

# NEUROSURGICAL RESEARCHER PRESENTATIONS



# NRF

NeuroSurgical Research Foundation

## Research area priorities Stroke, Brain Tumour, Traumatic Brain Injury, and Parkinson's Disease.



*Assoc Prof Renee Turner NRF Director of Neurosurgical Research, Dr Melinda Tea, Dr Adam Wells, Isabella Bileki and Bianca Guglietti.*

At this year's AGM Assoc Prof Renee Turner NRF Director of Neurosurgical Research introduced four researchers whose presentations summarized the high-quality, innovative and clinically-relevant research being conducted by our dedicated research team, comprised by both basic scientists and clinical researchers.

The extended team continues to conduct world-class research, working towards a common goal of finding new interventions and treatment strategies for life-threatening neurosurgical conditions such as spinal cord injury, traumatic brain injury, stroke, brain tumours, concussion, paediatric and neurogenerative disorders including Parkinson's Disease.



*Photos: Members, Board Members past and present, researchers and guests at the NRF AGM.*

## NRF RESEARCH AREAS FUNDED 2018

### BRAIN TUMOR

- Glioblastoma
- Medulloblastoma
- Childhood Cancer
- SA Brain Tumour Bank

### NEURODEGENERATION

- Chronic Traumatic Encephalopathy
- Parkinson's Disease

### PAEDIATRIC RESEARCH

- Concussion
- Post-surgical Outcomes

### TRAUMATIC BRAIN INJURY & CORD INJURY

- Neuroinflammation
- Immediate treatment

### STROKE

- Intracranial Pressure Control

# NRF PRESENTATION GALA DINNER

MANY THANKS TO THE DONORS, SPONSORS AND GUESTS. WE RAISED OVER **\$90,000** ON THE NIGHT.



The evening saw the NRF donate \$1million to the University of South Australia to establish the NRF Chair of Brain Tumour Research. In addition, guests enjoyed assisting the Foundation through fundraising and a silent auction.

## SPECIAL THANKS TO THE FOLLOWING

### VOLUNTEERS

Kat Nehme  
Allys Todd  
Brittany Vincent  
Kahla Parsons  
Ellen Muster  
Kate Mallia  
Kathryn Mullen  
Max, Saatvik & Matthew  
Matiss Reinhardts  
Melissa Cantley  
Robin Walden  
Stacey Collins  
George Chahhoud

### GUEST SPEAKERS

Cherrie Adams  
Jenny Tocaciu  
Prof Stuart Pitson  
Dr Glenn McCulloch  
Prof Allan Evans

### ENTERTAINMENT

**MC:** Cosi Costello  
**BAND:** SA Police Band  
**DJ:** Lisa D

### PRIZE DONORS

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Solver Paints  
Tania Aliis Art  
TBar  
Tde  
Topline Promotions  
Totally Framed  
Tupperware  
Uni SA  
Vrodos Family  
Westside Nailbar  
Wild Game Wine  
Woodstock  
Zhivago  
Zoos SA



# NEUROSURGICAL RESEARCH HIGHLIGHTS

This years AGM included presentations from four of the researchers currently undertaking projects with the support of the NRF. The evening provided an opportunity for attendees to ask some thought provoking questions to explore each area of research.

## DR ADAM WELLS

**Consultant Neurosurgeon, Royal Adelaide Hospital, Senior Clinical Lecturer, The University of Adelaide**

Dr Wells gave a summary of his recent experiences working in high volume Neurotrauma unit in Cambridge University, the United Kingdom, including research into the pathophysiology and management of traumatic brain injury.

“Research is an extremely important part of Neurosurgery in Cambridge University, and I hope to bring back to South Australia some of the lessons I have learnt whilst studying there. We have a unique opportunity in South Australia to unite the various unique and world-class research skill sets that already exist here, and make Adelaide the centre of Neurosurgical Research excellence in Australasia.”

## DR MELINDA TEA

**Glioblastoma brain tumour research, Research Associate, Centre for Cancer biology, University of South Australia and SA Pathology**

Melinda gave insights into her work on Advanced preclinical models for testing new therapies in Glioblastoma. In summary, Glioblastoma is the most common malignant brain tumour in adults, and is highly fatal due to limitations in existing therapies. There is a desperate need to identify new drug targets and effective targeted therapies for this cancer. With previous support of funding provided by the Neurosurgical Research Foundation, we have shown that drugs developed in our laboratory are effective in reducing glioblastoma tumour growth.



## ISABELLA BILEKI

**Stroke research, Translational Neuropathology Laboratory, School of Medicine, University of Adelaide**

ISabellas work aims to characterise the role of pericytes in barrier breakdown and the subsequent development of brain swelling following stroke, and in turn, what effect this has on functional outcome. By mapping pericyte response over time following stroke we will gain a better understanding of their role in post-stroke injury and recovery. By determining the relationship between pericytes, barrier breakdown and resultant post-stroke disability, we seek to identify new therapeutic targets to promote recovery and improve outcome following stroke.



## BIANCA GUGLIETTI

**Parkinson's Disease research, Translational Neuropathology Laboratory, School of Medicine, University of Adelaide**

Whilst the exact cause of Parkinson's Disease (PD) is unknown, Bianca is researching a leading theory involving the activation of microglia, which go on to perpetuate a chronic inflammatory response resulting in the degeneration of neurons. Further research will aim to fully characterise the efficacy of this intervention and the possibility that, by inhibiting microglial activation, this may minimise the spread of alpha-synuclein deposits (the main pathological protein found in PD) throughout the brain, potentially improving cognitive outcomes for PD patients.



## SAVE THE DATE

6:30pm on Friday 2nd November 2018

National Wine Centre, Hackney Road Adelaide

Professor Simpson has a profound impact on the neurosurgical community including being one of the founding fathers of the NRF.

Please join us at the NRF Dinner celebrating his life and contributions.

To register your interest in attending and to receive all booking information please contact Ginta Orchard via email [ginta.orchard@nrf.com.au](mailto:ginta.orchard@nrf.com.au) or alternatively by telephoning 08 8371 0771.





# NRF TEAM NEURO 2018 RAISES \$29,890 FOR LIFE SAVING NEUROSURGICAL RESEARCH.

Thank you to all of our wonderful participants, sponsors, volunteers and friends in this year's City to Bay! NRF Team Neuro looked fantastic and everyone did an outstanding job raising funds and awareness for NRF research. Everyone has their own personal connection and story behind taking part in the event ranging from brain tumour survivors, researchers, medical staff and those competing in memory of someone lost. All raising much needed funds for improved treatments, extended life expectancy and ultimately cures for neurosurgical conditions.

Over the past 7 years, NRF Team Neuro comprises of over 690 team members and has already raised in excess of \$250,000 for life saving and life changing neurosurgical research. Thank you to NRF Team Neuro!



## THANK YOU TO OUR FUNDRAISERS AND SUPPORTERS INCLUDING:

- Aldgate Vet
- 2 Ollie & Tyson
- 6 Ally & Lili
- 9 Strong Enough to Live & Lucinda
- 3 Dasith
- 5 Team Patrick
- Dr Jones and Partners
- 4 Team Wilkins
- Marissa
- 8 Tumournators
- 1 Michael
- 7 UniSA

