researchers undertook either the walk or the run, while the refreshments tent was well staffed by Ginta and her trusty team. Together with the Ride-like-Crazy bike event, the City to Bay fun run is not only successful in terms of fundraising, but also in its ability to raise the foundation's community profile. They both provide wonderful opportunities for the community to interact with the clinicians and research scientists supported by the NRF.



Dinner with a scientist panel



Assoc Prof Renee Turner



Dr Lyndsay Collins-Praino



Prof Stuart Pitson



Prof Robert Vink

As indicated in last year's report, we are beginning to receive substantial bequests to be directed to neurosurgical research. To address how the Foundation might best utilise those funds to advance neurosurgical research, an NRF strategic think tank took place in early February and was very well attended. Questions that were addressed included identifying strengths in neurosurgically-relevant research in Adelaide, what the public would like to see researched, how we might best invest in research to maximise outcomes, as well as how we might increase consumer engagement. The Board will be utilising the outcomes of the think tank to guide their strategies moving forward.

We were delighted to see that Melanie Cooper was awarded an AM (Member of the Order of Australia) on Australia Day for significant service to the community through philanthropic support for, and leadership roles with, charitable foundations, and to business. Melanie has been a member of the Board since 2008 and as we all know, has been a strong contributor to the Foundation's success. Congratulations Melanie and may you continue to provide such valuable input into the NRF Board. Speaking of the Board, Brian North last year retired from the Board after so many years of invaluable service. The Board has recommended that Brian be awarded Life Membership of the NRF and we look forward to bestowing this well deserved recognition.

Finally, we celebrated Prof Donald Simpson's 90th birthday at a lunch held at the Penfolds Magill Estate organised by Peter Reilly. Brian North delivered a fascinating speech giving us an insight into Donald's contributions to clinical neurosurgery, research and the NRF over the many years, which was very much appreciated by those in attendance. It was indeed an impressive lunchtime audience made up of past and present NRF Patrons, Presidents, Board members, as well as colleagues and former students who worked with Donald over his many years of clinical practice. For me, it was certainly a humbling experience to be in the company of such an auspicious group of individuals, all with strong connections to the NRF. May there be many more such celebrations of Donald's achievements.

In conclusion, I thank the members of the board for continuing to donate their valuable time and expertise to the Foundation and for joining me on this wonderful yet challenging mission, of supporting neurosurgical research.



Professor Robert Vink
President - NeuroSurgical Research Foundation



Prof Robert Vink, Prof Donald Simpson AO & Dr Brian North AO



ASSOC PROF RENÉE TURNER

NRF Director of NeuroSurgical Research Report

The 2016/2017 year has been a very busy time for the Translational Neuropathology Laboratory with many new students joining the lab, whilst others are completing their research studies.

New Honours students who have joined the lab are Lisa Drew, Jasmin Symonds and Ayanda Mhlanga. All of these students are undertaking a variety of research projects for their Honours degree, investigating inhibiting neuroinflammation in Parkinson's Disease, novel treatments for stroke and the temporal profile of injury markers following traumatic brain injury.

The research studies of our PhD students are also progressing well, with new PhD students commencing their PhD studies in 2017 are Bianca Guglietti and Jessica Sharkey.

- Bianca is investigating cognitive rehabilitation strategies to improve memory and decision-making in Parkinson's Disease.
- Jessica is looking at differences in injury profiles following concussion between adolescents and adults.

Our continuing PhD students are also making excellent progress:

- Continuing PhD students Annabelle Sorby-Adams and Alina Arulsamy are well into the experimental component of their research programs on treatment strategies for brain swelling following stroke and long-term consequences of traumatic brain injury respectively, and are both making excellent progress.
- Wrapping up their PhD studies in 2017 are Stephanie Plummer and Kelly McAteer, and in 2018, Stefan Court-Kowalski. All of these students are working on projects examining aspects of traumatic brain injury or brain tumours.

We have also had 2 students complete their PhD studies:

- We congratulate Dr Fiona Bright for the recent award of her PhD, she is currently working at Forensics SA and will be taking on an international Post-Doctoral training position (USA) in 2018.
- We also congratulate Kimberley Mander for her recent PhD thesis submission, she is currently working as a research assistant with SA Pathology. We wish them both all the best as they embark on their research careers.

The laboratory has been extremely productive in terms of publication output and conference presentations over the past year. In particular, publications have been in a number of international journals including: Brain, Behavior and Immunity, Restorative Neurology and Neuroscience, PLoS ONE, Journal of Neuroinflammation, Frontiers in Cellular Neuroscience and Journal of Neurotrauma, amongst many others.



Photo by JoAnne Robinson

Members of the group have delivered conference presentations, including invited talks, at a number of national and international scientific meetings including:

- Australasian Neuroscience Meeting and National Neurotrauma Symposium (Hobart). International Symposium for Cerebral Blood Flow and Metabolism (Berlin, Germany),
- International Symposium on Neurorepair and Neuroprotection (Germany),
- National Neurotrauma (Utah, USA).

Senior members of the laboratory have also established new research collaborations with research groups at:

- The University of Queensland,
- The University of Western Australia,
- The University of Nottingham (UK).

Such research collaborations, presentations and publications highlight the novel and innovative research conducted by the team.

Dr Lyndsey Collins-Praino was awarded the STEM educator of the year award, which recognises the achievements of talented STEM teachers, who are making an outstanding contribution to society both nationally and internationally. This prestigious award also celebrates those who have made a significant contribution in their field of research and continue to inspire future generations to become involved in science.

Dr Frances Corrigan has recently been named a finalist for the South Australian Young Tall Poppy Awards for 2017 by the Australian Institute of Policy Science, an award which recognises excellence in science communication.

Finally, we congratulate Dr Anna Leonard, Dr Emma Thornton, Dr Lyndsey Collins-Praino and Dr Frances Corrigan on the new additions to their families in 2017. The future of Team Neuro certainly looks bright with the next generation of Neuroscientists coming through!

The research progress and achievements by the group would not have been possible without your support as donors to the NRF so thank you once again for your generous support of the NRF.



Associate Professor Reneé Turner
NRF Director of NeuroSurgical Research



Translational Neuropathology Laboratory
members (L-R): Lisa Drew, Alina Arulsamy, Oana
Marian, Josh Woenig, Jasmin Symonds, Ayanda
Mhlanga, Stephanie Plummer, Bianca Guglietti,
Jessica Sharkey



CITY TO BAY

NRF TEAM NEURO

\$41,000 for life-saving research

Photo: Lucinda – Brain tumour warrior

A huge thank you to all of our wonderful participants, supporters, volunteers, friends and donors in the 2016 City-to-Bay! NRF Team Neuro looked fantastic and everyone did an outstanding job raising funds and awareness for the NRF funding research into brain tumours, stroke, aneurysms, spinal cord injury, traumatic brain injury, neurodegenerative diseases, paediatric conditions and much more. Everyone had their own personal neurosurgical reason and story for being part of NRF Team Neuro, ranging from brain tumour survivors, researchers, individuals competing in memory someone lost to a neurological condition and raising money for cures and improved treatments for people living with ongoing neurological conditions. Together we make a world-class team, together we do make a difference.

Thank you NRF Team Neuro Participants!



Dr Amal, Renee and Team



Running for Richard



Strong Enough To Live



Aldgate Vet Clinic



Allison and Caitlin



Team Patrick



Mahiki Hair and Rhiannon



Sally

Thank you to additional team members:

Claudio / Dr Jones & Partners / Emma / Jo / Max / Grace / Judith / Sally, Rachela & Harry / Sancilio Family / (SETL) Kate / Sam / Tom

Thank you to our volunteers:

Image design - Lucinda / On the day – Annabel / David / Isha / Lyndsey / Marissa / Renée / Rohit / Stefan



Dr Jones & Partners
Team Kit Sponsors



Aussie Farmers Direct
Breakfast Sponsors



Kids Memorial Hospital
Kids Kit Sponsors



Strong Enough To live
Cap Sponsor

GINTA ORCHARD

Executive Officer's Report

The support from you; our donors and fundraisers has enabled the NRF to fund more neurosurgical research projects and equipment for both research and treatment this year. The research institutes and neurosurgical teams which benefit from the NRF support are located at: The University of Adelaide, University of South Australia, Royal Adelaide Hospital and Women's and Children's Hospital.

We are currently focusing on five main areas of research:

Brain tumour research - Glioblastoma - examining more effective chemotherapy treatment

Primary brain tumours - Reducing tumour growth, swelling, and invasiveness

Metastatic brain tumours - Closing the blood-brain barrier to stop the spread of cancer

Neurodegeneration - How neuro inflammation affects the brain in concussion, dementia and Parkinson's Disease.

Neurotrauma - How to limit swelling after traumatic brain and spinal cord injury

Paediatric research - Impact of traumatic brain injury and how to stop shunt infections

Stroke – Mapping the development of brain swelling and changes in brain pressure following stroke.

Research will result in new treatments, greater understanding, longer survival and better quality of life!

I encourage you to visit our new look website www.nrf.com.au where you will see video interviews with the research team your donations fund.

Please join us on social media at Ginta Orchard NRF and the Neurosurgical Research Foundation on Facebook & Twitter for up-to-date research stories, event information, and fundraisers.



Ginta Orchard – Executive Officer



EQUIPMENT RESEARCH FUNDING

NEW RESEARCH AND EQUIPMENT FUNDED BY THE NRF THROUGH GENEROUS DONATIONS



Abbie Simpson Clinical Fellow: Dr Annika Mascarenhas

Master of Philosophy – Surgery – Skull Base Neurosurgery

Funded By: NeuroSurgical Research Foundation

Endoscopic approaches to the skull base are advancing dramatically but newer techniques and approaches carry risks, in particular major vessel haemorrhage. The main focus of Annika's research lies in the development of a simulation training model to mimic bleeding injuries from small critical intracranial vessels and management of these. The model will also allow for training in brain tissue handling, water-tight dural closure and skull base reconstruction in an endoscopic setting. This will be done through

development of a 3D face model and mapping on CT and MRI imaging of intracranial skull base cavities and vasculature. Once the model is established this will be progressed to establishment as a formal training model through a simulation session with senior ENT and skull base Neurosurgeons, assessing realism, stress responses, pre and post-course outcomes.



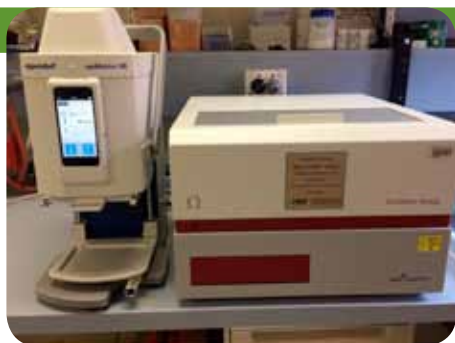
Equipment: Infinite Horizons Device for Spinal Cord Injury Research

Donated to: Dr Anna Leonard, Head of Spinal Cord Injury Research
Translational Neuropathology Laboratory at the University of Adelaide

Funded By: NeuroSurgical Research Foundation \$29,200

The Infinite Horizons Device is the gold standard device for spinal cord injury research and the only such device to currently exist in Adelaide. Employing this model is vital for producing competitive and comparative research to our counterparts in the US, Europe and Asia. I gained extensive expertise

using this device during my recent postdoctoral training at The University of Alabama at Birmingham (UAB), USA in 2015. Excitingly, such support from the NRF to purchase this equipment will enable us to further our Spinal Cord Injury research at the University of Adelaide.



Equipment: Eppendorf Liquid Handler for glioblastoma research

Donated to: Professor Stuart Pitson's glioblastoma research at University of South Australia and SA Pathology's Centre for Cancer Biology

Funded By: Strong Enough To Live - Chris Adams In Memoriam Appeal raised \$40,000

The Eppendorf Liquid Handler is an automated, high precision liquid dispensing system that will streamline cancer research. The goal is to understand the biology of glioblastoma brain cancer cells in order to find new drugs, and drug combinations, to kill these cells and treat this aggressive disease. This will allow screening of more drugs, and more complex combinations of drugs, and radiation in a shorter period of time, which will make a huge impact on the search for potential new improved therapies for glioblastoma.

STRONG ENOUGH TO LIVE



Paediatric Research: \$26,066

Donated to: Researchers: Dr Amal Abou-Hamden Neurosurgeon and Assistant Dr Aye Aye Gyi

Appointed at: Department of Neurosurgery at the Women's and Children's Hospital

Continue to collect clinical data on all children with neurosurgical conditions admitted to Department of Neurosurgery at the Women's and Children's Hospital over the past 6 years. We have conducted research to develop and validate simple and objective tools to assess children with neurosurgical disorders. This work will enhance our ability to care for these children by looking at treatment outcomes and will be able to assist with clinical trials in paediatric neurosurgery to advance knowledge, and to improve outcomes of neurosurgical treatment in children.

Additionally, we will continue an observational study aimed to evaluate the natural history of TBI in children, as well as the association between patients' helmet use and the risk of head injury using the data for the years 2012 to 2017, from our prospectively collected Neurosurgery Database. Children, aged 0 – 17 years, managed at the Department of Neurosurgery for head injuries represent a unique source of information on important directions for injury prevention efforts.



Concussion Research: \$19,742

The role of the SP-NK1 system in promoting the vulnerability to concussion in adolescence.

Donated to: Dr Frances Corrigan, Head Brain Injury Group,

Translational Neuropathology Laboratory, at the University of Adelaide

My research examines how concussion – particularly repeated concussion – may increase the risk of developing cognitive deficits later in life. Existing research suggests that adolescents are at the highest risk of suffering a concussion, the majority of which occur while participating in sporting activities such as AFL. This matters because adolescents may take longer to recover from the effects of a concussion, experiencing cognitive symptoms

for twice as long as adults. My team is interested in the role of the inflammatory mediator substance P (SP), which is released when TRPV1 receptors are activated by the mechanical input caused during a concussion when the brain moves within the skull. Importantly, previous research has suggested that levels of this TRPV1 receptor are higher in adolescents and thus they may have a greater inflammatory response to a concussive insult than an adult. We will be investigating whether blockade of this inflammatory response – by preventing the actions of SP – will prevent the development of cognitive deficits following concussion in adolescence.



Brain Tumour Research: Glioblastoma Research \$68,462

Donated to: Professor Stuart Pitson's

University of South Australia and SA Pathology's Centre for Cancer Biology

Funded By: Lightsview Ride Like Crazy and the NRF

New research will support more effective chemotherapy treatment for one of the most lethal brain cancers, glioblastoma. This funding will allow Prof Stuart Pitson and his team to take his work one step closer to clinical trials. They will examine the molecular mechanisms controlling the growth and survival of cancer cells with the goal of developing new agents to target these mechanisms for anticancer therapy. Glioblastoma is one of the most aggressive forms of brain cancer and is especially resilient to treatment.

Photo: Police Commissioner Grant Stephens with Prof Stuart Pitson





Brain Tumour Research: \$25,000

Does norepinephrine mediate the relationship between inflammation and chronic cognitive and neuropsychiatric impairments following Traumatic Brain Injury (TBI)

Brain Tumour Research: \$25,000

Donated to: Stefan Court Kowalski a Medical Student undertaking concurrent PhD student

Translational Neuropathology Laboratory, at the University of Adelaide

Research focusses on tumours that originate in the brain, again using a highly specialised drug that will reduce the tumours' ability to grow and invade surrounding healthy brain.



Traumatic Brain Injury Research \$19,532

Donated to: Dr Lyndsey E. Collins-Praino, Lecturer in Anatomy and Pathology

Adelaide Medical School at the University of Adelaide

While the acute effects of traumatic brain injury (TBI) are well-known, several individuals affected by TBI also develop chronic problems such as depression and cognitive impairment. Although the brain mechanisms of these impairments are currently unclear, persistent inflammation in the brain may play a key role. This inflammation may be driven by reductions in the neurotransmitter norepinephrine. Our research will investigate whether increasing levels of norepinephrine immediately after injury can reduce brain inflammation and prevent the development of persistent deficits in an experimental model of TBI.



Concussion Research: \$19,891

Unravelling the neurophysiological effects of concussion using combined TMS-EEG.

Donated to: Dr George Opie, ARC Research Associate

Discipline of Physiology at the University of Adelaide

Emerging evidence suggests that the concussive injuries may be associated with pervasive deficits in motor, cognitive and emotional function for months to years after the injury. Recent work using techniques such as functional magnetic resonance imaging (fMRI) have suggested that changes in brain activation and connectivity may contribute to these functional deficits. While

these findings provide new information about the concussion pathology, they cannot explore the subtle neurophysiological mechanisms contributing to these abnormalities. However, when applied in conjunction with electroencephalography (EEG), transcranial magnetic stimulation (TMS) can be used to generate a multifaceted profile of cortical function. This includes measures of functional connectivity and cortical neuroplasticity – put simply, the brain's ability to change the nature of its connections to encode new information. We will begin to characterise TMS-EEG indices of cortical dysfunction following concussion. These will be used to develop markers of recovery from injury that can be utilised to objectively inform decisions about when a patient is capable of returning to work and play.

LIFE MEMBERS

AMBASSADORS

BENEFACTORS

NRF Life Members

Helli Campbell
Derek Frewin AO
Robert Searcy

Richard Campbell
Carolyn Hewson AO
Donald Simpson AO

Richard Fewster
Robert Neill

Ambassadors

Amelia Bennetts
Henrietta Byrne
Anna Curyer
Pam Downward
Lucinda Gregory
Marissa King
Sheryn Miles
Sian Murphy
Melissa O'Brien
Hannah Philbey
Melissa Gillian Sparrow
Allys Todd
Kristen Wilkins & Family

Michelle Burdon
Callan Costello
Erica Davis & Family
Alice Fargher
Tom Gross & Family
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Adult Brain Cancer Support Association
Maddie's Appeal

Aussie Farmers Direct
Patrick of Coonawarra

Celebrate for a Cure
Strong Enough To Live

GET INVOLVED...

DONATIONS

FUNDRAISING & CHALLENGES

Donations and regular monthly payments

The NRF relies on your generosity to continue to support vital neurological and neurosurgical research and to be able to donate equipment for both research and treatment.

Regular monthly donations are a great way to spread your giving throughout the year, and an annual statement summarising your donations will be delivered to you.

One-off donations and regular monthly donations can be made either online, at www.nrf.com.au, by clicking the "Donate Now" button, or by completing the enclosed form.

Gifts in Wills

Looking for a way to make your final wishes really count? Consider leaving a gift in your Will to the NeuroSurgical Research Foundation.

To leave a gift in your Will to the Foundation, contact your solicitor, who will advise you of the required documentation. The correct full name to be listed in your Will should read NeuroSurgical Research Foundation.

The NRF wishes to thank Thelma May Ryan and Thomas James Walsh for leaving a Gift in their Wills to the NeuroSurgical Research Foundation.

In memoriam donations

In memoriam gifts are donations that may be made in lieu of sending flowers, or in memory of a loved friend, relative, or colleague. They are a positive and thoughtful way to honour the memory of a loved one. Family members are notified of all donors, and gifts are receipted and acknowledged promptly.

The NRF wishes to acknowledge the following In Memoriam donations received from families and friends in memory of their loved ones:

Mr Christopher Adams	Mr Allan Baker	Mr Richard Buttery	Ms Jane Curtis
Mr Norman Daley	Ms Katherine Fleming	Mr Ivars Jansons	Mrs Jean Luedeke
Miss Amanda Maiolo	Mr Joe Mazzachi	Ms Pauline Moffat	Miss Kim Morris
Mr Rob Phillips	Mr Mark Brenton Standley	Mrs Doris Williams	Mr Robert Wiseman
Mrs Jacqueline Winter			

In celebration donations

Next time you're celebrating a birthday, anniversary, engagement, or special event, why not ask friends and family to skip presents and donate to lifesaving research instead.

The NRF wishes to thank the following In Celebration events created this year:

Amanda & Glenn Ryan Wedding Donation In memory of George Ryan

Fundraising events & personal challenges

You can help raise money for the NRF by creating your own fundraising activity or event. Go online to www.nrf.com.au and click "Fundraise Now" to start, or phone us and we will assist you.

The NRF wishes to acknowledge the following fundraising events and personal challenges created this year:

Cecilia running 22 KM in the Sydney Running Festival

Clarke The Jeweller and Advertiser Sunday Mail Foundation Melbourne Cup Fundraiser

Coopers Burger Shack/Coffee Central Rundle Mall

STRONG ENOUGH TO LIVE - Just some of the amazing people who fundraised.

IN MEMORY CHRIS "CRITTER" ADAMS RAISES \$40,000



Back Row: Marty, Cherrie & Matt Adams Bot-
tom Row Jennifer & Russ Adams and Ellie
Foster. Movie Night



Patrick Shanahan – Ironman NZ



Jarrod Marsland - Brave enough 2 shave



Thomas Rutherford - Ironman

Raising money for equipment for
Brain Cancer Research at UniSA
and SA Pathology's Centre for
Cancer Biology.
(see page 10 for full details)

HEAD CASE FUN DAY RAISES OVER \$10,000



Hannah and her team



Heath and his team

Over \$10,000 has been raised through
the Head Case Family Fun Day in
Kadina on Sunday June 26, organised
by Hannah Philbey as a fundraiser
for the NRF. Hannah was diagnosed
with a brain tumour 12 months ago
and has since had surgery and
radiotherapy. "None of this would have
been possible without the support
and help from our wonderful friends,

family, local businesses and our amazing community," Hannah said. Thank you to all the volunteers and businesses who contributed raffle prizes, silent auction items, food/drinks and money. Hannah's fundraising will support new researchers from UniSA and SA Pathology's Centre for Cancer Biology. Thank you Head Case Family Fun Day organisers: Corinne Bussenschutt, Sarah Gardner, Rachel Meier, Steph Rundle, Hannah Philbey, Anita Rundle, Lisa Cundy and their families.

WOW walk for Aneurysm RAISES OVER \$5,000 December 17

This 5km walk on raised awareness and much-needed funds for aneurysm research. Thank you to Gina Harris, Sophie Needham and Karen Hunter Thompson who organised the first-time event. They all are aneurysm survivors. More than 100 people participated in this lovely family event, which took place along the foreshore in Williamstown, Victoria. There was interstate representation from Joanne Farthing, an aneurysm survivor from Sydney and international representation from Zenaïda Magtoto from the Brain Aneurysm Singapore group. Many people also joined in with their canine friends! Thank you to everyone who walked, fundraised and generously donated. Together you raised an amazing \$5,000 for aneurysm research.



Organisers: Sophie Needham, Karen
Hunter and Gina Harris



International representation: Zenaïda Magtoto



FINANCIAL ACTIVITY

The NeuroSurgical Research Foundation Incorporated

Statement of Comprehensive Income for the year ended 31st March 2017

		2016	2017
		\$	\$
	NOTE		
INCOME			
Donations and Fundraising	2	2,940,424	363,124
Investment Income		(31,321)	431,504
TOTAL INCOME		2,909,103	794,628
LESS EXPENSES			
Administrative Expenses	3	(127,238)	(147,174)
SURPLUS/(DEFICIT) BEFORE GRANT EXPENDITURE		2,781,865	647,454
Research Grant Expenditure	4	(1,339,012)	(396,963)
TOTAL SURPLUS / (DEFICIT) FOR YEAR		1,442,853	250,491
NOTE 4 - RESEARCH GRANTS			
NRF Chair of NeuroSurgical Research		85,000	30,000
Brain Tumour Research		---	113,462
Paediatric Research		90,000	26,066
University of Adelaide – Research and Equipment		117,214	36,925
Royal Adelaide Hospital		46,798	---
Paediatric Research – University of Adelaide		1,000,000	---
Grants – Unallocated		---	190,510
		1,339,012	396,963

These pages are extracts from the Audited Financial Statement. If you require a full set of the Financial Statement please contact Ginta Orchard – Secretary by either phone (08) 8371 0771 or email ginta.orchard@nrf.com.au.

Thank you William Buck Chartered Accountants for pro bono audit services.

		2016	2017
		\$	\$
	NOTE		
CURRENT ASSETS			
Cash and Cash Equivalents		166,166	49,762
Inventories		1,378	---
Sundry Debtors & Prepayments		5,278	17,936
Deposits		---	80,619
TOTAL CURRENT ASSETS		172,822	148,317
NON-CURRENT ASSETS			
Office Equipment and Computer Software		---	1,965
Managed Investment		3,903,647	4,307,249
TOTAL NON-CURRENT ASSETS		3,903,647	4,309,214
TOTAL ASSETS		4,076,469	4,457,531
CURRENT LIABILITIES			
Payables		(68,015)	(193,888)
Provisions		(7,617)	(10,721)
TOTAL CURRENT LIABILITIES		(75,632)	(204,609)
NON-CURRENT LIABILITIES			
Provisions		(7,271)	(8,865)
TOTAL LIABILITIES		(82,903)	(213,474)
NET ASSETS		3,993,566	4,244,057
TOTAL ACCUMULATED FUNDS	5	3,993,566	4,244,057

FINANCIAL ACTIVITY

The NeuroSurgical Research Foundation Incorporated

Statement of Comprehensive Income for the year ended 31st March 2017

		2016	2017	
		\$	\$	
NOTE				
ACCUMULATED FUNDS – CORPUS		3,903,647	3,903,647	
ACCUMULATED FUNDS – OTHER				
Opening Balance		1,014,634	89,919	
Surplus / (Deficit) for the year		(739,946)	250,491	
Transfer to Corpus		(184,769)	---	
		89,919	340,410	
TOTAL ACCUMULATED FUNDS		3,993,566	4,244,057	
NOTE 5	ACCUMULATED FUNDS			
	Corpus	General Funds	Paediatric Fund	Total
Balance 31/03/2015	1,536,079	203,343	811,291	2,550,713
Transfers	184,769	(184,769)	---	---
Surplus/(Deficit) Allocation	2,354,299	410,357	17,209	2,781,865
Research Grant Expenditure	(171,500)	(1,339,012)	171,500	(1,399,012)
Payment Paediatric Fund	---	1,000,000	(1,000,000)	---
Balance 31/03/2016	3,903,647	340,410	---	3,993,566
Surplus/(Deficit) Allocation	---	647,454	---	647,454
Research Grant Expenditure	---	(396,963)	---	(396,963)
Balance 31/03/2017	3,903,647	89,919	---	4,244,057

PATIENT

STORIES...

BECOMING VOLUNTEERS



Lucinda Brain Tumour Warrior – Brain Tumour Survivor

I was diagnosed with a remarkably large Hemangioblastoma in 2015 when I was 28 years old. It was located on my brain stem and C1 and C2 of my spinal cord. My treatment option was surgery. The surgery was tricky but successful in removing the whole tumour. I am currently still tumour free which is excellent. Unfortunately the sheer size and placement of the tumour, combined with the invasive surgery left me with hemiplegia. After four months in a rehabilitation hospital and a further twelve months in outpatient therapies at the rehab I was free to return to life and focus on my own personal rehabilitation outside of a hospital environment. I still continue with almost daily therapies in hope that my brain and spinal cord may further heal, which

would lessen the symptoms I'm left with.

I started supporting the NRF not long after my surgery. I did further research into my tumour and other tumours and was shocked with the poor survival statistics. After meeting others with brain and spinal tumours and seeing the devastation they cause us and our families, and after spending such a long time in hospital, I was emotionally moved and wanted to 'give back'. I volunteer my time and skills and also fundraise for the NRF. It's so important for all of our futures that these tumours, diseases and disabilities acquire further funding and research.



Allys – Brain Tumour Survivor

I was diagnosed with ganglioglioma temporal lobe brain tumour at age 28. After the successful resection of the tumour and subsequent treatment I have remained tumour free, seizure free and have lived my daily life with very few side effects for the past 8 years. I recognise that I am a very lucky survivor. I haven't ever taken this for granted.

My support of the Neurosurgical Research Foundation was a born from a natural evolution of my experiences within the medical system and the need for support to be raised in this charity space, specifically for the ground breaking work and tangible outcomes the NRF deliver through their charity direct foundation.

I give my time in support of the organisation as a volunteer at NRF events. I also provide knowledge in the areas of engagement, communications and non-profit sector marketing in support of the foundations strategic goals and objectives.



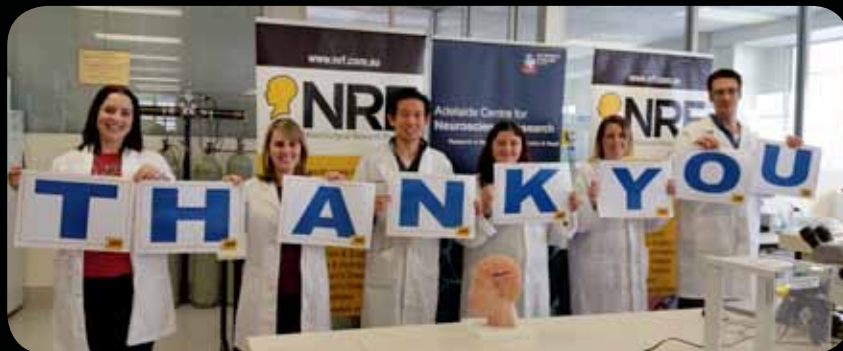
Jessica - Living with Spinal Injury

After an accident in 1995 I had the first of 4 neurosurgeries on my lumbar spine. Over the years, continuing degeneration, disc prolapses, spinal cord stenosis, and bone calcification has resulted in a further 3 neurosurgeries with more anticipated in the near future. Without these surgeries I would not be able to walk and be in constant excruciating pain.

Waiting at my neurosurgeon's I noticed a brochure for the NRF and thought I could help develop a more professional look. Working in advertising, marketing, graphic design and business consulting I know first impressions are so important, particularly for charities. I offered my expertise and so began my journey volunteering. During the last 10 years I have designed many pieces of collateral, banners, logos and have designed this and the previous 8 annual reports.



The objective of the Foundation is directed towards research into the cause, diagnosis, prevention and treatment of disease or malfunction of the brain, spine and nervous system.



NeuroSurgical Research Foundation

Executive Officer: Ginta Orchard

PO Box 698, North Adelaide SA 5006

Phone: (08) 8371 0771

Mobile: 0419 844511

Email: info@nrf.com.au

Website & Online Donations: www.nrf.com.au