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WE ARE GMRF

Enhancing the health and wellbeing of veterans, their families and the wider community through innovative medical research.

Founded in 2005, the Gallipoli Medical Research
Foundation (GMRF) is located at Greenslopes
Private Hospital, Brisbane's former repatriation
hospital. GMRF continues the proud tradition of
supporting current and ex-serving Australian
Defence Force personnel through medical research.

Who do we help?

Veterans, their families, and the wider Australian community benefit from our medical research.

How do we help?

Our medical research paves the pathway to finding new and innovative ways to predict, prevent and treat serious health concerns in the veteran and wider community.

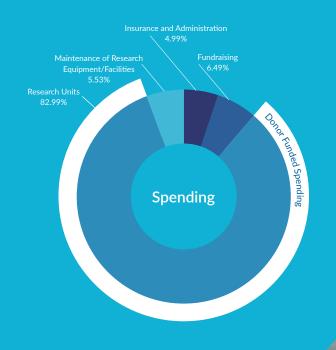
Where does your money go?

Thanks to our partnership with Greenslopes Private Hospital, many of our overhead costs are covered by significant in-kind support from the hospital.

All donations made to GMRF go towards medical research













Thanks to you

Another incredibly disruptive year goes past and I find myself grateful for each challenge that has presented an opportunity for us to grow and develop. The events of 2020 and 2021 once again instilled in me the faith in the GMRF team, the strength of research and the commitment that together with the community we can accomplish anything. To keep our community and supporters safe, we were sadly unable to see you as frequently as we wished, however with new challenges come new ideas.

I would like to take a moment to thank all GMRF researchers, clinical trial scientists, support staff and most of all, you – our supporters. As an independent medical research institute and a registered charity we rely heavily on the support of our community to continue providing real-world solutions. Without you, our important research aimed at improving the health and wellbeing of veterans, their families and the wider Australian community would not be possible and many lives would continue to go untouched by our beneficial work – the work you make possible.

This brief snapshot of our impact demonstrates how we are addressing the challenges facing our community in innovative and collaborative ways. The problems are clear and with your support we are actively finding solutions. Please take a few minutes to read our report and know that your support is critical to our mission-oriented research.

Miriam Dwyer

CEO



Finding answers to the issues in our community

We are driven by the ongoing need to fight disease and improve the health and wellbeing of people in our community. As researchers, we aim to understand those diseases and through biomedical, psychosocial and clinica studies, we believe the solutions can be found in research.



Almost 50% of Australian veterans experience difficulty adjusting to civilian life after service.



There are many physical and psychological impacts of service. Prescription of multiple medications to treat these conditions in veterans can cause some problems.



Some veteran families have complex social, health and financial needs that require access to multiple Defence and public support organisations.



One in four Australians has or will develop fatty liver disease. Patients with fatty liver often have increased liver iron which speeds up progression of their liver disease.



Rural Australians have limited access to specialised medical testing equipment and are also over 70% more likely to die from liver cancer than Australians in metropolitan areas.



Patients with liver cancer have poor prognosis and the relapse rate is over 50%. The tumour microenvironment is a key regulator of tumour progression and treatment response.



Some tumour cells leave the main tumour, circulate and then repopulate the original tumour making the cancer difficult to treat and quick to spread.



NTM lung disease severely impacts quality of life for over 1000 people diagnosed in QLD. Currently there's no way of knowing who, why or how people get it.



Health conditions are becoming more challenging to treat – medical research is required to investigate options for long-term survival.





How our research is helping

To help alleviate the burden of serious illness our researchers work tirelessly to investigate, study and understand disease in order to provide better treatment options for the future. The important work we conducted in 2020/2021 and continue to undertake in 2022 will make a difference for future generations.



Understanding the key elements of transition allows us to develop tools and resources which will ease adjustment to civilian life, improving life after service for veterans.



Raising awareness among doctors, clinicians and other prescribers to understand the effect of multiple medications, as well as improving communication between prescribers for veterans with multiple health conditions.



Evidence-informed recommendations to improve the way veteran and public support services interact when caring for veteran families with complex needs.



Decreasing liver iron could slow the progression from liver disease to cancer, helping the people currently affected by liver disease.



Finding better ways to predict liver disease in a less invasive, more accessible way – using saliva. Using saliva as a method of detecting liver injury means people located in rural and remote areas have a simple way to test for one of the deadliest cancers.



Aiming to develop a new treatment to target not only the cancer cells but also the area around the cells to stop regrowth.



Investigating how and why liver tumour cells circulate and repopulate the main liver. By understanding this process there is a better chance of finding a treatment to stop the travelling cells.



Reducing the knowledge gap will lead to better treatment opportunities and preventative measures for people with NTM lung disease.



Significantly contributing to global clinical trials can sometimes give patients a chance of a longer-term survival while contributing to the development of new treatments for the benefits of all future generations.



Developing world first psychological assessment tools to create a brighter future for veterans

Serving in the Australian Defence Force (ADF) is an honourable career, however like all careers, Defence employment eventually ends and personnel must consider life after service. For some this is a planned career move, for others due to unforeseen circumstance, this can be an unwelcome surprise. Either way transitioning from Defence can leave veterans with a profound sense of loss when returning to civilian life.

Research shows that almost 50% of veterans experience difficulty adjusting to civilian life within five years of leaving Defence. Understandably, the significant lifestyle change can be confronting and some might need help navigating this new change. The results of a world-first six year research study conducted at GMRF and funded by RSL Queensland uncovered five key areas in a veteran's transition experience that indicate successful adjustment. Uncovering these five key areas was the first step to creating a brighter future for Australian veterans. With this knowledge, clinical psychologist, GMRF researcher and Honorary Associate Professor at The University of Queensland, Dr Madeleine Romaniuk developed the M-CARM, a psychometric assessment tool the likes of which the world had never seen. The M-CARM research was published in renowned peer reviewed journal, BMC Psychiatry in November 2020.

The M-CARM is a simple 5 minute survey to determine how well a veteran is adjusting. However Dr Romaniuk understood that knowing how well a veteran is adjusting is only the first step in helping guide them through a successful transition. Taking the next step to make a real difference for veterans, GMRF in partnership with RSL Queensland, developed Go Beyond, an online



powered by





learning tool that offers free, personalised short courses for veterans based on their M-CARM results. The short courses include information, worksheets and other resources in the five key areas Dr Romaniuk discovered to be instrumental in a successful adjustment.

Go Beyond officially launched in May 2021. It continues to give veterans the real-world tools they need to create a brighter future after service.

"I actually wish I had this module (Resentment and Regret) earlier. I went through a lot of the situations the module discusses, however have resolved a lot of them the long way I think. This module helped me to put a lot of past experiences into perspective actually."

Laura, veteran.



Dr Kerri-Ann Woodbury,
Principal Research Fellow,
GMRF Veteran Mental
Health Research Unit

Veteran Mental Health

Dr Rebecca Mellor Senior Research Fellow, GMRF Veteran Mental Health Research Unit



"There are many physical and psychological impacts of service. Prescription of multiple medications to treat these conditions in veterans can cause more problems than solve them." Dr Mellor



Understanding the physical and psychological impact of service

One of the many challenges facing veterans of all generations is over prescription of medication. It's no secret that service takes a toll both physically and mentally for many veterans, however sometimes we can't see the impact of service. The veteran running your local café, or the veteran coaching your child's cricket team could be experiencing many different effects of service. Medical professionals treat each individual health concern with the utmost care, although with different specialities needed to address these coexisting conditions, treatment can become micro-focused. Multiple medications prescribed by different clinicians to treat multiple health concerns can sometimes cause problems.

GMRF research published in 2016 studied a cohort of Vietnam Veterans with PTSD, with results showing over 30% of the cohort were prescribed two or more psychotropic medications. Not only does over-prescription have an immediate effect on the veteran, it also takes a toll on our healthcare system.

At GMRF, our research takes a holistic approach to understanding and enhancing the health and wellbeing of veterans. In 2020/21 we continued our investigations into the full extent of over-prescribing in veterans, and the effect of multiple medications to treat co-existing illnesses, and find potential risks, to increase awareness among doctors, clinicians, and other prescribers. Educating and sharing knowledge among medical professionals is key. Research conducted in 2020 and 2021 will provide evidence to health practitioners to improve communication between prescribers for veterans with multiple health conditions. Helping doctors and other health practitioners prescribe more efficiently and safely can help create a healthier and happier future for veterans as well as relieving the overall cost on the Australian healthcare system.

Enhanced support for veteran families – an integrated solution

Research shows that health and wellbeing needs in families intensify as veterans transition from full-time military service to civilian environments. Families with needs that span health and socioeconomic concerns can face challenges navigating the many services and programs offered by military and civilian systems of care.

In 2019, GMRF launched the Families with a Veteran project. The project was a large collaborative initiative commissioned by RSL Queensland and Legacy Brisbane; delivered in partnership with Mates4Mates and Open Arms; and overseen by a Steering Committee that included representatives from the Australian Defence Force (ADF) and the Department of Veterans' Affairs (DVA).

The project, led by Dr Angela Maguire, was a yearlong undertaking that focused on understanding health and wellbeing needs in veteran families; and service providers' and families' experiences of navigating the veterans' support system. "The Australian health and social care system can be challenging to navigate if you're a civilian," Dr Maguire says. "Then you add the Defence, DVA, and ESO systems of care. Once families are engaged with a number of different agencies; coordinating care can get quite difficult".

In mid-2020, GMRF delivered a series of recommendations designed to better integrate service delivery for veteran families with multiagency needs. The recommendations were directly informed by the families and service providers who took part in the project, and demonstrate the value of working with families and services to deliver real-world solutions. Several key agencies, including RSL Queensland, Legacy Brisbane, and Mates4Mates, are using the project findings to address identified barriers and gaps in service provision.

The findings from the project have also informed the development of a five-year program of research

(2021-2026) for the GMRF Military Families stream. Supported by RSL Queensland, this research focuses on the relationship between military service experiences and family system functioning, and the processes that promote successful family adjustment and adaptation.

Dr Maguire says: "it was clear from the research that more work is needed to make sure that veteran families are gaining access to the right mix of services at the right time. There is an urgent need for high-quality implementation studies that evaluate initiatives for integrating fragmented systems of care". Dr Maguire



Dr Angela Maguire
Clinical Psychologist/
Principal Research Fellow,
GMRF Veteran Mental
Health Research Unit



The qualitative study from the project has been published in the international peer-reviewed literature and is free for anyone to access using this link: https://rdcu.be/cE4RV



The liver is one of the heaviest and hardest working organs in the body, it has hundreds of functions, and most importantly it cleans your blood. If the liver is injured, chances are you won't feel aches and pains in your abdomen. It's a resilient organ.

This makes liver injury difficult to diagnose. If left undiagnosed the damage can become steadily worse over time and treatment options may become limited. GMRF researchers, with partners at UQ School of Clinical Medicine are working hard to find solutions at different stages of liver injury, whether diagnosis, prevention or cancer treatment.

Fatty liver disease – the silent epidemic and what we're doing about it

Millions of Australians are living with fatty liver disease, which means one in four adults has, or will develop, fatty liver disease. If left undetected and untreated the liver can become damaged causing scarring, and in some cases cancer. A large challenge with liver injury is the low rate of early detection. If caught early many liver injuries can be treated before progressing to a more serious condition. Methods to detect liver disease in its early stages are limited by expense and availability, and this is especially a problem for people in rural or remote communities.

To help Australians with liver injury, GMRF researchers conducted in depth research through 2020 and 2021, studying the role of iron in liver disease, aiming to determine a potential way of slowing disease progression. Decreasing iron in the liver could slow the progression from liver disease to cancer. Slowing the progression and potentially reversing the effects of liver disease could help the millions of Australians who have or will develop liver disease in their lifetime.

Rural and remote Australians experience geographical limitations to healthcare, particularly limited access to specialist equipment. Beginning in 2020 and continuing in 2021, GMRF researchers are finding better ways to predict liver disease in a less invasive, more accessible way - using saliva. Testing for liver injury using saliva as a detection method means some of our most vulnerable communities located in rural and remote areas have a simple way to test for one of the deadliest cancers. Tests like this can improve access to healthcare and improve the life expectancy of Australians in rural/remote areas. In the last year, the study expanded to include a wider sample size to validate data and determine if biomarkers can be used to detect liver injury.



Dr Kim Bridle
Liver Disease Research
Lead & Lab Supervisor,
GMRF Liver Research Unit

"Fatty liver disease is a major health issue for millions of Australians. Our research aims to identify at-risk patients early and stop liver disease progressing to cirrhosis and cancer. We hope that this will ease the burden on Australia's health system but more importantly improve the health of millions of Australians." Dr Bridle





Our commitment to curing liver cancer

When liver injury advances, patients are at significant risk of liver cancer – an aggressive cancer with limited treatment options. GMRF is studying liver cancer and potential ways to treat it, hoping to give Australians a healthier, happier life. Patients with liver cancer have a poor prognosis and the relapse rate is over 50% for those who have the tumour removed surgically. The microenvironment surrounding the tumour is a key regulator of tumour progression and treatment. Some tumour cells even leave the main tumour – they circulate and then repopulate the original tumour and contribute to tumour growth.

In 2020, our research progressed to better understand the tumour cell microenvironment and how treatment affects the cells around the liver tumours as well as the cells themselves. We investigated how and why some tumour cells circulate and repopulate the main liver tumour.

The first step to develop a new cancer treatment is thoroughly understanding how cancers work. Studying the process of self-circulating and repopulating cells can increase the chance of finding a way to stop the movement and reintegration of these cells. Investigating the microenvironment aims to develop a new treatment that targets not only the cancer cells but the area around the cells to stop regrowth. Finding alternative ways to treat liver cancer by combining treatments and new pathways could offer more people with liver cancer a survival rate of more than a few months.

GMRF liver cancer researchers continued to work hard in 2020/2021 to increase the effectiveness of current treatments and create new solutions to reduce the likelihood of more cancer growth providing a longer life expectancy for vulnerable people in our community affected by liver cancer.



Dr Xiaowen (Tina) Liang
Research Officer,
GMRF Liver Research Unit

"The success of this project will reshape our understanding of liver cancer progression and provide a new strategy to significantly improve the response to therapy and prevent the relapse of liver cancer." Dr Liang





Tracking the mycobacteria in our waterways and gardens

Understanding the many different types of Nontuberculous mycobacteria (NTM) in our water, households and gardens remained a priority for our respiratory researchers in 2020/2021. For some people, different NTM are harmless, but for others they can be dangerous, resulting in a devastating NTM lung disease diagnosis. NTM lung disease is a growing area of concern for health practitioners and severely impacts the quality of life for over 1000 people diagnosed in South East Queensland.

The gap in collective medical knowledge continues to exist, with no way of knowing who, how or why people become infected with NTM. This is why GMRF scientists are conducting research in collaboration with Centre for Childrens' Health Research and The University of Queensland to determine what factors drive infection and transmission of NTM bacteria. Research conducted in 2020 and 2021 aimed to fill the knowledge gap and could lead to better treatment opportunities and preventative measures for people diagnosed with NTM lung disease. GMRF research projects studying water systems, garden soil, and even household dust can give us tools and strategies to prevent and manage NTM lung disease in vulnerable communities.

In parallel the respiratory team continue to explore the immune systems of patients with NTM to understand why some people get these infections and others don't. With major support from our donors they have set up a biobank of NTM patient samples to facilitate rapid research in this area. In collaboration with the National Institute of Health (NIH) in the US, and researchers in Japan and Korea, they are looking at the entire genome to try and identify the defects that lead to infection. In other diseases where this has been done, treatment options have followed that have had dramatic impacts on patient quality of life.

Professor Thomson continues to supervise externally funded PhD Candidate, Robyn Carter who is located at the GMRF laboratory. Robyn is investigating how dust and dirt particles could lead to NTM lung disease.

With each year, the respiratory research unit focus continues to grow as NTM lung disease becomes more prevalent in our community, severely impacting the lives of many people nationally and around the world.



Professor Rachel Thomson Respiratory Research Unit Head, GMRF Respiratory Research Unit

"At the moment, we can treat a patient and clear their infection. But they are at risk of reinfection, because the bugs are in our environment. We are trying to understand what is happening in the environment so we can reduce exposure and subsequently reinfection." Professor Thomson





Connecting patients with new and emerging treatments

Health conditions in today's society are becoming more challenging to treat. Some people diagnosed with serious illness are left with limited or no options for long-term survival. Medical research is advancing, however it's a long process to discover new treatments, then to transition treatments from the laboratory to patients. Clinical trials are an integral part of the process to test laboratory developed treatments with either healthy or sick people. The clinical trials coordinated at GMRF in 2020 and 2021, together with assistance from Greenslopes Private Hospital (GPH), screened over 90 people with limited or no other treatment options to provide the chance to consider a new and emerging treatment.

Clinical trials significantly contribute to scientific research and can sometimes give people a chance at long term survival. With clinical trials more people left with no alternatives have the option to test potential future treatments which may give them another chance at life.

Between 2020 and 2021, GMRF's Clinical Trial Unit commenced 14 new national and international studies in areas ranging from oncology to respiratory and liver disease.

New trials started



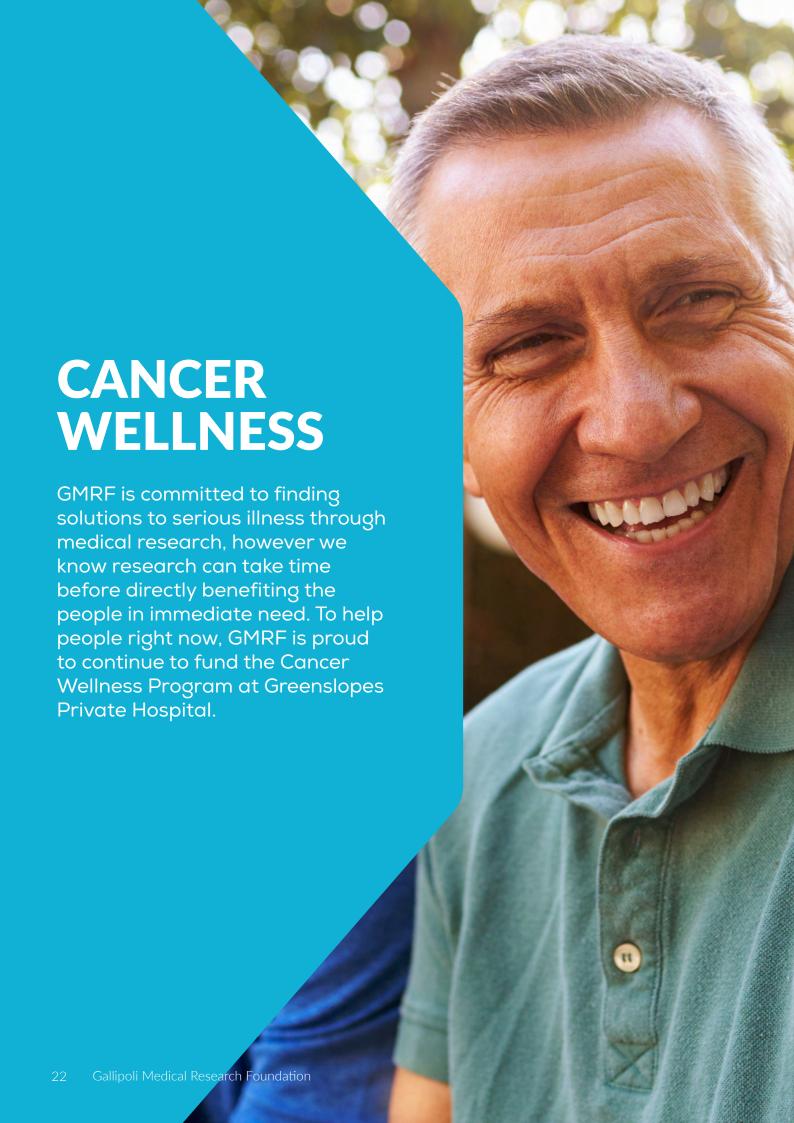
Dr Suzanne Elliott Associate Director of Clinical Trials,

GMRF Clinical Trials Unit

"Clinical Trials involve the assessment of new treatments for various stages of diseases. The Investigators/Doctors conducting these trials can provide eligible patients at Greenslopes Private Hospital with the opportunity to participate. The GMRF Clinical Trials team, together with the hospital clinical and pharmacy staff support the Investigators and the patients every step of the way.

Data from clinical trials provide the evidence required to support registration of new and effective treatments that will be made available to all future patients." Dr Elliott





Cancer Wellness Program

The community of care supporting the lives for people with cancer

During the repeated changes in COVID restrictions during 2020 and 2021, the Cancer Wellness Program adapted to meet the changing needs of the community and continued to provide crucial support. Transforming education and peer group sessions to online events enabled the program coordinator to increase accessibility of the program. Moving online allowed the program to provide resources and support to people previously unable to physically attend the sessions due to location or other health reasons.

A cancer diagnosis is shocking and difficult, for many people and their loved ones there's no central place for support, information, or community connection. At Greenslopes Private Hospital, close to 10 000 people receive cancer treatment each year. The Cancer Wellness Program offers free education and peer support sessions for people receiving cancer treatment as well as their loved ones and support networks.

Holistic support through cancer treatment can create a smoother experience for patients and their support networks. Providing education, resources and peer support through the Cancer Wellness Program can make a significant positive impact in a person's cancer journey.

"Most amazing support program ever - totally recommend to all cancer patients and their families - still so thankful that this existed during my treatment." Cancer Wellness Participant



Ranee Safiotti
Cancer Wellness
Program Coordinator,
Greenslopes Private
Hospital

"I am so proud to be a part of a program that enhances patients' health and wellbeing by making them feel like they have somewhere to go for guidance. By empowering patients, I hope to see those who have previously felt a bit lost, find direction and feel supported." Ranee Safiotti





The next generation of scientists taking a different approach to research

Our internationally renowned specialists carefully guide the students through their multi-year research projects. Often PhD candidates, sometimes new to the research area or lab, provide alternative points of view and have different ways to approaching the health concerns we're studying at GMRF. Facilitating the growth of the Australia's next generation of scientists is an important part of creating a brighter future for veterans and the community. Investing in early career researchers, the future of science, harnesses their diverse problem solving skills to continue to search for cures for years to come.

A new chapter for two of our PhD Candidates

Raji and Ritu two GMRF PhD candidates spent the last four years working tirelessly in the lab to help people with liver disease and liver cancer. In 2021 both candidates submitted their final research projects, one of the most important moments in a PhD candidate's research career. Raji's research examined how to treat a liver before transplant to give it a better success rate. Findings showed that a particular way cells die (necroptosis) play a role during liver transplantation. Understanding what makes the cell die provides a better chance of improving the transplant process or even identifying risky livers before transplant. Ritu's project investigated how to target cancer stem cells that are resistant to the standard available drug treatment. The project found that a particular biomarker is responsible for this drug resistance and by targeting this biomarker, people with liver cancer might have a better chance of survival. Both projects have significantly contributed to current national and international knowledge in the areas of liver disease and liver cancer.

"Professor Crawford is an experienced researcher, he makes out time for important project discussions and often gives his adept insight. Dr Bridle is always willing to help out whenever her help is required. She is quick to brainstorm and come up with solutions when there are challenges." Afolabi Akanbi



Afolabi AkanbiLiver Research PhD
Candidate at GMRF





Mark Clayton Respiratory Research PhD Candidate







Raji Baidya Liver Research PhD Candidate

Our partners share a passion to support our community and help fight diseases by investing in research.

RSL Queensland provides a range of services and programs to ensure a bright future and enduring legacy for all Australian veterans and their families. RSL Queensland's generous investment in GMRF research enables our scientists to study the physical and psychological impact of service. Without the support of RSL Queensland our research would not continue to benefit veterans and their families

Greenslopes Private Hospital (GPH) is proud to be Australia's largest private teaching hospital owned and operated by global hospital group, Ramsay Health Care. GMRF is located at GPH and we are grateful for the in-kind support they provide that allows us to invest every cent of your donations into innovative medical research.



Mr Rob SkodaCEO RSL Queensland



Ms Chris Went CEO Greenslopes Private Hospital

"GMRF and RSL Queensland have a shared goal of helping veterans by enhancing their health and wellbeing. Together, there's no limit to our innovative research capabilities that help inform critical services for veterans and their families. I look forward to supporting many more years of research with the Foundation."

"We're proud to foster a culture of research at Greenslopes Private Hospital, Queensland's biggest private teaching hospital. Our partnership with GMRF continues to move from strength to strength with every year that goes past."

With thanks to our supporters

GMRF research relies on generous donations. We would like to thank our supporters:













We are an independent research institute and charity. Our ground-breaking research is enabled by the generous support of our research partners and donors. With thanks to in-kind support from Greenslopes Private Hospital 100% of gifts made to GMRF are invested back into medical research. We greatly value the support of our partners and donors, without you none of this important research would be possible.





Help us make a difference for veterans, their families and the community.

Serious illness continues to burden veterans, their families and the wider community. Together and through research we can discover the solutions, both now and into the future. Your support makes this journey of discovery possible. Get in touch to find out how you can make a difference to veterans and the community.



Make an immediate difference through a financial gift



Make a lasting impact through a Gift in Will



Make a continuing advancement to research by becoming a research discovery partner



Scan the code to learn more about GMRF and find out how you can help support our medical research.

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enquiries.gmrf@ramsayhealth.com.au







