The Hon. Greg Hunt MP

Minister for Health

MEDIA RELEASE

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More support for Australia's world-class medical researchers

The Turnbull Government is today announcing new grant funding of almost $12 million to provide further support for Australia's world-class medical researchers.

I am delighted to visit the Murdoch Children's Research Institute to announce support for research that will offer new hope for people living with rare ataxia diseases.

Ataxia is a rare and debilitating disease which affects a person's ability to walk, talk and use fine motor skills. Symptoms include a lack of coordination, slurred speech, difficulty eating and swallowing, eye movement abnormalities, trouble walking, gait abnormalities, tremors and heart problems.

Many people with ataxia may eventually be permanently confined to a wheelchair and in later stages be permanently incapacitated.

As part of the Turnbull Government's Medical Research Future Fund (MRFF), a new $1.7 million grant will allow researchers at the Murdoch Children's Research Institute and the University of Melbourne to conduct separate trials into the benefits of rehabilitation.

The Murdoch Children's Research Institute will trial the effectiveness of rehabilitation for hereditary ataxias – which no medication is proven to benefit – to help sufferers perform the basic tasks needed to maintain their independence.

For those people with difficulty speaking, the University of Melbourne trial will evaluate whether intensive, home-based speech therapy can improve symptoms.

These two trials are the first to receive support through the MRFF's *Lifting Clinical Trials and Registries Capacity* (LCTRC) program, which supports researchers trying to find new treatments and cures for rare diseases and cancers.

And in a further boost for ataxia research, Dr Louise Corben from the Murdoch Children's Research Institute will also receive a $431,000 grant.

This funding will support Dr Corben's study into the use of brain stimulation to improve coordination and function in people with Friedreich ataxia – a disease which often shortens life expectancy due to severe heart diseases.

Dr Corben is one of 21 recipients of 2018 Medical Research Future Fund *Next Generation Researchers* fellowships which are also being announced today. They will share in $10 million to further their work across a wide range of research subjects.

Research includes tackling poor outcomes for patients with acute myeloid leukaemia, treating methamphetamine addiction, managing staphylococcal infections and improving treatment for depression.

These fellowships fund Australia's next generation of clinical researchers to ensure the best and brightest minds are supported today to make the breakthroughs of tomorrow.

The grants announced today are a further demonstration of the Turnbull Government's unprecedented commitment to health and medical research.

(ENDS)

***Next Generation Researchers* fellowships:**

Researcher/ Institute/ Funding	**Project/ Summary (from researcher)**
Professor Elizabeth Elliott University of Sydney $577,188	Improving health outcomes for disadvantaged children I am a paediatrician researcher dedicated to improving health and quality of life for ill and disadvantaged children. The focus of my Fellowship will be research in three areas: rare childhood diseases, fetal alcohol spectrum disorder, and vaccine-preventable disease, with attention to diagnosis, treatment and prevention. Alignment of my research and clinical work and my experience in evidence-based medicine will facilitate adoption of my research into clinical care and health policy.
Professor Christopher Levi The University of Newcastle $577,188	Discovery to therapy implementation in acute stroke Advances in acute stroke therapies are occurring rapidly but challenges remain in their safe and effective delivery to stroke sufferers. This research focuses on testing a potentially superior 'clot busting' drug therapy for acute stroke and on identifying reasons why one of the most widely used current therapies carries a risk of significant harm due to bleeding into the brain. The work also investigates how to better implement the newest form of acute therapy, mechanical blood clot extraction.
Professor Y C Gary Lee University of Western Australia $481,155	Translational Research on Malignant Pleural Effusion and Pleural Infection I am a leading researcher in pleural effusions (fluid build-up in the chest) from cancer and infection. I run a multicentre clinical trial team to answer important questions directly relevant to patient care, as well as a lab research group with proven record of discovery new treatment targets. This fellowship will capitalize on platforms I have built and determine best approach to remove effusions, understand etiologic roles of the fluid ultimately to find ways to stop fluid from forming.
Professor Jacqueline Center The Garvan Institute of Medical Research $343,682	Improving outcomes in osteoporosis and bone health Osteoporotic fractures are a common and increasing problem as the population ages. They are associated with increased risk of re-fracture and early death yet most patients remain untreated. This proposal will identify which fracture patients are at highest risk of re-fracture and premature death (b) identify whether osteoporosis treatment decreases this risk and (c) increase osteoporosis awareness and treatment uptake by general practitioners with an integrated fracture risk prediction tool.
Professor Helena Teede Monash University $494,733	Generating and translating evidence into practice in womens health and beyond Obesity is increasing with major reproductive and metabolic health impacts for women and the next generation. This fellowship focuses on prevention of obesity and optimal diagnosis and management of obesity related reproductive and metabolic conditions in women including before and during pregnancy. Translation is vital to deliver health benefits from research. Here Prof Teede will generate new evidence and translate this into practice in women's health and beyond to deliver tangible impact.
Professor Peter Cameron Monash University $412,277	Optimising Emergency and Trauma Systems through evidence based pathways Developing systems for emergency and trauma care based on strong evidence and robust data systems is crucial to the acute health sector. Through an extensive, well recognised collaboration of research groups at The Alfred, Monash and the National Trauma Research Institute, we aim to undertake world leading systems development both locally and globally, focusing on prehospital, emergency and trauma clinical care pathways significantly reducing mortality and improving functional outcomes.

Associate Professor Andrew Wei Monash University $412,419	Translational Research Program to Advance Clinical Outcomes in Acute Myeloid Leukaemia Five-year survival in acute myeloid leukaemia (AML) is only 27%, placing it amongst the worst-ranked cancers for clinical outcome. Improved patient outcomes will be achieved through implementation of a Translational Research Program to support novel agent drug testing, early-phase and randomised clinical trials and a national clinical registry to audit outcomes. New insights into leukaemic stem cell function and mechanisms of drug resistance will inform the design of future clinical trials.
Associate Professor Paul McCrory Florey Institute of Neuroscience and Mental Health $577,188	Mild traumatic brain injury and the risk of long-term neurodegenerative and neurobehavioural disease Considerable media attention surrounds the potential for long-term problems in individuals with high exposure to head impacts such as seen in sporting, civilian and/or military contexts. This study examines the long-term effects of mild traumatic brain injury (mTBI) and helps close the current knowledge gap of the impact of this disorder on individuals. There are no long term trials to answer the critical question of whether mild TBI causes long term problems in the brain.
Professor Alexander Thompson University of Melbourne $481,155	Elimination of HCV as a Public Health Threat This Practitioner Fellowship will support studies that will contribute directly to the efforts to eliminate HCV infection from Australia. The research program aims to reduce transmission of HCV infection by evaluating the best models of care for i) engaging and treating high risk individuals with HCV infection, including people who inject drugs and prisoners, ii) preventing reinfection with HCV, and iii) re-treatment of individuals who fail treatment due to drug resistance.
Professor Bala Venkatesh The George Institute for Global Health $274,946	Sepsis Outcomes Research Sepsis is a major cause of hospitalization and ICU admission in Australia population corresponding to more than 15,700 new cases each year. Every year more than 3,000 people die from sepsis in Australia which is greater than the annual national road toll and breast, prostate or colorectal cancer. The research outlined in this proposal to study the effect of steroids and vitamin D to improve patient's recovery from sepsis and also understand the genetic basis behind their ability to survive sepsis.
Assistant Professor Lianne Schmaal University of Melbourne $431,000	Neuroimaging in mental health: the quest for clinically useful biomarkers To ultimately improve treatment of mental illness, this research program aims to detect robust and reliable neuroimaging markers that are associated with affective disorders by pooling data from many samples across the world. Moreover, this research aims to develop alternative biological-based classifications of mental illness in young people, and evaluate their clinical value by examining their predictive value for treatment response and disease course.
Associate Professor Antonio Verdejo-Garcia Monash University $476,728	Cognitive Phenotyping and Personalised Treatment for Methamphetamine Addiction Prevention and treatment of addiction to stimulants such as methamphetamine is imperative for community health and safety. This fellowship will enable me to apply my expertise in impulsivity and addiction to identify people at risk of increasing methamphetamine use and to develop and evaluate cognitive training therapies that will empower people with methamphetamine related problems to control their drug use. Outcomes include a risk identification and triage tool and three novel therapies.
Doctor David Godler Murdoch Childrens Research Institute $476,728	Significance of low-level mosaicism to intellectual disability in paediatric disorders My vision for the next 4 years is to improve outcomes for children and their families with inherited disorders associated with intellectual disability (ID) and autism through earlier diagnosis and intervention. This is of great importance with annual costs of ID close $14.72 billion to the Australian health system, and missed or delayed diagnoses being a significant problem, as ID is found in 1.7% of births, where a specific cause is currently identified in less than half.
Associate Professor Christopher Davey University of Melbourne $333,709	Examining new treatments and developing new treatment biomarkers for youth with severe depression Antidepressant medications and psychotherapy have been the mainstays of depression treatment in young people, but given their modest effectiveness, there is a pressing need for new treatment strategies. During this fellowship I aim to examine better treatments for depression, and develop better predictors about who is likely to benefit from them.
Doctor Donna Urquhart Monash University	Improving outcomes in low back pain: Targeting specific therapies to patient subgroups Low back pain is a major health problem worldwide. There is a lack of effective treatments and a "one size fits all" approach to treatment is being used. This innovative research program

$429,055	aims to change the way back pain is treated, by identifying specific types of back pain, determining the effectiveness of treatments for these types of back pain, and translating a targeted approach to management into clinical practice to improve the health of individuals with back pain.
Doctor Louise Corben Murdoch Childrens Research Institute $431,000	Improving upper limb function in Hereditary Cerebellar Ataxia Friedreich ataxia (FRDA) causes in-coordination and muscle weakness which may result in the affected person being unable to walk or use their arms effectively. In-coordination is a result of destruction of nerves in the spine and the area of the brain that controls movement (cerebellum). This study will assess the use of brain stimulation to improve coordination and function in people with FRDA. The results of this study may also result in treatments for similar inherited cerebellar ataxias.
Associate Professor Steven Tong University of Melbourne $333,709	Optimising interventions for Staphylococcus aureus and skin infections Staphylococcal and streptococcal infections are major causes of illness and death, particularly in Indigenous Australians. These include invasive bloodstream infections and skin infections that lead to chronic kidney and heart disease. I will conduct clinical trials to optimise the management of staphylococcal bloodstream infections using novel trial methods, and use genomics and mathematical modelling to understand and reduce the burden of skin infections in Indigenous communities.
Doctor Jill Newby University of New South Wales $431,000	Improving internet-delivered psychological therapies for depression and anxiety Depression and anxiety affect 3 million Australians. While effective psychological treatments exist, even the best only help 50% recover, and relapse is common. My research aims to improve the treatment of adult depression and anxiety, through developing more effective, efficient and accessible internet-delivered psychological therapies and identifying the conditions that promote optimal long-term outcomes.
Doctor Saurabh Kumar Western Sydney Local Health District $431,000	Role of Non-Invasive Imaging using Speckle Tracking Echocardiography in the Identification and Treatment of Patients At Risk of Arrhythmias and Consequent Sudden Cardiac Arrest Every year, 15,000 Australians die from sudden cardiac arrest. Identifying individuals at risk is a major challenge. We will investigate whether a heart ultrasound technique called speckle tracking allows clinicians to rapidly identify changes in heart muscle that are associated with cardiac arrest. If found to be positive, the technique may be broadly applied to large populations, identifying at risk individuals, potentially rescuing them before cardiac arrest occurs.
Doctor Dawn Aitken University of Tasmania $431,000	Improving musculoskeletal pain by matching the right treatment with the right patient Musculoskeletal pain is common, disabling, and costly in Australia. Current treatment options are poor. This program of research uses clinical trials to investigate new therapy options for osteoarthritis and chronic low back pain. These studies aim to provide new effective treatment options for patients that can improve pain, slow joint damage and decrease the overall burden of musculoskeletal disease.
Doctor Dominik Linz The University of Adelaide $431,000	Sleep apnea and atrial fibrillation Atrial fibrillation (AF) is the most common sustained cardiac rhythm disorder. Obstructive sleep apnea (OSA), is four times more common among patients with AF than without. OSA has been associated with a greater recurrence rate of AF after initially successful treatment of AF and treatment of OSA reduces recurrence of AF. To identify the underlying mechanisms, we aim to determine effects of OSA on atrial electrical activation and to characterize sleep apnea in AF patients in a more precise way.
Associate Professor Meg Jardine University of New South Wales $476,728	Understanding and optimising the delivery of chronic disease care for better cardiovascular outcomes The proposed research program will undertake research that utilises existing clinical information and structures. This information will provide evidence in a cost effective manner. A particular project will examine current treatment delivered to people with chronic disease. A second project will embed a study of the optimum level of sodium exposure in dialysis within routine clinical practice. The outcome will be a cost-efficient study that will potentially lead to improve outcomes.