

Wednesday 28 February 2018

MEDIA RELEASE

RHH Research Foundation announces new grant recipients for Tasmanian health research in 2018

The Royal Hobart Hospital Research Foundation today announced details of its grant funding for 2018, providing five new annual incubator grants and six new annual project grants, together with a further significant three year major project grant, all supporting local medical research to be undertaken in Tasmania.

The Research Foundation's Chair, Mr Trent Sayers, explained *"the purpose of these grants is to assist emerging and highly skilled clinical researchers to collaborate with each other for the benefit of the local community. Each grant category is designed to nurture further expertise and research capacity while also delivering improved health and well-being for us all."*

"The Foundation is thrilled to be in a position to invest just over \$650,000 into local research this year. Since inception two decades ago, this small but vibrant organisation has focused strongly upon supporting research into medical conditions and approaches to healthcare that are of particular relevance to the Tasmanian community. In total, we've invested over \$8m to support projects undertaken by local clinicians," Mr Sayers said, *'Over the past twenty years the RHH Research Foundation really has made a significant difference to the health and wellbeing of the Tasmanian community.'*

After an intensely competitive selection process undertaken over the final months of 2017, the range of projects chosen for funding in 2018 offers a broad scope of intended benefit for the wellbeing of many Tasmanians, with potential that is even more far-reaching.

For example, the Foundation will support a local medical research team guided by Associate Professor Seana Gall to investigate how a successful cardiac rehabilitation model, currently used for those recovering after a heart attack, might instead be modified to be used when assisting those who have experienced a stroke. This is an important investigation as statistics show that those who survive an initial stroke, but who have poor management of ongoing risk factors in their lifestyle, are then at significant risk of suffering another, potentially life-taking, cardiovascular event.

Chief Executive Officer Heather Francis emphasised that research supported by the RHH Research Foundation is selected via a rigorous assessment process undertaken by the Foundation's scientific research advisory panel, which is endorsed by the National Health & Medical Research Council (NH&MRC).

"Facing a highly competitive field of applications from interested clinicians, only projects and researchers of excellence can be selected to pursue their investigations. Even then, in every funding round we are overwhelmed with applications from a community of eager researchers based within and around the RHH. This demonstrates a need for continuing and increased support from across our general and business communities for this vital work," she said.

"Once again, the Research Foundation has been oversubscribed by researchers' applications that amounted to more than six times above the funds available. There were many excellent projects submitted which, had funding been available, could have been considered further."

“There’s great scope for additional investment in high quality local health and medical research and this is something the RHH Research Foundation aims to achieve with the community’s support through our fundraising initiatives and also through the generosity of benefactors,” she said.

For the third successive year, anonymous Hobart benefactors have generously chosen to become involved with the Foundation by directly funding a selection of \$10,000 Incubator Grants. *“This generosity enables the Foundation to accelerate the number of grants funded in 2018 and, in addition to that, we were overwhelmed by the community’s response when a further grant investigating desensitisation against Jack Jumper allergy was enabled through a recent funding campaign in December 2017,”* said Ms Francis.

“We were already oversubscribed so heavily, but really wanted to see such a worthwhile study move ahead, so took this out to the community during the final weeks of last year. The response was overwhelming and we were able to reach our target of an additional \$10,000 in only four weeks, giving the chance for another team to embark on important research that we know will save lives.”

As an independent entity, the RHH Research Foundation provides an important role in supporting specialist doctors, nurses and allied health professionals with research interests through its annual grants program. With a strong emphasis on collaboration, this latest round of funding includes researchers from the RHH, and various areas of the University of Tasmania’s College of Health and Medicine, including the Menzies Research Institute.

“In total, the Foundation has budgeted almost \$650,000 to support local health and medical research through grant funding in 2018,” highlighted Ms Francis.

-Ends-

For more info: CEO Heather Francis 0407 201 113

Interviews available: CEO RHH Research Foundation Heather Francis and 2018 medical research grant recipient Assoc Professor Seana Gall
2.00pm, Thursday 1 March 2018
Hadley’s Orient Hotel foyer,
34 Murray Street Hobart

Research Grant Recipients – 2018

New Incubator Grants for 2018 – each approx. \$10k for a one year grant

The Peri-Peri project: the role of pericytes in placental function and perinatal outcomes

Project Team: Dr Brad Sutherland, Prof Peter Dargaville and Dr Lindsay Edwards.

This study will assess how pericytes, a specific cell that may control blood flow in placenta, could contribute to restricted growth of babies during pregnancy.

Continuous infusion of cephalosporins in elastomeric devices: physical, chemical and microbial stability

Project Team: Dr Rahul Patel, Dr Syed Tabish R Zaidi, Mr Troy Wanandy and Dr Louise Cooley.

Administration of intravenous antibiotics by patients using home infusion (elastomeric) devices is growing. Cephalosporins are one of the commonly used antibiotics and their stability in elastomeric infusion devices is lacking. This project will measure the physical, chemical and microbial stability of cephalosporins to enable their use in such devices.

CARDiac REhabilitation for the Secondary prevention of Stroke (CARESS)

Project Team: Assoc Prof Seana Gall, Dr Michele Callisaya, Dr Martin Schultz, Mr Berhe Sahle and Assoc Prof Helen Castley.

Stroke survivors have poor management of risk factors that increases their risk of another cardiovascular event. The project team will adapt the successful cardiac rehabilitation model used in people with heart disease for those recovering from stroke. The study aims to improve cardiovascular risk factors, reduce recurrent strokes and cardiovascular events.

Cystic Fibrosis: Investigating the acute stage of infection by *Pseudomonas aeruginosa*

Project Team: Dr Mark Ambrose, Dr Sean Beggs and Mr James O'Brien.

Cystic fibrosis (CF) patients develop chronic lung infection by the bacterium *Pseudomonas aeruginosa*, which are resistant to antibiotic treatment. The study will target the *early* (acute) stage of infection by this organism, and the project team will use primary CF epithelial cells and *Pseudomonas aeruginosa* gene arrays to identify potential bacterial targets.

Assessment of the Basophil Activation Test as a tool for monitoring therapeutic responses to Jack Jumper Ant Venom Immunotherapy

Project Team: Mr Troy Wanandy, Dr Emily Mulcahy and Dr Wun Yee Lau.

This research project may lead to the establishment of a blood test (BAT) as a reliable marker of protection obtained from Jack Jumper Ant Venom Immunotherapy (JJA VIT). This investigation might also establish BAT as a useful test for predicting the chance of having allergic side effects to JJA VIT.

New Project Grants for 2018 – each approx. \$25k for a one year grant

Functional interrogation of a novel locus associated with the development of Giant Cell Arteritis

Project Team: Assoc Prof Alex Hewitt, Mr Kristof Wing and Dr Joseph Powell.

Giant Cell Arteritis (GCA) is the most common form of vasculitis in elderly people. GCA is an ophthalmic emergency, making a timely diagnosis and intervention crucial. The project team has identified a novel locus which confers risk for GCA and this work will functionally interrogate the role of this locus.

Childhood and adulthood determinants knee cartilage health assessed using biomarkers

Project Team: Dr Benny Eathakkattu Antony, Prof Changhai Ding, Prof Graeme Jones, Prof Alison Venn, Prof John Burgess, Assoc Prof Udayan Ray and Assoc Prof Venkat Parameswaran.

Identifying the modifiable risk factors from childhood itself is an ideal strategy to prevent osteoarthritis. The project team aims to explore the effect of physical activity and obesity measured from childhood to adulthood over 32 years on joint degradation biomarkers measured in adulthood.

A Clinical and Biospecimens Prostate Cancer Resource for Biomarker Research in Tasmania

Project team: Dr Liesel FitzGerald, Assoc Prof Joanne Dickinson, Dr Marketa Skala, Mr Brian Stokes, Dr Shaun Donovan, Dr Roslyn Malley, Dr Frank Redwig, Dr Adele Holloway and Dr Phillippa Taberlay.

The project team proposes building upon the clinically-focused Prostate Cancer Outcomes Registry, Tasmania (PCOR – TAS) and collecting matched biological samples to create a valuable resource for both clinicians and scientists. The availability of clinical and genetic data will allow important biomarker research into predicting prostate cancer outcomes and improving treatment strategies.

The modulation of multiple sclerosis (MS) relapse risk by genetic variations in the LRP2 gene

Project Team: Dr Yuan Zhou, Prof Bruce Taylor, Dr Jac Charlesworth and Assoc Prof Kathryn Burdon.

This study will sequence the associated *LRP2* gene region to identify the functional variants that modulate MS relapse risk which is the primary end point of many pivotal clinical trials testing the efficacy of MS disease-modifying drugs.

Demonstration of therapeutic protection of human cystic fibrosis (CF) respiratory cells against bacterial-mediated inflammation and cell death

Project Team: Dr Sean Beggs, Dr Louise Roddam and Ms Joanne Pagnon.

This research project will demonstrate for the first time that a new therapy directed against bacterial signalling is stable and able to prevent bacteria from inducing inflammation and cell death in respiratory epithelial cells from people with cystic fibrosis.

Can anti-diabetic agents improve blood flow and outcome following stroke in type 2 diabetes?

Project Team: Dr Dino Premilovac, Dr Brad Sutherland, Prof John Burgess, Prof David Howells, Assoc Prof Lisa Foa and Assoc Prof Michelle Keske.

People with type 2 diabetes are four times more likely to have a stroke. Interestingly, common anti-diabetic drugs seem to improve patient outcomes following a stroke. This research project will determine whether anti-diabetic drugs improve brain flow dynamics to reduce stroke severity in an animal model of type 2 diabetes.

New Project Grant for 2018-20 – approx. \$450k

Identifying pathological pathways and putative therapeutics for the treatment of nervous system pathology in people with Multiple Sclerosis

Project Team: Dr Kimberley Pitman, Dr Kaylene Young, Prof Bruce Taylor, Dr Jac Charlesworth and Assoc Prof Alex Hewitt.

DNA sequencing of Tasmanian families with multiple closely related MS cases has implicated the *GRIK4* gene in the development of this disease. This project aims to understand how *GRIK4* affects the central nervous system, determine its role in disease pathogenesis, and repurpose existing pharmaceuticals targeting this pathway to offset neurodegeneration.