



CELEBRATING 10 YEARS

EMERGENCY HEALTHCARE RESEARCH FUNDING

ANNUAL REPORT 2018





Funding transformative,
clinician-led emergency
healthcare research



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About EMF

EMF is an Australian not-for-profit organisation dedicated to emergency healthcare research.

We run two research programs as well as a Research Support Network to actively drive collaborative, multi-disciplinary projects.



Welcome

It is with great pleasure that we welcome you to the 2017/18 EMF Annual Report, in which we mark 10 years of emergency healthcare research funding in Queensland.

We were delighted to celebrate our 10th anniversary in August 2017, with a two-day Research Symposium. More than 160 emergency clinicians and researchers from around Australia attended the event. We are particularly grateful for the generous sponsorships from industry and several Queensland universities, which helped make this event possible.

When EMF was founded in 2007, emergency medicine was seen as a relatively new field of medicine, having been only recognised as a medical speciality in Australia since 1993. In many ways, we set out to achieve the impossible: with limited funding and resources we aimed to develop clinicians in this young area of medicine who could transform emergency healthcare through research.

Funded by Queensland Health and driven by a group of emergency physicians, we believe EMF was an initiative which has proved to be an astute move for healthcare in Queensland.

In the last decade, EMF has awarded 154 grants worth more than \$14.4 million through our Queensland and Rural and Remote research programs. We have also committed a further \$2 million in developing and rolling out a Research Support Network (RSN) in Queensland.

Our research programs have enabled Queensland emergency medicine clinicians to develop into some of the world's leading researchers. They are delivering real solutions for the chronic demand on the country's emergency departments and emergency

responders. They are also improving patient care by stimulating the translation of evidence to clinical care areas such as chest pain, trauma, aged care and paediatrics.

EMF-funded research is also delivering critical economic benefits. In the past five years, EMF-funded research has delivered outcomes that have provided more than \$100.4 million in economic benefits for the Queensland healthcare system. A further \$15.1 million in additional (leveraged, in kind, associated and linked) funding was also associated with grants awarded by EMF in the past five years.

In 2017/18, the annual financial benefits from eight EMF projects were more than \$33.6 million in Queensland. Also during the year, the results from our first Rural and Remote research grant were published, finding \$21.7 million in annual savings for the Northern Territory government due to the use of point of care testing in remote medical centres. These outcomes easily demonstrate the return on investment for the Government's \$25 million injection into EMF in the past decade.

EMF expects these savings and improvements in patient care to keep rising as our clinician-researchers become even more skilled at delivering evidence-based solutions to emergency healthcare. This was evident in the 12 final reports submitted to EMF during the year for completed projects. Two of these projects (highlighted later in this report) have led to key clinical changes for diagnosing haemorrhaging in trauma patients, which resulted in the Queensland Ambulance Service and four major trauma hospitals adopting new diagnostic devices.

We were also delighted to see one of the pilot projects we funded, and led by clinicians from Lady Cilento Children's Hospital, receive a \$2.63 million NHMRC grant in December 2017. Another pilot study funded by EMF, and led by the same research team, generated a

“In the past five years, EMF-funded research has delivered outcomes that have provided more than \$100.4 million in economic benefits to the Queensland healthcare system.”

publication in the prestigious *New England Journal of Medicine* in early 2018. This was one of 80 journal publications during the year relating to EMF-funded research results.

This year, we awarded 19 new research grants totalling \$1.2 million to projects associated with \$2.2 million in leveraged, linked and in-kind funding. Many of the projects will address key health priorities and issues such as sepsis, trauma, respiratory disease, domestic violence, drug overdose, and the elderly as well as reducing the over prescription of antibiotics.

During the year, our team continued to actively help translate research results. We ran two knowledge mobilisation training workshops to upskill clinicians. In addition, there were also 11 media releases regarding EMF projects, which led to national and international media coverage; and more than 620,000 views of EMF social media posts and website pages.

Looking to the future, the EMF Board approved key changes to our Queensland Research Program. From June 2018, we are offering two new grant schemes open to all Queensland Health employees providing direct clinical care in an emergency. By expanding our programs to the broader emergency healthcare community, EMF can foster the research capabilities of a much wider cohort of clinicians. We expect this to generate further improvements for patient healthcare.

Our RSN is a key EMF initiative, which is helping to sustain and nurture clinician-researchers by providing skilled, on-the-ground support in Queensland. This unique program entered its third year of operation in late September 2017.

Within a relatively short time-frame, the RSN has substantially increased research activity across the State. It also has been instrumental in levelling the playing field for regional, rural and peripheral hospitals (within larger Hospital and Health Services (HHSs)) who are now beginning to benefit from the collaborative efforts facilitated by the network.

Since 2014, EMF invested \$2 million from its limited financial reserves to fully fund the development, pilot and implementation of the RSN. In an attempt to secure systemic, collaborative investment for the service from 2018/19, our RSN Manager engaged in a broad range of meetings with both Queensland Health and the HHSs' leadership. EMF will continue to meet with these stakeholders to ensure the longevity of the RSN as well as seeking other co-investors in the model.

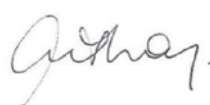
Our 10th anniversary provided the EMF Board with the impetus to develop a new strategy for expanding EMF within Queensland as well as interstate. Following an important strategic planning session, we made the decision to engage KPMG Australia to conduct an independent evaluation of EMF's impact on emergency healthcare. This evaluation will provide a critical tool for building a roadmap and investment plan for the future. It will also help EMF to further engage with other state governments and the Commonwealth Government as well as to renegotiate our next round of funding with Queensland Health.

The EMF Board is grateful to Queensland Health for its ongoing support and long-term vision for emergency healthcare research. We look forward to continuing this highly-productive relationship well into the future.

This year, 55 clinicians, academics and professionals donated their time to our Board and Committees. We thank you whole-heartedly for the valuable contribution of your time and skills to EMF and the furtherance of emergency healthcare research. In particular, we would like to thank our outgoing Scientific Advisory Committee Chair, Dr Ogilvie Thom and welcome new chair, Dr Ellen Burkett. We also farewell Prof Daniel Fatovich from the Committee and welcomed new members A/Prof Jamie Seymour and A/Prof Stephen Macdonald as well as the new member of our Finance, Risk and Audit committee, Ms Cathy Montesin.

We also thank the dedicated EMF team who consistently go above and beyond to help this small Foundation exceed all expectations.

We hope you enjoy reading about the many remarkable achievements made by EMF and emergency clinicians in 2017/18.



Dr Anthony Bell
Chair
Emergency Medicine Foundation



Beth Chapman
General Manager
Emergency Medicine
Foundation

Our Board



DR ANTHONY BELL

MBBS, MBA, MPH, FACEM, FRACMA

EMF Chair & ACEM Board nominee

22 February 2017 – ongoing

Dr Bell was appointed EMF Chair in May 2017. He is also the Director of Medical Services for Uniting Care Health's The Wesley Hospital in Brisbane and an emergency medicine specialist with The Prince Charles Hospital. Previously Dr Bell was the Medical Director of the Emergency and Trauma Centre at the Royal Brisbane and Women's Hospital. He has held state-wide Clinical Chair positions. Dr Bell has successfully secured several research grants and is committed to fostering clinical research in emergency medicine. He has a keen interest in quality improvement, clinical redesign, health services research and policy development at a system level. He holds academic appointments with two universities: he is an Associate Professor at The University of Queensland and an Adjunct Associate Professor with the Queensland University of Technology.



DR JOHN WAKEFIELD PSM

MBChB, MPH (research), FRACGP, FACRRM, FRACMA

Queensland Health Board nominee

23 March 2016 – ongoing

Dr Wakefield is the Deputy Director-General – Clinical Excellence Division, Queensland Health and an Adjunct Professor of Public Health at the Queensland University of Technology. He has more than 20 years' experience in clinical and management roles in rural, regional and tertiary public sector health services in Queensland. He established the Queensland Health Patient Safety Centre in 2004, which he led until late 2012. He is actively involved in national efforts to improve patient safety in partnership with the Australian Commission for Safety and Quality in Healthcare. He chaired the National Open Disclosure Pilot Project and regularly teaches Open Disclosure and other patient safety curricula. His research interests include patient safety culture, safety performance measurement and open disclosure. In 2011, he was awarded a public service medal for services to patient safety as part of the national Australia Day Awards.



ASSOCIATE PROFESSOR ED OAKLEY

MBBS, FACEM

ACEM Board nominee

11 November 2014 – ongoing

Associate Professor Oakley is a paediatric emergency medicine specialist, Chief of Critical Care, Royal Children's Hospital, Melbourne and an honorary research fellow at the Murdoch Children's Research Institute. He is a member of the Clinical Trials Network of the Australasian College for Emergency Medicine (ACEM) and of the ACEM Council of Practice and Partnership. Associate Professor Oakley is the chief investigator for the Paediatric Emergency Medicine Centre of Research Excellence and a chief investigator on several other NHMRC grants through the Paediatric Research in Emergency Departments International Collaborative (PREDICT). Associate Professor Oakley is a member of the EMF Scientific Advisory Committee.



DR MICHAEL SINNOTT

MBBS, FRACGP, FACEM

ACEM Board nominee

28 September 2015 – 19 September 2018

Establishment (2007) – November 2013

Dr Sinnott is an Academic Associate Professor at The University of Queensland (UQ) School of Medicine and Managing Director of Qlicksmart Pty Ltd. Until recently, Dr Sinnott was a Senior Staff Specialist at the Princess Alexandra Hospital (PAH) Emergency Department and Director of the UQ-PAH Emergency Department Research Program. He has been awarded \$1.8 million in research grants (including being a partner investigator on two ARC linkage grants); \$2 million in commercial grants and loans; produced more than 30 publications and delivered 40 presentations. He has been the driver behind two Australian Standards and successfully lobbied for one Australian Standard and Resolutions on Staff Safety by the Michigan House and Michigan Senate.

Our Board (cont).



DR DAVID SPAIN

MBBS, FRACGP, FACEM

ACEM Board nominee

15 October 2015 – ongoing

31 May 2007- 27 February 2012

Dr Spain is Deputy Director and Staff Specialist with eminent status at Gold Coast University Hospital Emergency Department. He is an Adjunct Fellow (Research) at the Menzies Health Institute Queensland, Clinical Senior Lecturer with Griffith University and an Associate Professor with Bond University. With vast experience in clinical governance, complaint resolution and medical negligence, he also provides emergency medicine opinion to numerous governments as well as private and judicial organisations. Dr Spain's previous appointments include Medical Director Allamanda 24Hr Emergency Care Centre at Allamanda Private Hospital Southport, Clinical Senior Lecturer with The University of Queensland and Chief Medical Officer Gold Coast Indy 300. He has published more than 30 articles in refereed journals.



MR JASON CURRIE

BSc, LLB, MIP, MBA, GCPA

5 April 2016 – 31 July 2018

September 2010- March 2014

Mr Currie is the Chief Operating Officer for Vanguard Health. He has worked in the healthcare improvement and innovation space for more than a decade: delivering state-wide improvement programs, establishing support programs for medical research, providing policy advice to government departments and working as a Patent Examiner in IP Australia. He has a passion for challenging the status quo, for fostering innovation and reducing the time delay between research creation and practice change. Until 19 June 2018, Mr Currie was also Chair of EMF Board's Finance, Risk and Audit Committee.



DR PETER ISDALE AM

BA (Hons), PhD, MAICD

9 September 2015 – ongoing

Dr Isdale is the Managing Director of Intergyre Pty Ltd; Chairman of the Innovation Centre Sunshine Coast Pty Ltd; Deputy Chairman of Suncare Community Services Ltd; a non-executive Director of the Australian Medical Association (Qld); Chairman of the Advisory Board for the Medical Engineering Research Facility, Queensland University of Technology (QUT); a Member of the Advisory Committee for the Institute for Future Environments at QUT; a Commercialisation Strategy Advisor for the University of the Sunshine Coast; and holds an Adjunct Professorship in the School of Chemistry, Physics & Mechanical Engineering at QUT. He has held directorships on boards in Australia, Asia and the Pacific Rim for 30 years.

For nine years, Dr Isdale was CEO of The University of Queensland commercialisation company IMBcom (in 2015 he was also interim CEO of QUTbluebox). Dr Isdale began his career as a marine scientist at the Australian Institute of Marine Science in 1981; he was appointed its Executive Director of Business in 1996. He has co-authored more than 50 scientific papers. Dr Isdale was made a Member in the General Division of the Order of Australia (AM) in 2006. He is Chair of the EMF Research Evaluation Panel, and serves on the Strategic Grants Committee.

Role of the EMF Board

The EMF Board is responsible for setting the Foundation's strategic agenda and approving the budget.

The Board is accountable to the members for the attainment of EMF's vision and purpose and for ensuring the ongoing sustainability and growth of the Foundation.

In general, the Board is responsible for, and has the authority to determine, all matters relating to the policies, practices, management and operations of EMF. The Board is required to do everything that may be necessary to effectively carry out EMF's objectives. The Board also has the final responsibility for the successful operations of EMF.

More details about the Board are provided on page 85.

Our leadership team

Role of the EMF executive

Under the guidance of the General Manager, the EMF executive manages the Foundation's operational activities in accordance with the direction of the Board.



BETH CHAPMAN

BBus, CPA

General Manager & Company Secretary

Beth was appointed General Manager in July 2016 and is responsible for overseeing EMF's operations. Beth also continues to be responsible for overseeing all aspects of financial management, company secretarial and statutory reporting obligations for EMF. Beth brings extensive experience to her role from the private, public and not for profit sectors both in Australia and in the United Kingdom, with more than 25 years in senior positions.



TEGWEN HOWELL

BEcon, MEcSt

Research Network Support Manager

Tegwen is responsible for overseeing the EMF Research Support Network. Tegwen brings to her role more than 20 years' health research experience in Australia and Canada. She is an experienced health economist who has worked across the health spectrum, including public health, health economics, health policy, health technology assessment and clinical research. Tegwen has managed several large multisite research projects in emergency medicine and cardiology. In addition, Tegwen has also managed multi-disciplinary teams evaluating clinical, economic, ethical and social implications of emerging health research.



LISA VAN DEN BERG

BSc MSc (Hons)

Research Manager

Lisa has several years experience in university research innovation and knowledge transfer in Australia and New Zealand. In this sector, Lisa worked closely with researchers to identify and develop ways to translate their ideas into practice, focusing on relationship building and the translation of multi-disciplinary projects. Prior to joining EMF, Lisa was a Commercial Manager at QUTbluebox, the Queensland University of Technology innovation and knowledge transfer company. She is committed to fostering research innovation and enhancing the impact of research outcomes through developing strategies, collaborations and partnerships.



JULIA RENAUD

BSc Agr (Hons I), PGradDip J

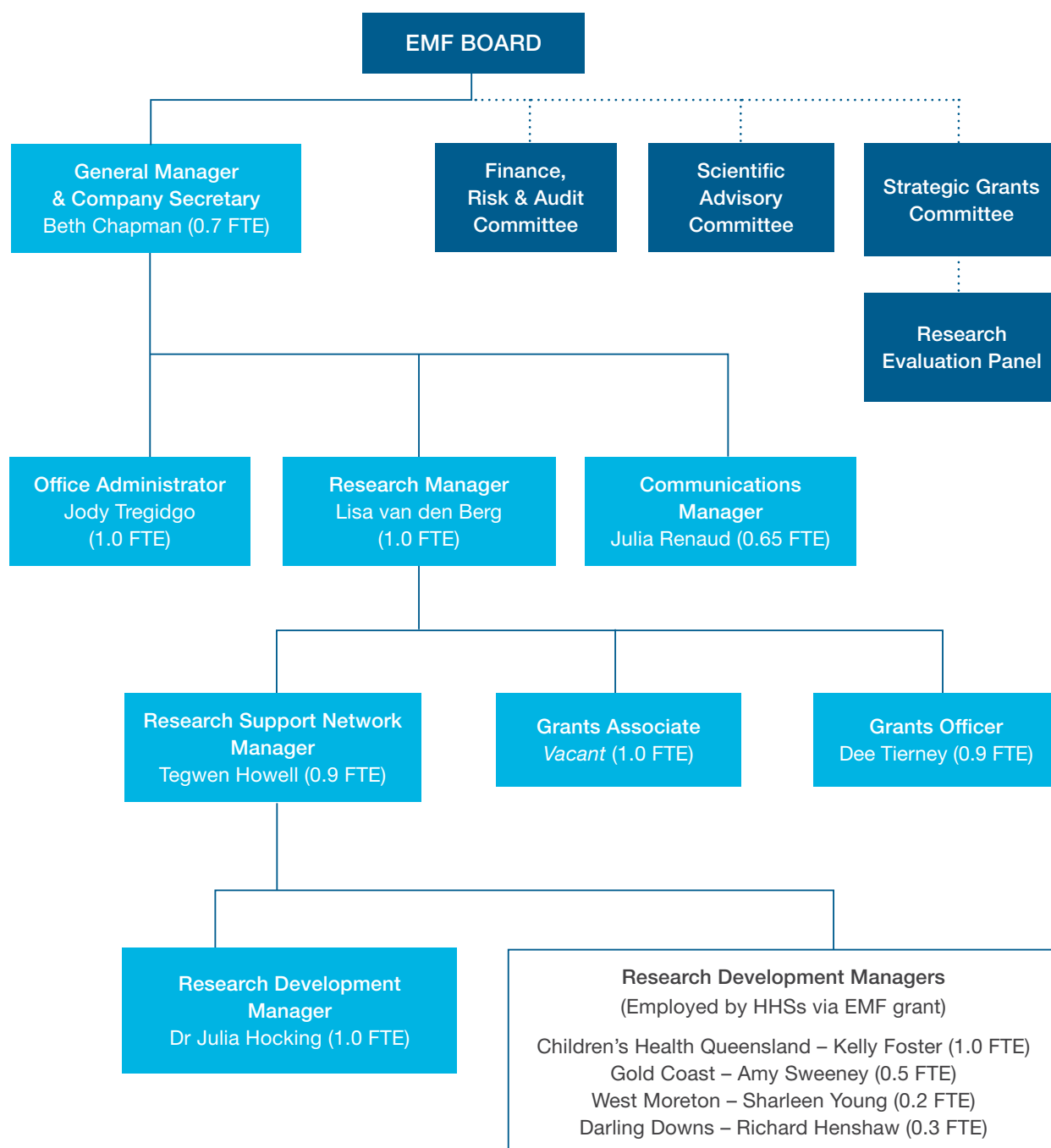
Communications Manager

Julia has more than 20 years' experience in communications and research. Prior to joining EMF, Julia ran a corporate communications consultancy—collaborating with industry, universities, government and start-ups. Julia began her career in research with CSIRO and QIMR Berghofer, before moving into communications with the Leukaemia Foundation. Prior to establishing her consultancy, Julia was the Corporate Development Manager for UniQuest, The University of Queensland's technology transfer company.



Queensland Health Director General, Michael Walsh with EMF Chair, Dr Anthony Bell, at the EMF Research Symposium

Organisational Structure



Organisational structure as at 30 June 2018

Note:

- The Grants Associate is a new position
- Until 18 January 2018, Dr Jonathan Staggs was the Research Support Manager (0.6 FTE).



Purpose, vision and values

EMF's **purpose** is to invest in high-quality translational research directed at improving emergency healthcare for Australians.

.....

EMF's **vision** is to improve emergency healthcare through research, leading to better outcomes for all Australians in a medical emergency and realising economic benefits for the healthcare system.

EMF's values are

SAVING LIVES

We drive patient-centred emergency healthcare research that will deliver improvements in the quality of emergency health services provided in Australia. Our focus is on research that will impact patient care.

EMPOWERMENT

Through our programs, we empower emergency healthcare clinician-researchers. We believe the clinicians at the coal-face are best positioned to lead clinical change.

INNOVATION

EMF fosters research innovation among clinicians. We also encourage our team to 'dare to go beyond' so that we can offer leading research services, programs and opportunities for improving emergency healthcare in Australia.

INTEGRITY

We run highly-transparent and scientifically-rigorous grants evaluation and awarding processes.

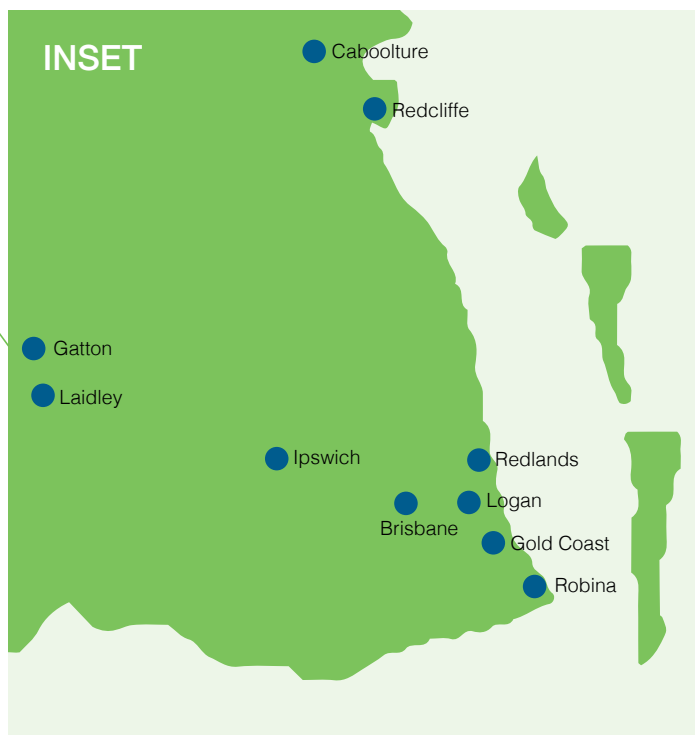
RESPECT

We treat each other, our stakeholders and our researchers with respect and consideration.

The reach of our research activity

We strongly encourage research collaborations in the projects we fund as well as through the work of our Research Support Network. In 2017/18, many of our clinicians were actively collaborating with groups in Queensland, Australia and overseas.





Areas of health we impact

Translation

This financial year saw the completion of several EMF-funded projects, which have provided a strong evidence-base for the clinical adoption of new programs, diagnostic devices and sedatives in Queensland. There was also the continued roll out of new clinical protocols in the State's emergency departments.

AGED CARE

Research we funded saw the expansion of an intervention program to help Brisbane-based aged care facilities provide greater medical treatment for residents at home. The 'Hospital in the Nursing Home' program is leading to significant reductions in emergency department presentations and a \$17 saving for every \$1 invested by Queensland Health.

EMF also awarded a new grant to evaluate the Queensland Health-funded pilot of the Geriatric Emergency Department Intervention (GEDI) in Cairns and Ipswich Hospitals. The program is designed to fast-track the care of the elderly through the hospital, which sees this vulnerable patient group receive better care while reducing their length of stay in hospital.

TRAUMA

Following the funding of three inter-related trauma trials by EMF, Queensland's major trauma emergency departments are now using a point of care (POC) device to monitor haemorrhaging in trauma patients in real time. They are the only Australian emergency departments using POC testing (either ROTEM or TEG) to manage blood products in trauma patients from the time they arrive at hospital.

CARDIAC

Another key area EMF-funded research is impacting is in chest pain. This year, there was the continued Queensland Health-funded roll out of the IMPACT protocol to Queensland emergency departments. EMF funded the development of this protocol, which is cutting the time to diagnosis for patients with a low to medium risk of a heart attack.

QUEENSLAND AMBULANCE SERVICE (QAS)

Our research grants provided QAS with the evidence-base for including a portable ultrasound device for their trauma response paramedics to use in diagnosing patients with internal injuries or bleeding en route to hospital.

An EMF-funded evaluation also confirmed the benefits of the QAS introducing an alternative sedative, Droperidol, for paramedics to administer for calming aggressive patients. Following their research, other services in Australia and internationally are also introducing the sedative.



Health issues we are tackling

We are committed to driving improvements to emergency healthcare. Our clinicians are leading active projects investigating a wide range of diseases and conditions, many of which are national and international **health priorities**.

Key research areas:

- Aged care
- **Cardiovascular**
- Child health
- Health services/improvement
- **Mental health**
- Pain management & sedation
- Pre-hospital care
- Respiratory
- **Sepsis**
- Trauma

Other:

- **Antibiotic resistance and MRSA**
- **Asthma**
- Brain and spinal cord
- Cannulation
- Domestic and family violence
- Headaches
- Indigenous health
- Infections
- **Injury prevention and control**
- Medication overdose
- Musculoskeletal injury
- Point of care testing
- Rural healthcare
- Toxicology & toxinology

Our economic impact

In 2017/18, the economic impact of EMF was considerable: seven research projects we helped fund had been implemented clinically and these were delivering economic benefits to the healthcare system. An additional two research evaluations funded by EMF demonstrated significant cost savings from the adoption of these programs.

NORTHERN TERRITORY

\$21.75 million

Annual cost benefits in reduced aeromedical retrievals due to point of care testing in remote health centres. Economic evaluation was part of an EMF-funded Rural and Remote project.

QUEENSLAND

\$33.67 million

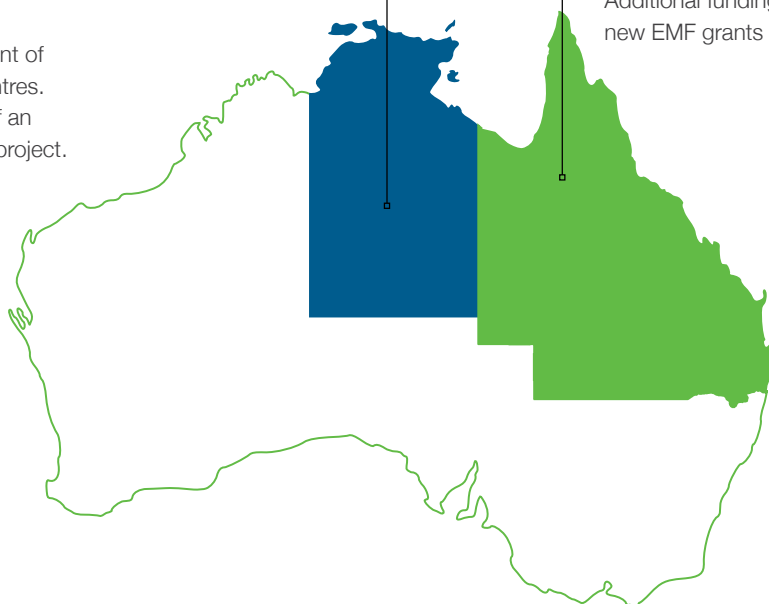
Annual economic benefits from 8 EMF-funded Queensland projects

\$1.2 million

Awarded in EMF grants for 2017/18

\$2.2 million

Additional funding associated with new EMF grants



Our organisational strategy

In 2015/16, EMF released an interim five-year strategy. This strategy includes several clear objectives such as establishing both national and additional state-based emergency medicine research programs. The EMF Board reviewed this strategy and its operational objectives in January 2018, but no changes were made.

Objective

Performance in 2017/18



Establish a national research program

The EMF Board commissioned an independent evaluation of EMF's impact on emergency healthcare. This evaluation will form the basis of a national and state-based approach to funding an expanded EMF offering. **See page 58.**



Identify opportunities for state-based research programs

EMF identified Western Australia and Tasmania as initial states that could benefit most from EMF research grant programs. **See page 46.**



Expand the Research Support Network

The RSN Manager worked to develop new relationships with Queensland hospitals and HHSs not formally covered by the RSN. The Manager also met extensively with HHSs with which we hold collaborative agreements in an effort to secure ongoing funding for the service. **See page 32.**



Targeted corporate development

Our team successfully secured sponsorships from industry and universities for our Research Symposium. **See page 41.**



Grow the Queensland Research Program

Significant changes were made to the Queensland Research Program, which allows EMF to offer grants to all Queensland Health clinicians providing direct clinical care to patients in an emergency. By opening up the Program to a broader base of healthcare professionals, we anticipate a continued growth in research activity in the State as well as increased demand for our grants. **See page 24.**



Raise the profile of EMF

Through our Research Symposium and increased social media presence, we were able to grow awareness of EMF and its research portfolio both with Australia and internationally. **See page 44.**



Knowledge mobilisation

To help facilitate the clinical translation of EMF-funded research (via knowledge mobilisation), we ran two workshops for our clinician-researchers. The first was run as part of our Research Symposium in 2017, while the second was offered as a stand alone workshop in 2018. **See pages 40-41.**





What we do

Driving innovative, evidence-based emergency research led by clinicians: doctors, nurses, paramedics, allied health professionals and others.

Queensland Research Program



We awarded 19 grants worth \$1.2M this year, following requests for 2.4 x more funding. More than half of applicants were new principal investigators.

Established in 2008 and fully funded by Queensland Health, the Queensland Research Program is EMF's flagship grant program.

Annually, EMF receives \$2.2 million (including GST) from Queensland Health to administer this Program, which is aimed at fostering research capability and capacity in emergency medicine in Queensland.

Historically, EMF directed this Program at research led by emergency medicine specialists based in Queensland's public emergency departments. However, in 2018 the EMF Board approved significant changes to allow EMF to expand this Program to the broader Queensland Health emergency healthcare workforce.

New grants awarded

In 2017/18, EMF awarded 19 new grants totalling \$1,214,003 for two grant rounds (Rounds 27 and 28). A total of 35 applications were received for these rounds from 10 Queensland HHSs, requesting a total of \$2,971,263 in funding.

The applications were put through a highly rigorous and transparent review process. This involved an initial review by an independent peer panel, followed by EMF's Strategic Grants Committee and with final Board approval required.

Of the successful projects, four secured additional leveraged funding and a fifth also had NHMRC funding. Overall, the 19 projects were associated with \$2 million in leveraged, linked or in-kind funding.

A quarter of the projects will potentially help paediatric research, with projects including a rapid diagnostic for sepsis; a potential new treatment for severe trauma; and the trialling of a portable lung ultrasound to quickly diagnose pneumonia.

Other projects aim to improve the emergency medical care of patients affected by issues as wide ranging as domestic violence, drug overdose, lung disease and whiplash. EMF also funded projects to evaluate emergency health services for the elderly and aeromedical retrievals as well as to reduce the over prescription of antibiotics.

In total, 14 of the projects are clinical studies, which will involve the recruitment or analysis of 36,181 patients or their records, respectively. EMF is funding the involvement of 10 Queensland hospitals in the largest trial, the APHIRST-Gap study, which will involve recruiting 3200 children from across Australia and New Zealand with head injuries.

There was a 38 per cent decline from the previous year in total funding requested (2016/17: \$4.8M; 2017/18: \$2.9M), although application numbers only dropped from 20 to 19. This fall was largely reflective of the higher value Program and Research Scholarship schemes not being offered in 2017/18 (these schemes were only offered every second year, but both were discontinued by EMF from June 2018).

COMPETITIVENESS

In the past five years, the Queensland Research Program has become increasingly competitive, with applications rising by 59 per cent (2013/14: 20; 2017/18: 35). Despite this increase, EMF has continued to award grants, on average, to 50 per cent of applicants.

The total amount of funding requested since 2013/14 has fluctuated between \$2.8 million and \$4.8 million, with a median ask of \$3.1 million across the five years.



REACH

The EMF Queensland Research Program is increasingly reaching across the breadth of the State. In the past five years, Queensland's three largest HHSs – Metro North, Metro South and the Gold Coast – have secured 52 per cent of EMF grants (Metro North: 23%; Gold Coast: 19%; Metro South: 15%) and 62 per cent of grant funding (Metro North: 23%; Gold Coast: 20%; Metro South: 19%).

However, in 2017/18 there was a distinct change to this trend, with EMF awarding grants to 10 out of the 16 HHSs and 72 per cent of the funding awarded outside the two large Brisbane Metro HHSs.

In terms of 'Major Referral', 'Urban District' and 'Rural/Regional' facilities: in 2017/18, the Major Referrals received 47 per cent of EMF funding. The Rural/Regional and Urban District hospitals each received 27 per cent of the funding.

With regard to specific hospitals in 2017/18, Logan Hospital, which has one of the State's busiest emergency departments, was successful in securing two grants; Nambour and Rockhampton hospitals were awarded two of the largest grants; while Mackay Hospital received its first EMF grant.

These changes in the Program's reach were largely driven by EMF marketing activities and its RSN. The RSN in particular has played a pivotal role in enabling research in hospitals outside the metropolitan hospitals as well as upskilling clinicians in regional rural HHSs who are new to research.

NEW INVESTIGATORS

The number of first-time investigator applications has continued to increase. In the five years prior to the introduction of the RSN, new investigators comprised, on average, 35 per cent of applicants. In 2016/17, when the first impact of the RSN was felt on EMF, 63 per cent of applicants were new investigators. This dropped slightly to 57 per cent in 2017/18, but still remained significantly above the historical average.

53% of our grant funding was awarded outside major referral emergency departments

Pictured above: 2017/18 EMF grant recipients and/or research team members at the EMF Grants Award Ceremony. Back row (L-R): A/Prof Luregn Schlapbach, Dr Ben Lawton, Dr Peter Gillies, Prof Gerben Keijzers, Dr Shane George, Dr Anthony Bell, Dr Rose Jones, Andrea Taylor, Dr Mark Edwards, Dr Pieter Nel. Front row (L-R): Dr Rob Eley, Dr Volha Pankevich, Dr Katherine Isoardi, Dr Kerina Denny, Dr Jason Chan, Prof Marianne Wallis, Prof Louise Cullen, Dr Alan Yan.

We're making changes to our Queensland Research Program

From June 2018, it's not just doctors who can apply...

In June 2018, EMF introduced significant changes to expand the Queensland Research Program.

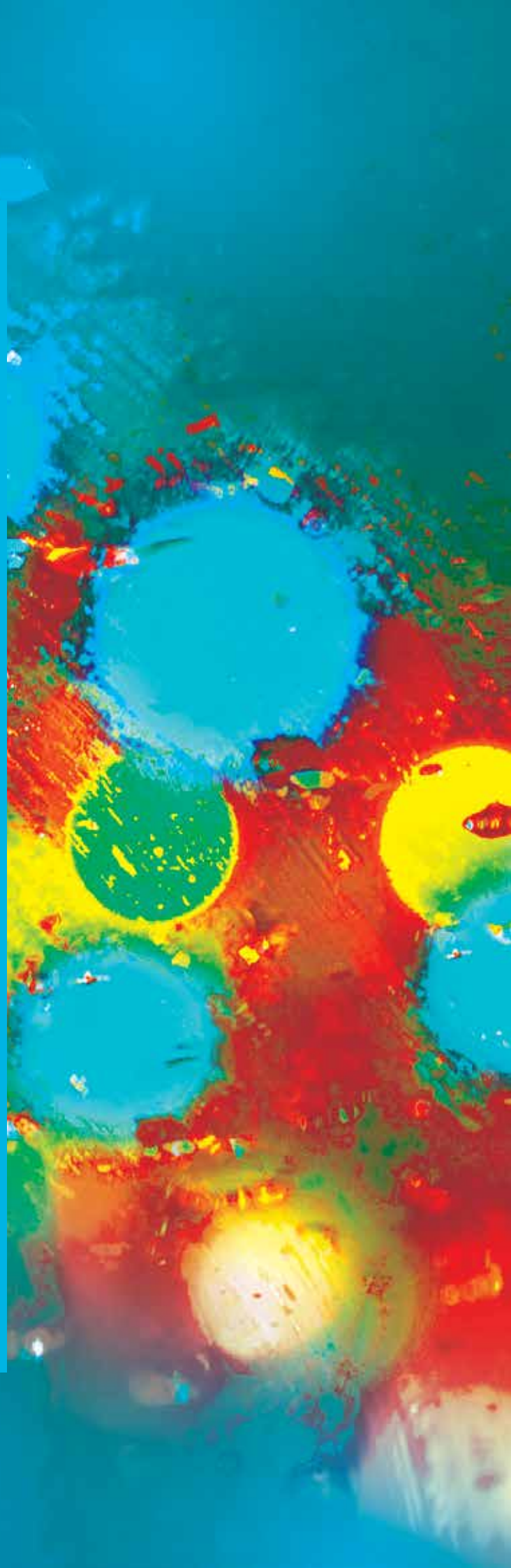
The Board believes these changes were critical to promoting innovative clinical research into the future as well as fostering leading researchers.

Since its launch in 2008, the Queensland Research Program has successfully nurtured a vibrant and proactive research culture among Queensland emergency doctors. With this cohort of mature researchers and an extensive research infrastructure in place, the EMF Board decided to expand the Program to support growth across the entire emergency healthcare workforce in Queensland Health.

From Round 30, which opened on 25 June 2018, two new grant schemes were made available: *JumpStart* and *Leading Edge*.

For the first time in EMF's history, all Queensland Health-employed clinicians providing direct clinical care to patients in an emergency can apply for an EMF Queensland Research Program grant. This includes, nurses, paramedics, allied health professionals and rural generalists.

In addition to these changes, EMF also increased the funding for three grant schemes available to Emergency Specialists (*Trainee*, *Staff Specialist* and *Project*). To allow for this increase, from February 2019 (Round 31), EMF will no longer offer the following three less popular – and more expensive – grant schemes: *Program*, *Capacity Building* and *Scholarships*.



New grants: highlights



FASTER CARE FOR THE ELDERLY

EMF is funding the evaluation of a pilot trial of the Geriatric Emergency Department Intervention (GEDI) program at Cairns Hospital and Ipswich Hospital in Queensland. GEDI is a unique nurse-led, doctor-championed service model, which fast-tracks patients aged 70 and over through the emergency department. The pilot trial is being funded by the Queensland Health Clinical Excellence Division.

Lead hospital: Nambour General Hospital



EMERGENCY DEPARTMENTS TARGET DOMESTIC VIOLENCE

Through this State-wide study, emergency clinicians could help turn the tide of domestic and family violence (DFV) and make Queensland a leader in DFV detection in hospitals. Emergency departments are reviewing their processes to identify how often clinicians screen patients for instances of DFV, and the number of adult cases being referred to social workers. To date, 10 emergency departments have joined this study.

Lead hospital: GCUH



RAPID ONSITE TEST FOR BROWN SNAKE BITE

In collaboration with James Cook University, emergency specialists are assessing a point of care diagnostic device to analyse brown snake venom in human blood. Ultimately, the team hopes to use the device to work out the right dose of antivenom to give to a patient.

Lead hospital: The Townsville Hospital



INCREASING SURVIVAL RATES FOR TRAUMATICALLY INJURED CHILDREN

In this multisite trial, the research team is hoping to improve survival outcomes for children with traumatic haemorrhaging. They are comparing two types of fibrinogen replacement (clotting proteins used to control bleeding).

Lead hospital: Gold Coast University Hospital (GCUH)



RAPID DIAGNOSIS OF SEPSIS IN ACUTELY ILL CHILDREN

In this State-wide trial, clinicians are assessing whether genetics hold the key to faster diagnosis and treatment of sepsis, which claims the lives of one million children globally every year. The team leveraged EMF's funding to secure an additional \$125,000 in funding from the Gold Coast University Hospital Foundation, Mater Research and Far North Queensland Hospital Foundation.

Lead hospital: Lady Cilento Children's Hospital (LCCH)



DATA LINKAGE & PATIENT OUTCOME STUDY: AEROMEDICAL SERVICES IN CENTRAL QUEENSLAND

This first-of-its-kind study seeks to take the next step in patient-centred outcomes research and resource allocation planning by linking together independent emergency department, aeromedical, hospital and death databases. Central Queensland HHS contributed \$150,000 in matched funding for this project.

Lead hospital: Rockhampton Base Hospital



TRIALLING TWO ANTIDOTE REGIMENS FOR PARACETAMOL OVERDOSE

Paracetamol is the commonest medication taken in an overdose and the leading cause of acute liver failure in the developed world. In this study, clinicians are assessing two regimens for the antidote, acetylcysteine. The research is a collaboration between clinicians at the Princess Alexandra Hospital (PAH) and the Calvary Mater Newcastle and Prince of Wales hospitals.

Lead hospital: PAH



REDUCING REGIONAL EMERGENCY DEPARTMENT PRESENTATIONS

Working in collaboration with the University of Tasmania and the University of Southern Queensland, Ipswich clinicians aim to develop a regional strategy for reducing non-urgent presentations in emergency.

Lead hospital: Ipswich Hospital



ANTIBIOTICS IN THE EMERGENCY DEPARTMENT

There is no quick test that an emergency doctor can perform to accurately decide who needs antibiotics or what type of antibiotic to prescribe. In this study, the research team is looking at how many patients are given antibiotics in the emergency department; what proportion of those antibiotics are not required or have been given incorrectly; and the factors associated with poor antibiotic choices.

Lead hospital: GCUH



REDUCING AVOIDABLE COPD EMERGENCY PRESENTATIONS

Chronic Obstructive Pulmonary Disease (COPD) is a lung disease and the second leading cause of avoidable hospital admissions in Queensland. In this multisite project, the Darling Downs research team is collaborating with the University of Southern Queensland along with Ipswich Hospital and the Gold Coast University Hospital to develop an integrated model of healthcare for COPD patients.

Lead hospital: Toowoomba Hospital



PREVENTING CHRONIC PAIN AFTER WHIPLASH INJURY

In this trial, the team is investigating the feasibility and potential effectiveness of using the medication, pregabalin, combined with evidence-based physiotherapy advice/exercise to treat acute whiplash injury. The team includes academics from the Menzies Health Institute Queensland at Griffith University, which has contributed an additional \$60,000 in funding.

Lead hospital: GCUH



USING POINT OF CARE LUNG ULTRASOUND FOR CHILDREN WITH RESPIRATORY ILLNESSES

Clinicians are assessing the effectiveness of trainees performing lung ultrasound examinations to identify respiratory illnesses such as bronchiolitis, pneumothorax and pneumonia in children presenting with a cough, shortness of breath and hypoxia. If successful, the study could lead to the introduction of portable lung ultrasound machines for diagnosing these illnesses instead of x-rays.

Lead hospital: Logan Hospital



MEDICATION-RELATED EMERGENCY DEPARTMENT PRESENTATIONS

In this project, the team is investigating the incidence of patients presenting to emergency with complications due to a medication error. The research could lead to a more integrated healthcare system and fewer patients suffering from medication-related harm.

Lead hospital: Royal Brisbane and Women's Hospital (RBWH)



SINGLE CENTRE VALIDATION OF THE CANADIAN SYNCOPE RISK SCORE

This team is leading a trial to assess a new tool, the Canadian Syncope Risk Score, for identifying high-risk patients who present to the emergency department experiencing 'syncope' or fainting. The trial will be carried out in collaboration with the Australian Centre for Health Services Innovation (AusHSI), and the QIMR Berghofer Medical Research Institute.

Lead hospital: Redcliffe Hospital



ASSESSING CHILDREN'S HEAD INJURY: VARIATION IN CT SCAN USE (APHIRST-GAP)

EMF funded the involvement of 10 Queensland hospitals in the APHIRST-Gap study, which will recruit 3200 children from across Australia and New Zealand with head injuries. The PREDICT network project is an extension of the APHIRST study and includes regional hospitals. The study will inform new clinical guidelines for the diagnosis of head injuries in children.

Lead hospital: LCCH



DERMATOLOGY IN THE EMERGENCY DEPARTMENT

With 1 in 25 emergency department presentations due to a skin condition, this research team is hoping to improve our understanding of the types of skin complaints doctors are seeing and the treatment required. The data will be collected at one large emergency department and could help Queensland Health better plan dermatology services.

Lead hospital: PAH



CUTTING UNNECESSARY X-RAYS

A Mackay-based research team is looking to implement guidelines for emergency doctors to follow to reduce the number of unnecessary x-rays. The findings will be used to inform other regional and metropolitan hospitals throughout Queensland.

Lead hospital: Mackay Base



UNDERSTANDING ASTHMA IN CHILDREN

EMF is funding Queensland sites to take part in an Australasian trial, led by the PREDICT network. In the study, clinicians are looking at how more than 18,000 children with asthma are treated and how often they suffer complications from severe asthma.

Lead hospital: Logan Hospital



CAPACITY BUILDING GRANT

Redcliffe Hospital Emergency Department successfully secured a Capacity Building grant to build their team's ability to undertake research.



180 journal articles, book chapters and conference papers/posters were published this year regarding EMF-funded research.

Program outcomes

EMF's decade-long, merit-based research funding and capacity building in emergency healthcare has led to world-class research and translated clinical outcomes for the State.

This return on investment was evident in the 12 final reports submitted by researchers to EMF in 2017/18. Each of these completed projects has the potential to significantly improve patient care or emergency healthcare services. In particular, two trauma-related projects led to the adoption of new diagnostic devices by the QAS and major trauma emergency departments, which are helping to reduce deaths. Other projects related to sepsis, heart disease, ladder injury and decompression illness look set to influence or change guidelines.

PUBLICATIONS

The high-quality research output by EMF-funded clinicians was also demonstrated by the 180 publications for 2017/18 (80 journal articles, two book chapters and 98 conference papers/posters) as well as an additional 15 published electronically ahead of print.

Significantly, a landmark EMF and NHMRC-funded study, known as PARIS I, was published in the prestigious *New England Journal of Medicine* in March 2018. The trial was led by clinicians at the Lady Cilento Children's Hospital (LCCH) and the PREDICT network.

In the last five years, journal articles related to EMF projects had a total of 4809 citations. On average, each paper was cited 15.4 times.

COLLABORATIONS

The multiple collaborations facilitated through our Queensland Research Program are an important element of EMF developing emergency medicine research capacity across the State. By fostering emergency medicine research in a concerted and collaborative manner, EMF aids the translation of research outcomes to other emergency departments around the State, nationally and potentially internationally.

In 2017/18, EMF-funded Queensland researchers actively collaborated with more than 129 Australian and overseas hospitals, universities, research institutions, government departments and other organisations. Many of these organisations collaborated on more than one EMF-funded project.

To help build inter-agency relations and research collaboration opportunities, EMF continued as a member of Life Sciences Queensland; an Associate Member of the Queensland Alliance for Mental Health (QAMH) – the main body representing the mental health sector in Queensland; and an Associate Member of Leading Age Services Australia (LASA), which is the national peak body representing and supporting providers of age services across residential care, home care and retirement living.

ADDITIONAL FUNDING

In late 2017, an LCCH research team secured a \$2.63 million NHMRC grant to extend their EMF-funded pilot study looking at using high flow nasal cannula treatment in the emergency department for young children with acute respiratory failure. (The new clinical trial, called PARIS II, will include up to 20 participating centres in Australia and New Zealand.)

This is the eighth NHMRC grant awarded to Queensland clinicians to progress EMF-funded projects. A further 10 NHMRC grants are linked to EMF projects.

EMF is aware of more than \$54 million in additional funding associated with grants awarded since 2008/09. Projects receiving grants in the past five years account for \$15.1 million of this funding.



Bronchiolitis study published in leading medical journal

In the PARIS I clinical trial, researchers found that by using nasal high-flow therapy to treat infants with the common respiratory illness, bronchiolitis, from arrival in the emergency department, they could halve the number of babies requiring a higher level of care, including intensive care. Outcomes from the EMF and NHMRC co-funded trial were published in the prestigious *New England Journal of Medicine*.

Image courtesy of Children's Health Queensland.

Final reports: highlights



PARAMEDICS USING ULTRASOUND TO SPEED UP TIME TO TREATMENT FOR TRAUMA PATIENTS

The QAS was the first service in Australia, and one of the few internationally, to equip paramedics with ultrasound technology to diagnose patients with internal bleeding en route to hospital. EMF funding allowed clinicians to evaluate the use of the technology and its effectiveness.

Lead hospital: RBWH (and QAS)



POTENTIAL NEW DIAGNOSTIC FOR PATIENT FAINTING DUE TO HEART ATTACK

As part of a large, multisite international study, Queensland clinicians helped to identify biomarkers, which could improve the early detection of cardiac-related syncope, or fainting.

Lead hospital: RBWH



NEW TOOL TO RAPIDLY IDENTIFY TRAUMA PATIENTS AT RISK OF SEVERE BLEEDING

Following an EMF-funded pilot trial, four major Queensland emergency departments[^] are using rapid point of care testing to identify and treat trauma patients at risk of bleeding to death due to Trauma Induced Coagulopathy. They are the only Australian emergency departments adopting either, ROTEM[®] or TEG[®], to manage blood products in trauma patients from the time they arrive at hospital.

Lead hospital: GCUH



UNDERSTANDING AUSTRALIA'S ONLY ONSITE 24/7 EMERGENCY DEPARTMENT SOCIAL WORK SERVICE

This was the first-ever study of Australia's only 24/7 onsite emergency department social work service at the RBWH. It led to improvements in the service as well as impacting services nationally and internationally. The extensive interest generated by the project saw the launch of an Australasian research network called FunDEmentals by EMF.

Lead hospital: RBWH



USING NITROX TO PREVENT DECOMPRESSION ILLNESS IN SHALLOW DIVES

North Queensland clinician-researchers trialled nitrox gas in shallow dives to see if it could reduce the risk of the 'bends' — their work could lead to a change in gas used for recreational and commercial/research diving. This research was a collaboration between The Townsville Hospital and James Cook University.

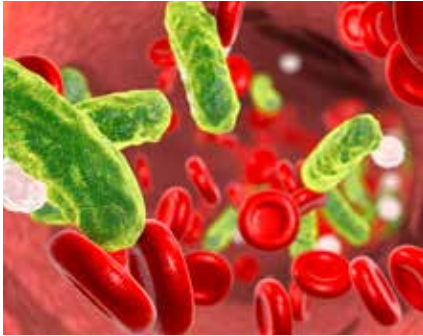
Lead hospital: The Townsville Hospital



EMERGENCY CLINICIANS IDENTIFY WAYS TO PREVENT LADDER INJURIES

New data from this study will inform future safety campaigns to reduce ladder falls in Australia. The research team found that most falls occurred among older men using a ladder at home due to ladder movement and slips or missteps, with the main contributing factor a combination of user features and flaws in ladder setup. The collaborative project involved clinicians from Nambour General Hospital and the Princess Alexandra Hospital along with researchers from the Queensland University of Technology and The University of Queensland.

Lead hospital: Nambour General Hospital



NEW ANIMAL MODEL SHEDS LIGHT ON SEPSIS

A team based at The Prince Charles Hospital collaborated with researchers internationally to successfully develop a 'two-hit' sepsis animal model, to replicate inflammation caused by infection and shock. The team also gained an insight into the complexities of blood transfusion.

Lead hospital: PAH



DIAGNOSING HEART ATTACK IN PATIENTS WITH PACEMAKERS

Brisbane clinicians took part in a large international study to improve the diagnosis of a heart attack in patients with pacemakers.

Lead hospital: RBWH



BUILDING RESEARCH CAPACITY IN NORTHERN QUEENSLAND

The Townsville Hospital reported on the outcomes from an EMF Capacity Building grant. The grant led to significant research activity and outputs for the Hospital's Emergency Department.



DEDICATED NURSE SHORTENS WAITING TIME FOR PATIENTS ARRIVING VIA AMBULANCE

Researchers found an Emergency Department Ambulance Offload Nurse (EDAON) can play an important role in reducing patient treatment delays. In this collaborative research project – involving a major Queensland emergency department and the QAS – the EDOAN led to more patients arriving by ambulance being offloaded within 30 minutes. The time taken to see a doctor was also slightly shorter as was the total length of emergency department stay.

Lead hospital: GCUH



PHD SCHOLAR INVESTIGATES CHILDHOOD STATUS EPILEPTICUS AND THE PROCESS OF INFORMED CONSENT FOR CHILDREN IN EMERGENCY DEPARTMENT STUDIES

In this project, Dr Jeremy Furyk identified nine priority research questions for the life-threatening condition, status epilepticus. He also ran several surveys and found Australians supported researchers using deferred consent for clinical trials involving children in emergency situations.

Lead hospital: The Townsville Hospital

Research Support Network (RSN)



Our RSN team assisted Queensland emergency clinicians apply for 21 EMF grants and 22 grants from other funding bodies: 43 research grants

The RSN is a unique people-based infrastructure designed to develop a research-ready emergency healthcare workforce in Queensland.

EMF committed \$2,043,073 to develop, pilot and implement the RSN as part of its Queensland Research Program. The network is now in its third year of operations and delivering promising outcomes: increasing research activity; developing research capacity; growing multi-disciplinary collaborations; and facilitating the knowledge mobilisation of emergency medicine research.

FACILITATING RESEARCH ACTIVITY

The RSN is realising an increasing research capacity across Queensland and building broad national and international collaborations.

EMF tracks research activity generated by the RSN through a range of performance metrics, which are collected (by calendar year) for each of the three hubs.

In the three years the network has been operational, there has been a substantial increase in research-active emergency clinicians (2015: 23; 2017: 181); engagements with potential collaborators (2015: 9; 2017: 276); and presentations delivered by emergency clinicians (2015: 6; 2017: 61).

The research infrastructure of Queensland emergency departments has also benefitted from the RSN. At the time the RSN commenced, no site covered by a hub had an emergency medicine research strategy in place. By the end of 2017, 14 sites had developed emergency department research strategies. In addition, research capacity at sites supported by a hub had also increased from 5.5 FTE to 8.5 FTE.

The network has played an important role in engaging regional, rural and remote Queensland hospitals in research.

Before the RSN, EMF had received grant applications from eight of the 16 HHSs in Queensland. However, since the launch of the RSN, EMF has received applications from an additional six HHSs in regional Queensland (with a Torres and Cape Expression of Interest received in the 2018 Rural and Remote grant round and a Wide Bay application in Round 29, which opened in February 2018).

The RSN Manager has also facilitated a collaborative non-EMF research project with Central West HHS and is working with an eighth HHS, the South West HHS, on potential studies including an Indigenous project looking at 'culturally appropriate end of life information in the emergency department'.

INCREASING GRANT APPLICATIONS

The RSN supports clinicians applying for research grants, both EMF and non-EMF. In 2017/18, the RSN team helped Queensland clinicians apply for 43 research grants: 21 EMF grants (including Rounds 27, 28 and 29 for the Queensland Research Program as well as the Rural and Remote Research Program) and 22 grants for other funding bodies, including the NHMRC, Private Practice Trust Funds and various hospital foundations

The team was also involved in 77 per cent of the EMF grant applications for Rounds 27 and 28 with 16 of the 19 grants awarded having RSN support in some capacity. Although, this level of engagement with grant applications was unforeseen in the design of the RSN, it points to the importance (and possible necessity) of providing skilled support for emergency medicine clinician-researchers.



RSN Team members Dr Julia Hocking, Ms Amy Sweeny, Ms Tegwen Howell, Mr Richard Henshaw, Ms Sharleen Young and Ms Kelly Foster

BUILDING COLLABORATIONS

The RSN is playing a critical role in establishing collaborations between emergency medicine clinicians, allied health, government, community organisations, Primary Health Networks (PHNs), pre-hospital clinicians and academics.

When measured across the hubs, there were 33 collaborative research projects in 2015/16. By 2017/18 this had grown to 93 projects. There also has been a rise in engagement with universities, with collaborative EMF-funded projects increasing from five to all eight Queensland-based universities.

RURAL AND REMOTE HOSPITALS

The RSN has been instrumental in developing a research-led emergency healthcare workforce in regional, rural and peripheral hospitals (within larger HHSs), who are benefiting from the collaborative efforts facilitated by the RSN.

In 2017/18, the RSN team collaborated with 35 sites, including 11 rural or remote hospitals with less than 20,000 presentations annually. Our team worked with these small remote Queensland hospitals to develop quality improvement projects, develop research protocols and navigate ethics and governance processes as required. Of the 11 small rural and remote sites, five joined a clinical study and an additional site submitted a grant application.

The RSN Manager works closely with clinicians at hospitals within the eight HHS districts not covered directly by an RSN hub. These hospitals are predominantly regional and remote sites from Mackay, north to Cape York and west to Mt Isa. Clinician-researchers at these sites are supported in participating in multisite projects. In addition, the Manager also liaises with ambulance and police services to facilitate collaborative research.

Examples of rural and remote participation in research:

- Toowoomba and Ipswich hospitals partnered with the GCUH through the RSN to develop a three-site research project, which was awarded EMF funding in 2017/18. The research team is investigating COPD presentations to emergency departments and collaborating with investigators from academia and the primary health networks. There is the potential for non-government organisations to help translate research outcomes nationally.
- Mackay Base Hospital, Hervey Bay Hospital and Maryborough Hospital, all small regional hospitals, were encouraged and supported by the RSN to be joint applicants for a 2017/18 EMF-funded domestic violence study.
- The rural hospitals of Gatton, Dalby and Kingaroy became involved as collaborating sites on EMF-funded projects through the support and networking efforts of the RSN team.

SOURCING FURTHER FUNDING FOR THE RSN

With capped investment for EMF's Queensland Research Program and limited financial reserves, EMF needs to secure systemic, co-funding for the RSN from 2018/19 to maintain and expand the program.

Our team engaged in a broad range of meetings with both Queensland Health and the HHSs' leadership during 2017/18 to negotiate a commitment to the shared cost of providing the RSN. We were successful in securing commitments from several HHSs. However, neither the HHSs collectively nor Queensland Health were willing to contribute to the costs of providing the RSN. Consequently, the RSN will cease to operate in some HHSs, which is predicted to lead to a decline in research activity in these locations.

The RSN structure

The RSN operates via a ‘hub-and-spoke’ model, which has been trialled supporting eight Queensland Health HHSs (with which EMF holds individual collaborative agreements).

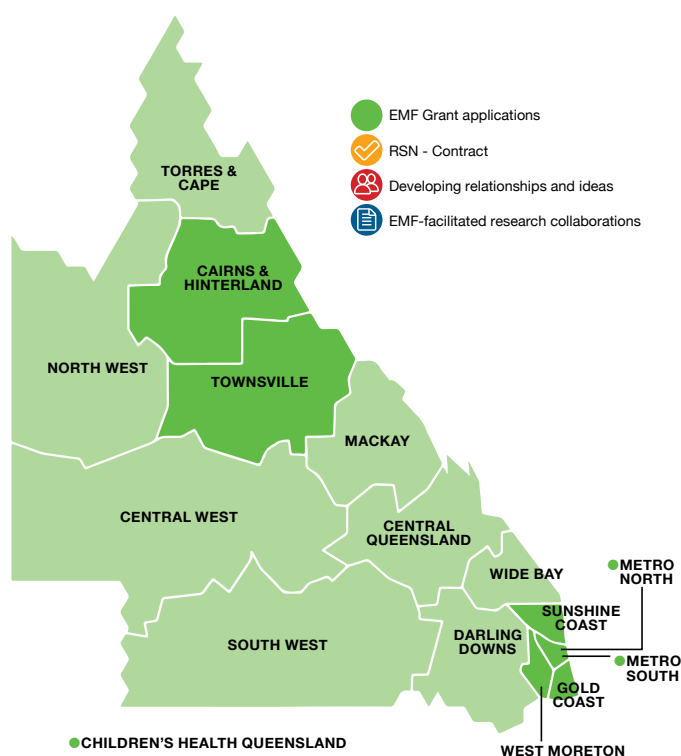
Each hub has a dedicated full-time-equivalent (FTE) Research Development Manager (RDM) – funded by EMF – that engages with several HHSs. An RSN Manager (0.9 FTE) coordinates the RDMs and liaises with and supports clinicians in Queensland HHS areas not covered by the hubs.

The RSN currently includes three hubs:

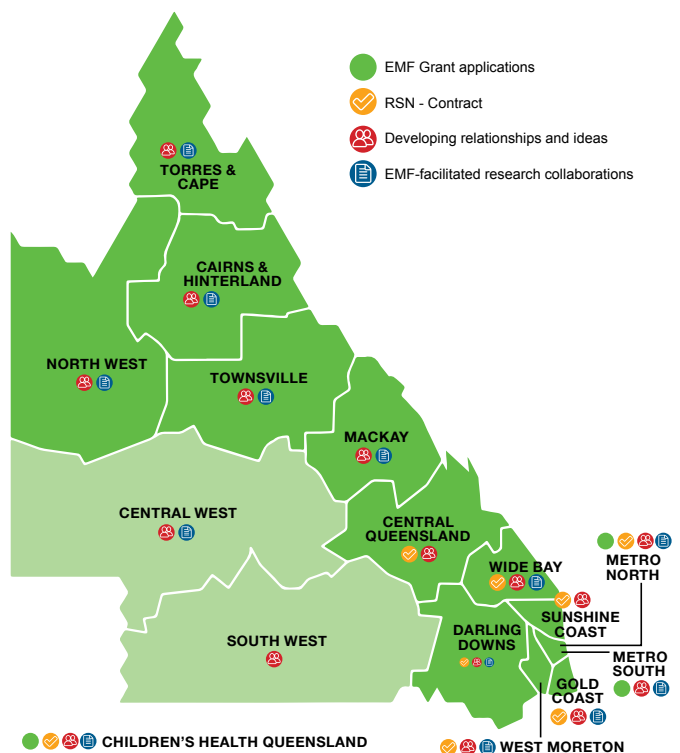
- **Gold Coast HHS/West Moreton HHS/Darling Downs HHS hub:** comprises three part-time RDMs based at the largest hospital within each HHS.
- **Children’s Health Queensland HHS/PREDICT hub:** based at LCH and supported by a single RDM. This position is predominantly funded by a grant from EMF, with additional funding from the PREDICT network. The RDM provides support to paediatric clinicians across Queensland as well as facilitating PREDICT projects.
- **North of the River hub:** the RDM for this hub is highly mobile, providing support to Redcliffe Hospital and Caboolture Hospital within the Metro North HHS; Sunshine Coast HHS; Wide Bay HHS; and Rockhampton Base Hospital.

EMERGENCY MEDICINE RESEARCH ACTIVITY GENERATED BY THE EMERGENCY MEDICINE FOUNDATION IN QUEENSLAND HEALTH HOSPITAL AND HEALTH SERVICES PRE (MAP 1) AND POST-RSN (MAP 2)

Map 1: PRE-RSN (2007/08-2014/15)



Map 2: POST-RSN (2015/16-2017/18)





Thursday Island joins sepsis study

In 2017, EMF awarded a \$100,000 grant for a Queensland-wide study of acutely ill children presenting with suspected sepsis to Emergency Departments.

Led by LCCH clinicians, the research team is investigating gene-expression-based tests, which could potentially provide a more accurate diagnosis of sepsis in children, quicker test results and lead to improved treatment.

The Thursday Island Hospital Emergency Department, which is located 39 kilometres off Queensland's Cape York Peninsula in the Torres Strait, was encouraged and supported by a local leader and the RSN Manager to successfully secure funding from the Far North Queensland Foundation to join the sepsis trial.



Rural and Remote Research Program

Our national Rural and Remote Research Program is aimed at improving patient outcomes and healthcare services in Australian rural and remote locations during an emergency.

EMF launched this Program in 2014 with funding from philanthropic and industry donations. We have since awarded three grants, totalling \$195,000.

However, in 2017, one of the grant recipients rescinded their \$50,000 grant. EMF subsequently opened a second Rural and Remote grant round in May 2018, offering up to \$50,000 to support a collaborative research project in the field of emergency medicine for the benefit of rural and remote patients within Australia.

Expressions of Interest were requested, with the successful grant recipient to be announced in November 2018.

The purpose of the Rural and Remote Research Program is to provide medium-term (up to two years) seed funding for innovative research that may have the potential for future funding by other granting bodies.

Grants are open to all Australian-based emergency healthcare clinicians (including doctors, nurses, paramedics and allied health professionals) who are providing direct clinical care to patients in an emergency.



Reduced aeromedical retrievals in remote Indigenous communities due to onsite pathology testing

In an EMF-funded Rural and Remote Research Program project, a Flinders University research team assessed both the medical and cost benefits of using on-site pathology testing, or point of care testing (POCT), for acute medical care in six remote health clinics in the Northern Territory over a six month period.

The Flinders study is one of the first projects in the world to quantitatively evaluate the clinical and economic benefits of POCT in a remote setting, according to Project Coordinator Ms Brooke Spaeth from the International Centre for Point-of-Care Testing at Flinders University.

“Up to now, we had very little hard research data to support the cost benefits of using POCT, it was mostly anecdotal,” said Ms Spaeth.

“We now have proof that the POC technology improved the clinical and operational outcomes for acutely ill patients in remote communities in the Northern Territory. It also reduced the need for medical evacuations by up to 35% in the clinical conditions investigated, which has led to significant cost savings for the Territory healthcare system,” she said.


In 2018, the team published the economic outcomes from their evaluation in the journal, *ClinicoEconomics and Outcomes Research*.

They found that having access to POCT resulted in avoided medical evacuations, with estimated total cost savings of \$21.75 million per year for the Northern Territory Government.

Access to POCT also enabled the early diagnosis, treatment and appropriate evacuation for critically ill patients.

Pictured above: Brooke Spaeth training Aboriginal Health Workers (Janice and Florence) to conduct testing on a POCT device.





How we engage with you

Educational and promotional activities are an important avenue for translating research outcomes into clinical practice.

They also help develop a research-ready clinician workforce and secure ongoing investment for EMF and emergency healthcare research.

Educational events



On 24-25 August 2017, EMF marked its 10th anniversary with a Research Symposium

Research Symposium

With more than 40 international and Australian speakers, the inaugural EMF Research Symposium attracted 165 delegates from the emergency medicine profession, academia, government and industry.

The event, which was held at the Translational Research Institute in Brisbane, formed a strategic platform for up-skilling individuals in research capability; informing delegates on the latest research; and actively shaping the future of emergency medicine research in Australia.

In conjunction with the Symposium, EMF ran several additional events:

- **Pre-symposium Acute Care Research and Translation Workshop** – a one-day event run in collaboration with the PREDICT network and Queensland Health.
- **Twilight wine and cheese awards event** – at this informal function, EMF recognised several Board and Committee members for their significant impact on emergency medicine research through the development of EMF (formerly known as QEMRF): co-founders Dr Michael Sinnott and Professor Gerry FitzGerald, along with members who had served six or more years, Mr Jason Currie, Associate Professor Ed Oakley, Professor Gerben Keijzers, Professor Tony Brown and Dr David Rosengren.

- **‘People’s Choice’ competition** – EMF invited Australians to vote for the researcher they felt had contributed most to emergency medicine in Australia. The award was won by Dr Kylie Baker from Ipswich Hospital, with Professor Louise Cullen from Royal Brisbane and Women’s Hospital the runner up.
- **Sepsis Roundtable** – an invite-only session which brought together sepsis researchers attending the Symposium.

EMF produced a 10th Anniversary booklet to coincide with the Symposium. This booklet contained an overview of the success of the Queensland Research Program, a statement from the Queensland Health Minister and case studies of key projects.

KEYNOTE SPEAKER

The Symposium featured Professor Kathryn Maitland as the keynote speaker. Professor Maitland is the Professor of Paediatric Tropical Infectious Diseases, Imperial College, London and the Director of the ICCARE Institute of Global Health Innovation with Imperial College. For the past 15 years, the Professor has been based full-time in East Africa, where she leads a research group whose major research portfolio includes malaria, sepsis and severe malnutrition in children as well as clinical trials in emergency care.

Professor Maitland was a co-investigator on a NHMRC and EMF-funded project to develop an animal model of sepsis (see page 31). In addition, the Professor also collaborated on an EMF-funded nasal high-flow cannula research (see page 29). This latter project was a key stimulant for a successful £2.8 million Wellcome Trust grant, which is supporting her ‘Children Oxygenation Administration Strategies’ trial in 4200 severely ill African children.



Sponsors

EMF ran the Symposium on a cost-recovery basis, with \$19,628 collected in registration revenue and \$57,100 via sponsorship. Our thanks to the 14 organisations that sponsored, exhibited, advertised or supplied promotional material for the event:

- The University of Queensland
- James Cook University
- Queensland University of Technology
- Vocera
- University of the Sunshine Coast
- CSIRO
- GE Healthcare
- Radiometer
- Fisher & Paykel Healthcare
- Griffith University- Menzies
- HESTA
- Griffith University
- National Injury Insurance Scheme
- ACEM

Virgin Australia also kindly sponsored the 'People's Choice' award for best researcher.

The Symposium and its associated events were organised and run by EMF staff. The event was overseen by our former Research Support Manager, Dr Jonathan Staggs, while RSN RDM-Children's Health Queensland, Kelly Foster, played a key role in developing the Acute Care component of the workshop in collaboration with the PREDICT network.

KNOWLEDGE TRANSLATION WORKSHOP

EMF ran a three-hour interactive workshop to help clinicians plan to translate their research. Held on Tuesday 13 March in Brisbane, 22 clinicians from across the State (including Mt Isa, Townsville, Warwick and the Gold Coast) attended the workshop.

Translation expert, Dr Tamika Heidon presented the workshop, which EMF subsidised with profits from its Research Symposium.

2018 GRANTS AWARD CEREMONY

EMF celebrated the 2017/18 grant recipients with an award ceremony. The ceremony was held on Tuesday 13 March 2018, in Brisbane, and attended by 62 guests.

Among those attending were collaborators from QIMR Berghofer, The University of Queensland, Queensland University of Technology, Griffith University, the University of Southern Queensland, the University of the Sunshine Coast, James Cook University and the University of Tasmania.

Guest speakers at the event included Dr Mark Larsen from the Black Dog Institute, Professor Marianne Wallis from the University of the Sunshine Coast, and members of the FEISTY team: Dr Don Campbell, Ms Elizabeth Wake and Dr Glenn Ryan.

This annual event is an opportunity for EMF to publicly congratulate its recent grant recipients as well as celebrate ground-breaking research outcomes from its grants program.

EVENT SPONSORSHIP

EMF sponsored two events in 2017/18: the ACEM Queensland Autumn Symposium, Free Paper Session (31 May 2018), which was won by Dr Oliver Newton; and the Geriatric Emergency Medicine Research Collaborative (17 April 2018).





Supporting research networks

FUNDEMENTALS

In June 2017, EMF's RSN Manager launched a national emergency medicine social work research interest group. This group, which meets regularly via teleconference, was subsequently called 'FunDEmentals'. There are now 100 members of this group from sites across every State and Territory in Australia and both islands in New Zealand. The group developed following interest in a research project funded by EMF, which was looking at a social work service provided in the RBWH Emergency and Trauma Centre (see page 30).

QUEENSLAND EMERGENCY RESEARCH COLLABORATIVE (QERC)

EMF continued to provide in-kind support – including administrative, secretariat, teleconferencing and meeting facilities – for QERC, which is run by Queensland emergency researchers. The group meets in the EMF Boardroom on a bi-monthly basis. QERC aims to improve the quality and impact of emergency health research activities by supporting multi-centre research and facilitating collaboration between institutions, health care providers, researchers and industry partners involved in the delivery of and advancement to emergency healthcare.

Conference presentations

EMF staff, predominantly the RSN RDMs, presented on the outcomes of EMF programs as well as EMF-funded research at nine national and international research conferences held in Australia.

EMF grant recipients were also active in presenting at conferences during the period. There were 98 conference presentations made during the year (oral or poster), with more than 16 presentations made at the ACEM Annual Scientific Meeting in November 2017.

Pictured above: EMF co-founder, Professor Gerry FitzGerald, was one of several clinician-researchers recognised at the EMF Research Symposium for their service to the Foundation

Communication and promotional activities



584,850 social media impressions
37,500+ website page views by
12,400+ visitors

MEDIA

EMF works in close collaboration with the Queensland Health Corporate Media Unit (Proactive) as well as with individual clinician-researchers' hospitals and universities to promote the outcomes from projects to the public.

During 2017/18, we developed seven media releases which were jointly distributed. A further three media releases were distributed directly by clinicians' HHS media teams with EMF input, while an eleventh release was not distributed, but instead posted to social media at the request of the HHS.

These media releases resulted in 87 media stories in more than 30 Australian and overseas print, online, television and radio media outlets, including *The Australian*, *The Courier-Mail*, the *Sydney Morning Herald*, *The Daily Mail*, *The Conversation*, ABC radio, Seven News and Nine News.

SOCIAL MEDIA

EMF has social media accounts on Twitter, Facebook and LinkedIn. These channels allow us to directly engage with the emergency medicine research community. This is especially critical for communicating research outcomes as well as promoting EMF grants and educational events.

EMF has become increasingly active on social media over the past three years, posting a total of 961 articles in 2017/18—an 80 per cent rise from the previous year. These posts resulted in a 100 per cent increase in impressions, which grew to more than half a million for the year (2016/17: 281,696; 2017/18: 584,850).

Through our posts, we continued to proactively promote the EMF research portfolio. However, our promotion of the EMF Research Symposium, led to the most significant spike in social media activity in August 2017.

Our combined social media following grew by 37 per cent over the year to 2815, with Twitter accounting for half of the following.

WEBSITE

The EMF website provides an important resource for clinician-researchers when applying for EMF grants. We also leverage the site to profile research outcomes and our research portfolio.

Visits to the website remained on par with the previous year at 13,677 (2016/17: 13,111), although page views increased by 25 per cent (2016/17: 29,864; 2017/18: 37,581). There were 12,463 users of which 12,210 were new. On average, they looked at 2.16 pages per visit, staying for just over two minutes.

Most visitors were from Australia (74%). However, a quarter of visitors were from overseas, in particular North America, the United Kingdom and New Zealand. Over the 12 months, on average about a third of visitors came directly to the site, with 12 per cent following links on social media.



Paramedics using new drug to calm violent patients: Queensland paramedics are leading the world by introducing the sedative, Droperidol, to quickly and safely calm violent patients. EMF Scholarship holder, Dr Colin Page, and the QAS's Lachlan Parker led a study that proved the effectiveness of the drug in a pre-hospital setting. The research generated international attention when EMF distributed a media release about the research results.

RESEARCH NEWSLETTER

EMF distributes a quarterly e-newsletter to subscribers and grant recipients. ACEM Queensland also forwards the newsletter to its member database. Combined, these newsletters were viewed more than 5000 times during the year.

COMMUNICATION COLLATERAL

EMF produces a limited range of printed communication collateral. What is printed is also produced in electronic format. This year, new pieces included flyers to promote the *Knowledge Translation Planning Workshop* and the changes to the Queensland Grant Round. A document celebrating the Foundation's 10th anniversary and profiling key research projects was also produced to coincide with the Symposium.

ANIMATIONS & VIDEOS

During the year, EMF produced two animations, showcasing EMF-funded research into emergency healthcare innovations for the elderly and jellyfish stings. We promoted these engaging productions via social media, YouTube and the EMF website as well as sharing the animations with collaborating institutions.

EMF also produced 25 short video clips of interviews with clinicians and research teams about their EMF-funded projects. The footage is being released gradually via the EMF website and social media. We have also shared the clips with the HHSs and relevant university media teams.

Government relations

QUEENSLAND HEALTH

EMF maintains a close working relationship with its key funding body, Queensland Health. Our funding is managed via the Health Innovation, Investment and Research Office (HIIRO) and EMF meets regularly with this office. In addition, EMF is required to provide six-monthly reports to HIIRO regarding the Queensland Research Program.

RSN progress report

In October 2017, EMF submitted a progress report to Queensland Health, outlining the outcomes from the pilot phase of the RSN in Queensland. This document included an overview of the network, case studies on regional research projects made possible via the RSN as well as an outline of its impact and key metrics.

EMF Annual Report

On 31 October 2017, EMF submitted its *2016/17 Annual Report*. This document was EMF's longest ever annual report, reflecting the quantity and quality of outcomes in emergency medicine research funded by EMF. An electronic version of the report is available on the EMF website.

Media

EMF continued to liaise regularly with the Queensland Health Corporate Media Unit and individual HHS media teams with regard to media and social media opportunities. All pro-active media releases are required to be submitted by EMF to HIIRO for approval.

Informed consent draft policy

In November 2017, EMF submitted feedback to the draft Queensland Health policy statement: *Research involving patients who are unable to give consent*, which was developed by HIIRO. EMF compiled a list of proposed edits to the policy based on extensive consultation with Queensland emergency clinicians. Numerous leading emergency medicine clinician-researchers contacted EMF to raise their concerns about the potential impact this policy could have on research, particularly the ability to conduct clinical trials in the emergency department setting.

LIAISING WITH OTHER GOVERNMENTS

EMF has long identified the strategic importance of developing dedicated Research Programs in other Australian States and Territories. For EMF, the benefits of expanding our programs extend far beyond economies of scale and building national clinician research capacity. We know from our experience in Queensland that the other States and Territories stand to gain substantially from partnering with EMF: emergency healthcare research generates significant improvements in patient outcomes and economic savings for healthcare systems.

In August 2017, the Queensland Department of Health Director General, Michael Walsh, offered to cover the first year of administrative costs for any of the other States and Territories interested in partnering with EMF. We have since spoken with emergency clinicians and government officials in Tasmania and Western Australia who see the importance of establishing similar State-based research programs to Queensland.

Building relationships interstate and raising the awareness with these potential stakeholders about EMF and the value of our programs is an ongoing and long-term activity. However, we are optimistic that within the next five years, we will have established additional state-based research programs in Australia.



Pictured above: Members of the RBWH CREDIT team. With an EMF grant, these clinicians successfully trialled an intervention project, called CREDIT, to reduce the number of cannulas used in emergency departments. EMF captured national interest in CREDIT via a media release and social media.

Our team





4.25 FTE

staff in research administration,
corporate & communications

3.9 FTE

Research Support Network
(RSN) staff

55 volunteers

 on EMF Board, Committees & REP panel

At EMF, we run a tight operation with a very small team.

Our research programs are managed by a core team of two staff members (1.9 FTE). Administratively, we employ a full-time Office Administrator.

The organisation's stakeholder reporting obligations and promotional activities are met by a Communications Manager (0.65 FTE). The business operations and finances are overseen by a General Manager/Company Secretary (0.7 FTE).

Within our Research Support Network (RSN), EMF directly employs an RSN Manager (0.9 FTE) and a Research Development Manager (1.0 FTE). We also fund a further four Research Development Managers (2.0 FTE), who are directly employed by HHSs via an EMF grant. These four Managers are based externally at the Lady Cilento Children's Hospital, the Gold Coast University Hospital, Ipswich Hospital and Toowoomba Hospital respectively.

Our culture

EMF values and encourages a flexible, supportive and collegial workplace. In return, the company expects employees to act with equity, justice, fairness and compassion in dealing with others both internally and externally.

To encourage this behaviour as well as a professional work ethic, EMF put in place a performance management framework. This included a range of policies such as Code of Conduct and Workplace Bullying.

The company also provides workplace health and safety training and education. (There were no workplace health and safety incidences in 2017/18.)

Where appropriate, training and development opportunities are provided to employees. In 2017/18 several employees attended conferences relating to emergency medicine.

To minimise its environmental impact, EMF provides paper and waste recycling options as well as recycling printer cartridges.

EMF in the community

For the second year, EMF entered a team, "EMF & Friends", in the Darkness to Daylight event in Brisbane. The 110 km run, which was held on 23 May 2018, represented the 110 women, men and children who die annually in Australia from domestic and family violence.

Volunteers

Volunteers contribute significantly to EMF and help keep administrative costs low.

All positions on the EMF Board, Finance Risk and Audit Committee, Scientific Advisory Committee and Strategic Grants Committee are voluntary and receive no remuneration. In addition, many members of our Research Evaluation Panel (REP) also choose to forgo an honorarium payment and provide their time freely.

This year, 55 clinicians, academics and professionals made up our Board, Committees and REP, providing invaluable insight, direction and input to EMF and its programs.

Governance



“Since 2014/15 there has been sustained growth in applications to EMF for research funding, with increasing competitiveness and quality of applications. The Scientific Advisory Committee helps EMF maintain the integrity of its research programs in this environment.”

Dr Ellen Burkett MBBS, FACEM (pictured on previous page)
Chair, EMF Scientific Advisory Committee
Senior Staff Specialist, Emergency Department, Princess Alexandra Hospital
CARE-PACT specialist
Health Innovation Unit Consultant, Queensland Health

Board Governance

The roles and responsibilities of the EMF Board are described on page 9. The Board held five ordinary meetings and the Annual General Meeting (AGM) as well as an extraordinary meeting to discuss EMF's strategy during 2017/18.

The Finance, Risk and Audit Committee (FRAC) also met on five occasions, as did the Scientific Advisory Committee (SAC). The Strategic Grants Committee (SGC) met twice. EMF welcomed new FRAC member, Cathy Montesin and two new SAC members, A/Prof Jamie Seymour and A/Prof Stephen Macdonald. Our thanks to retiring SAC Chair, Dr Ogilvie Thom and new SAC Chair, Dr Ellen Burkett.

Further information about the EMF Board and its Committees is provided in Appendix 4.

Research grants governance

EMF's governance framework provides for additional advice and support for its research programs via the SGC, the SAC and the Research Evaluation Panel. EMF has three layers in place to ensure its research grants programs operate within a highly transparent and rigorous governance framework.

STEP 1: RESEARCH EVALUATION PANEL (REP)

New grant applications are assessed by up to three expert peer reviewers who are part of the REP. Applicants are provided with a copy of the assessment and given an opportunity to respond. Following this process, all applications are scored. REP members are offered an honorarium for their time. However, many panel members volunteer their time.

In 2017/18, grant applications were reviewed by 38 clinical and academic experts from Australia and overseas. A list of these members as well as an overview of the role and responsibilities of the REP is provided in Appendix 4.

STEP 2: STRATEGIC GRANTS COMMITTEE (SGC)

The SGC reviews the grant applications and selects a list of suggested grant recipients based on the REP score, EMF's strategic direction and the research's potential impact on patient care. This list is provided to the EMF Board with the SGC's final recommendation for grants.

STEP 3: EMF BOARD

The EMF Board makes the ultimate decision on grant recipients based on the recommendations of the SGC; they also must approve the grant funding recommended by the SGC. To be successful, a project must be translatable and guarantee health economic outcomes along with better patient outcomes.

OVERSIGHT

EMF's research governance is overseen by the SAC. The committee is responsible for auditing the process annually to improve the assessment and reporting mechanisms as well as metric collection. In addition, the SAC also deals with any feedback regarding the research programs as well as requests for changes to approved projects. An overview of the role and responsibilities of the SAC is provided in Appendix 4.

In 2017/18, the SAC streamlined the grants review and scoring criteria to improve efficiency and consistency. It also supported the introduction of new grant schemes for the Queensland Research Program and developed a process for a philanthropist-supported Rural and Remote grant. In addition, the SAC also oversaw the requirement for health economics analyses in research projects (where relevant) and improved structures to ensure researchers understand the reporting requirements and are able to meet these in a timely manner.

In the coming year, the SAC expects further improvements to be made to the grants review and administration processes following an audit of the grants allocated, reports received and research completed.

Research grant reporting requirements

All EMF research grant recipients are required to provide six-monthly progress reports and a final report when the project is completed. Recipients must submit a request for any changes to the original approved project, including an extension of the period of their research grant.

Queensland Government reporting

EMF is required by the Queensland Government to provide detailed six monthly progress reports as well as submit an Annual Report each year by 31 October. The latter report provides an in-depth look at the Foundation's research programs and key research projects over the last 12 months as well as its strategy for the future.

Registrations and legislation

EMF is a non-profit organisation with charitable, health promotion and deductible gift recipient (DGR) status. Our Australian Business Number (ABN) is 17 128 057 170 and our Australian Company Number (ACN) is 128 057 170.

Finance



Completion of Annual Financial Statements

On 11 September 2018, the EMF Finance, Risk and Audit Committee recommended the EMF Board endorse the 2017/18 Financial Statements. The Board endorsed and recommended the Statements for signing on 18 September 2018. Bentleys Chartered Accountants independently audited these Statements.

Sources of funding

EMF was delighted to continue its working relationship with Queensland Health, following the Department signing a contract in September 2017 to renew its funding for the EMF Queensland Program. The contract provides \$2 million (plus GST) per year from 2017/18 to 2019/20. In December 2017, a variation of the contract was signed, which saw EMF receive the first tranche of \$2 million under the new, three-year agreement. This enabled EMF to distribute funding agreements for grants awarded in Round 27.

EMF also received \$261,933 from other sources, including \$182,533 generated in interest on EMF's invested cash reserves and \$79,400 in sponsorship and registration fees from the EMF Research Symposium. There were no philanthropic or industry donations to fund EMF grants, as reflected by EMF's focus on securing sponsorship for the Research Symposium and no dedicated business development staff.

Financial outcome

EMF operated within its budget, in accordance with total sources of funds and revenue from the Queensland Government for the 2017/18 financial year.

In total, EMF spent 25 per cent more on research and grant activities in 2017/18. We dispersed \$2,338,583 for research (with \$1,391,594 paid in research grants and \$946,987 expended in research infrastructure and support, including the RSN) during the year, compared with \$1,875,640 in 2016/17.

The company incurred operational expenses of \$674,415, which included corporate expenses, events and communication and business development activities. This was a one per cent decrease on expenditure from the previous year (2016/17: \$678,307) and includes the costs of the Research Symposium.

Due to cost cutting measures, EMF reduced its combined corporate, communication and business development expenditure by 7 per cent from the previous year. This was exclusive of the Research Symposium. (Refer to Figure 1.1 for a breakdown on expenses for the year.)

It should be noted that the once-off cost of EMF hosting a Research Symposium in 2017 was fully covered by the generation of revenue and sponsorship. The event generated a \$31,569 surplus, which EMF reinvested in education and training events.

EMF ended the year with available assets of \$6,582,189 compared to \$7,307,610 in 2016/17. The continued decrease in assets was primarily due to EMF's commitment to drawing on the Foundation's cash reserves to continue funding the RSN and meeting research grant funding obligations.

As shown in Figure 1.2, 67 per cent of the available assets remained uncommitted as of the 30 June 2018.

Queensland Research Program Reserve

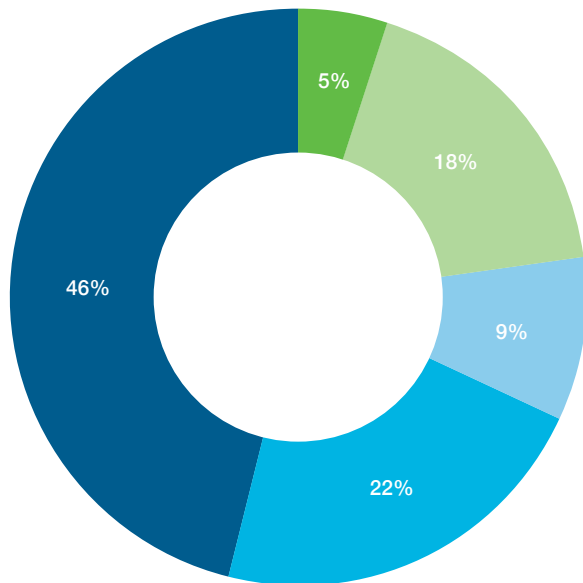
EMF has allocated cash 'Reserve' for its Queensland Research Program. The Reserve is an amount of cash set aside by the Board as 'untouched and unallocated unless formally agreed upon'. It can be used to fund additional emergency medicine research or research related projects in Queensland. The Reserve is also designed to allow the Board to meet commitments should funding be withdrawn.

In 2017/18, uncommitted funds in the Reserve increased marginally by 6 per cent to \$4,401,245 (2016/17: \$4,155,208) due to a decrease in total grant commitments at the end of the financial year.

The reserve funds are invested in the Queensland Treasury Corporation (QTC), which offers competitive interest rates and the investment is 100 per cent guaranteed as well as easily accessible.

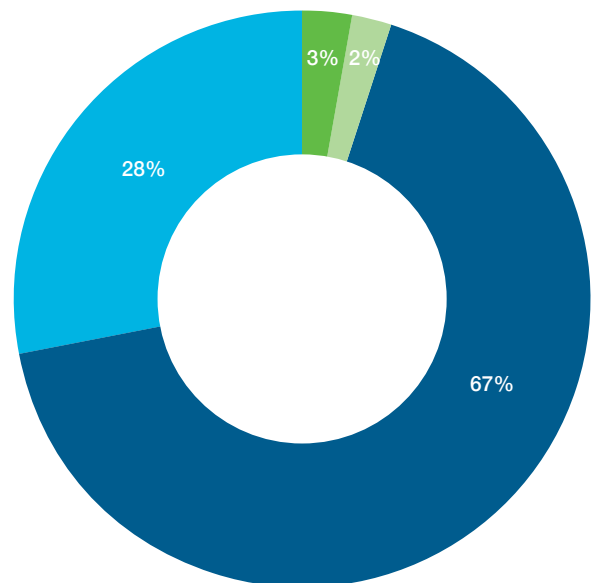
Pictured on previous page: In 2017, Gatton Hospital Emergency Department joined a Mild Traumatic Brain Injury research project funded by EMF thanks to the efforts of RSN Research Development Manager – West Moreton, Sharleen Young. Sharleen is pictured with Debbie O'Brien (Director of Nursing Gatton Hospital), Janine Webster (Nursing Unit Manager) and RSN Manager, Tegwen Howell.

Figure 1.1 Breakdown of EMF expenses 2017/18



- Research grants (paid)
- Communications & Business Development
- Corporate
- Grants administration
- RSN grant

Figure 2.2 Breakdown of EMF committed & uncommitted available assets (as of 30 June 2018)



- Uncommitted (Reserve)
- Committed (research grants)
- Committed (leases)
- Committed (creditors & staff)



RSN Research Development Manager – Toowoomba, Richard Henshaw, successfully nominated Toowoomba Hospital Emergency Department specialist, Dr Alex King, for a Darling Downs HHS research award. Dr King is pictured accepting his award from Dr Dennis Campbell, Darling Downs Hospital and Health Board (Toowoomba).

STATEMENT OF FINANCIAL POSITION

AS AT 30 JUNE 2018

	2018 (\$)	2017 (\$)
ASSETS		
Current assets		
Cash and cash equivalents	6,513,110	7,244,290
Trade and other receivables	69,079	63,320
Other assets	30,976	28,221
Total current assets	6,613,165	7,335,831
Non current assets		
Property, plant & equipment	2006	9088
Total non current assets	2006	9088
TOTAL ASSETS	6,615,171	7,344,919
LIABILITIES		
Current liabilities		
Trade and other payables	146,583	126,774
Total current liabilities	146,583	126,774
Non current liabilities		
Provisions	6048	4540
Total non current liabilities	6048	4540
TOTAL LIABILITIES	152,631	131,314
NET ASSETS	6,462,540	7,213,605
EQUITY		
Retained surplus (deficit)	6,462,540	7,213,605
TOTAL EQUITY	6,462,540	7,213,605

A full set of EMF's financial statements is available online at emergencyfoundation.org.au

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF EMERGENCY MEDICINE FOUNDATION LTD

Report on the Audit of the Financial Report

Opinion

We have audited the financial report of Emergency Medicine Foundation Ltd (the "Company"), which comprises the statement of financial position as at 30 June 2018 and the statement of profit and loss and other comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, notes comprising a summary of significant accounting policies and other explanatory information, and the director's declaration.

In our opinion the financial report of the Company is in accordance with Division 60 of the *Australian Charities and Not-for-Profit Commission Act 2012*, including:

- (i) giving a true and fair view of the Company's financial position as at 30 June 2018 and of its performance for the year then ended; and
- (ii) complying with Australian Accounting Standards – Reduced Disclosure Requirements and Division 60 of the *Australian Charities and Not-for-Profits Commission Regulations 2013*.

Basis for Opinion

We conducted our audit in accordance with Australian Auditing Standards. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Report* section of our report. We are independent of the Company in accordance with the ethical requirements of the Australian Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants* (the Code) that are relevant to our audit of the financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of the Directors for the Financial Report

The directors of the Company are responsible for the preparation and fair presentation of the financial report in accordance with Australian Accounting Standards and the *Australian Charities and Non-for-Profits Commission Act 2012* and for such internal control as the directors determine is necessary to enable the preparation of the financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

In preparing the financial report, the directors are responsible for assessing the ability of the Company to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

The directors are responsible for overseeing the company's financial reporting process.

**INDEPENDENT AUDITOR'S REPORT
TO THE MEMBERS OF EMERGENCY MEDICINE FOUNDATION LTD**



Auditor's Responsibilities for the Audit of the Financial Report

Our objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this financial report.

As part of an audit in accordance with Australian Auditing Standards, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial report or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial report, including the disclosures, and whether the financial report represents the underlying transactions and events in a manner that achieves fair presentation

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Bentleys Brisbane (Audit) Pty Ltd
Chartered Accountants

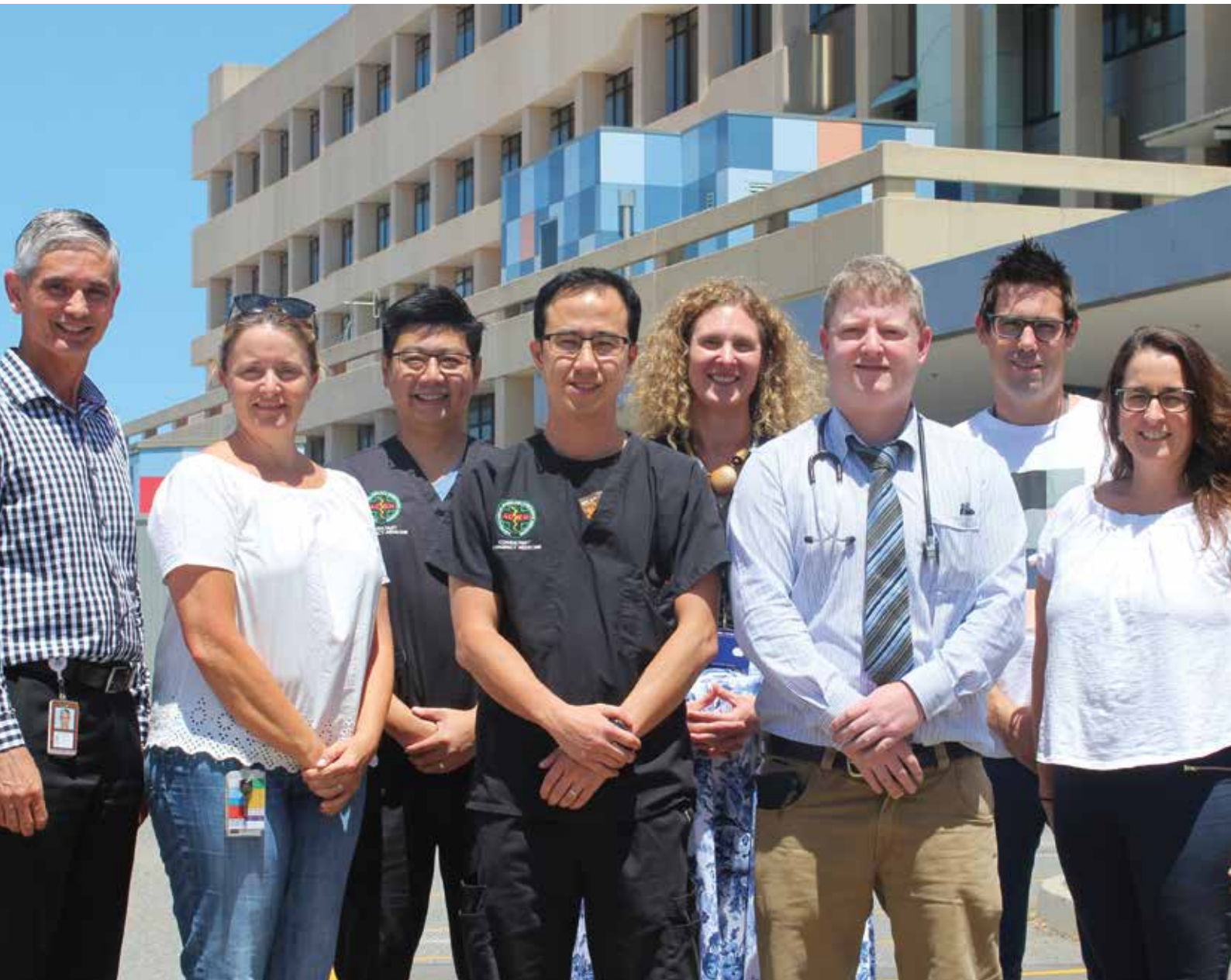
Ashley Carle
Director
Brisbane, 20 September 2018



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Our plans for the future



Members of the Redcliffe Hospital ‘syncope’ research team who received a 2017/18 EMF grant.

From left to right: A/Prof Doug Morel, Ms Helena Cooney, Dr Alan Yan, Dr Jason Chan, Dr Emma Ballard (QIMR), Dr Jonathan Hunter, Dr David Brain (AusHSI) and EMF Research Development Manager Dr Julia Hocking.

Photo courtesy of Redcliffe Hospital

EMF is poised to lead a national, coordinated approach to funding clinician-led research in emergency healthcare.

Our aim is to enable the clinicians at the coal-face to develop and implement innovative, evidence-based solutions to improve patient care and clinical outcomes.

Based on our decade of experience in Queensland, we also know first-hand that EMF's unique and innovative research funding model of dedicated funding and support for clinician-led emergency medicine research successfully drives real-world changes in clinical practice to improve patient outcomes. Our programs are also saving the healthcare system tens of millions of dollars annually. If the EMF model was extended nationally, we believe it could achieve unparalleled outcomes for Australian healthcare.

Our challenge is to develop a roadmap for expanding nationally and an 'investment' model for operating beyond Queensland. We face many challenges, not the least of which is attracting the attention of government and industry.

Our expansion strategy

EMF is at a crossroads. After a decade of developing, implementing and refining our operations in Queensland, we can continue to focus our attention primarily on this one State or build upon our success to benefit all Australians.

STEP 1: EVALUATING THE EMF IMPACT

Our success story needs independent validation. We recognise the importance and value of having our impact assessed by an external organisation.

To underpin its strategic decisions, the EMF Board has commissioned KPMG Australia to provide an independent evaluation of EMF's 'return on investment' in its first 10 years of operation as well as the overall value of investing in emergency medicine research.

Our aim is to use this evaluation to help grow the funding available for clinician-led research. A key part of this is also to establish and develop the infrastructure to build research capacity in the emergency healthcare system.

The evaluation will contain the following:

- Costs of Emergency Care in Australia
- Case studies from research EMF has supported
- Future Recommendations.

STEP 2: DEVELOPING A ROADMAP AND INVESTMENT MODEL

Following the release of the KPMG evaluation, EMF will finalise a roadmap and investment model for expanding the organisation.

During this planning phase, EMF will also look at incorporating the learnings from the RSN pilot into a revised operational model for the service, including a funding strategy. This model is likely to provide a broader support infrastructure for an expanded EMF research funding program.

STEP 3: BROADER ENGAGEMENT

EMF was established at the instigation of several emergency medicine physicians in Queensland along with various organisations with a vested interest in emergency healthcare. To drive change, we recognise the need to more broadly engage with other organisations and industry. Importantly, we also need clinicians to agitate for research funding.

Queensland Health

In parallel to its expansion strategy, EMF will continue to work with Queensland Health. In late 2018, EMF will submit a funding proposal to Queensland Health to renew and potentially expand its contract for the Queensland Research Program beyond June 2020.

EMF will also consider options for approaching other government departments to help fund EMF programs, such as the RSN, as well as targeted research areas including, digital innovation, rural health, aged care, mental health and Indigenous health.

We will look to work more closely with the Clinical Excellence Division within Queensland Health to facilitate knowledge mobilisation and clinical adoption of research.

Operational changes

We will continue to evaluate our operational expenses to identify efficiencies. With staffing changes in the following year, we will potentially create new roles to enable the organisation to implement strategic changes in our operations. To reduce office rental expenditure we will relocate to a smaller office in late 2018.

Performance metrics

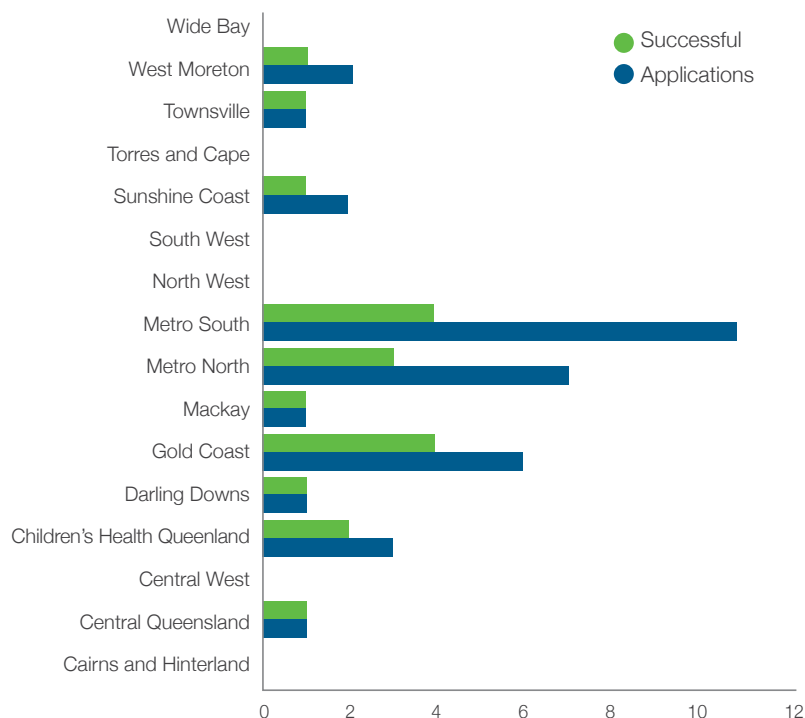


Queensland Research Program

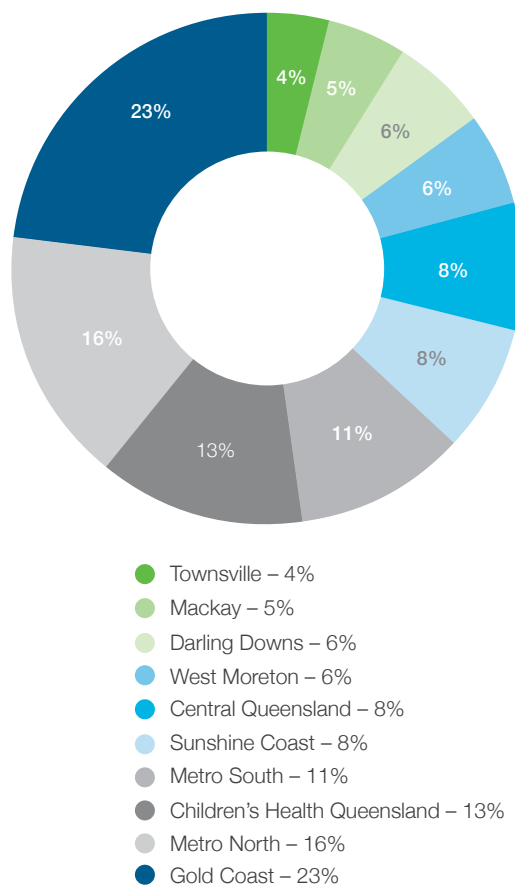
2017/18 GRANTS GRANT RECIPIENTS

	PRINCIPAL INVESTIGATOR	PROJECT TITLE	SITE	AMOUNT (\$)
Trainee				
1	Dr Kerina Denny	Antibiotics in the Emergency Department	Gold Coast University Hospital	24,131
2	Dr Volha Pankevich	Point of care lung ultrasound in paediatric respiratory presentations.	Logan Hospital	8,608
Staff Specialist				
3	Dr Colin Page & Dr Katherine Isoardi	Randomised controlled trial of 2 antidote regimens for paracetamol overdose.	Princess Alexandra Hospital	43,778
4	Dr Thomas Torpie	Domestic and Family Violence Screening in the Emergency Department	Gold Coast University Hospital	65,856
5	Dr Ben Lawton	How are we treating severe childhood asthma in Australasia?	Logan Hospital	69,444
6	Prof Louise Cullen	Medication-related emergency department presentations	Royal Brisbane & Women's Hospital	31,410
7	Dr Jason Chan	Single centre validation of the Canadian Syncope Risk Score	Redcliffe Hospital	59,804
8	Dr Alex King	Reducing avoidable COPD emergency presentations: An integrated cross-health service initiative	Toowoomba Hospital	67,000
9	Dr Sarah Boxall	The impact of imaging referral guidelines on unnecessary x-ray examinations	Mackay Base Hospital	57,093
10	Dr Tina Bazianas	Dermatology in the Emergency Department	Princess Alexandra Hospital	16,448
11	Dr Adam Holyoak	Examining the effectiveness of Brown snake antivenom	The Townsville Hospital	46,000
12	Dr Rose Jones	Developing a regional strategy for reducing non-urgent emergency department presentations	Ipswich Hospital	69,603
Project				
13	Dr Mark Edwards	Data linkage & patient outcome study: Aeromedical services in Central Queensland	Rockhampton Base Public Hospital	100,000
14	Dr Christa Bell	Fibrinogen Early In Severe Trauma in children study (FEISTY Junior)	Gold Coast University Hospital	100,000
15	Dr Peter Snelling	Rapid diagnosis of sepsis in acutely ill children	Lady Cilento Children's Hospital	100,000
16	Prof Gerben Keijzers	Preventing chronic pain after whiplash injury	Gold Coast University Hospital	83,639
17	Dr Natalie Phillips	Assessing Children's Head Injury: Variation in CT scan use (APHIRST-Gap)	Lady Cilento Children's Hospital	62,749
18	Dr Elizabeth Marsden	Evaluation of the Geriatric Emergency Department Intervention (GEDI) implementation.	Nambour General Hospital	100,000
Capacity Building				
19	Dr Doug Morel	Clinical Research Coordinator	Redcliffe Hospital	108,440
Total				1,214,003

Grant applications by HHS (2017/18)



Successful grant funding by HHS (2017/18)

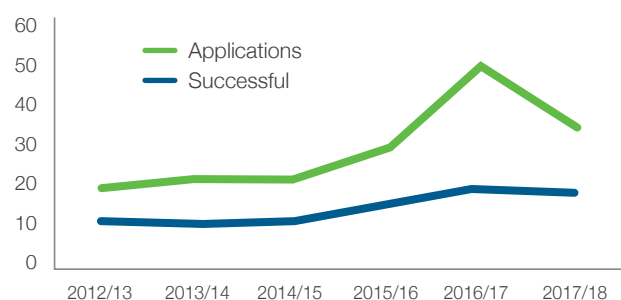


HHS	REQUESTED	AWARDED	APPLICATIONS	SUCCESSFUL
Cairns and Hinterland	\$0	\$0	0	0
Central Queensland	\$100,000	\$100,000	1	1
Central West	\$0	\$0	0	0
Children's Health Queensland	\$557,287	\$162,749	3	2
Darling Downs	\$70,000	\$67,000	1	1
Gold Coast	\$504,065	\$273,626	6	4
Mackay	\$62,093	\$57,093	1	1
Metro North	\$481,516	\$199,654	7	3
Metro South	\$729,060	\$138,278	11	4
North West	\$0	\$0	0	0
South West	\$0	\$0	0	0
Sunshine Coast	\$304,277	\$100,000	2	1
Torres and Cape	\$0	\$0	0	0
Townsville	\$46,000	\$46,000	1	1
West Moreton	\$115,398	\$69,603	2	1
Wide Bay	\$0	\$0	0	0
TOTAL	\$2,969,697*	\$1,214,003	35	19

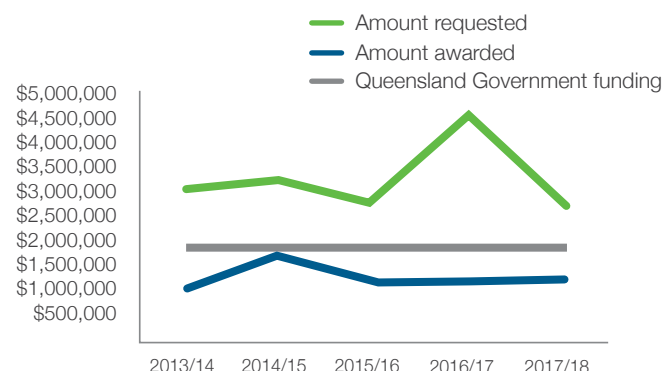
* Rounded total when cents taken into account

Five year trends (2013/14-2017/18)

Total applications received and awarded

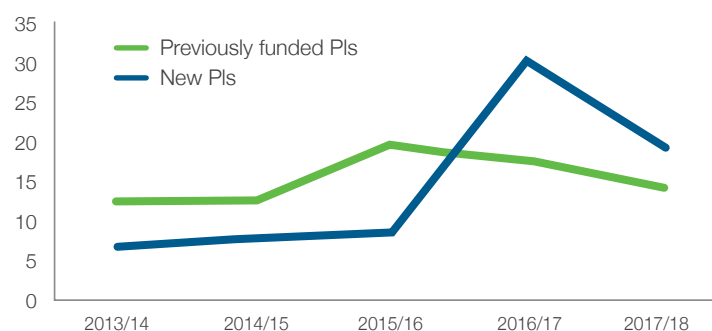


Total funding requested and awarded



FINANCIAL YEAR	APPLICATIONS	SUCCESSFUL	PERCENTAGE	AMOUNT REQUESTED	AMOUNT AWARDED	PERCENTAGE
2013-2014	22	11	50%	\$ 3,174,609	\$ 1,145,014	36%
2014-2015	22	12	55%	\$ 3,294,469	\$ 1,792,706	54%
2015-2016	29	16	55%	\$ 2,873,933	\$ 1,209,448	42%
2016-2017	49	20	41%	\$ 4,712,941	\$ 1,266,626	27%
2017-18	35	19	54%	\$ 2,969,697	\$ 1,214,003	40%

Grant applications by new principal investigators (PI)

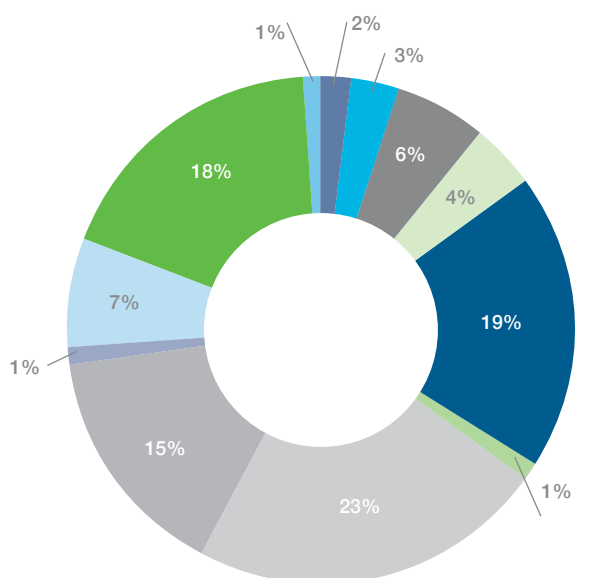


FINANCIAL YEAR	NEW PIs	PREVIOUSLY FUNDED PIs	TOTAL APPLICATIONS	% NEW PIs
2013/14	7	13	20	35%
2014/15	8	13	21	38%
2015/16	9	20	29	31%
2016-2017	31	18	49	63%
2017/18	20	15	35	57%

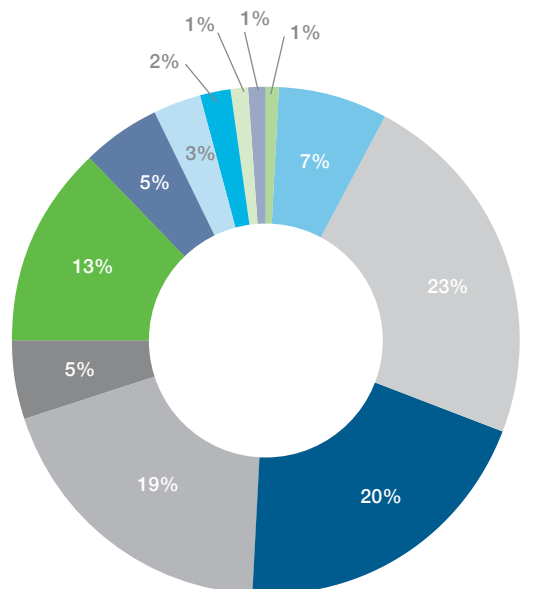
Breakdown by HHS

HHS	REQUESTED	AWARDED	% TOTAL AWARDED (5 YEARS)	APPLICATIONS	SUCCESSFUL	% TOTAL SUCCESSFUL (5 YEARS)
Cairns and Hinterland	\$352,157	\$344,340	5%	2	1	1%
Central Queensland	\$400,000	\$150,000	2%	2	2	3%
Central West	\$0	\$0	0	0	0	0
Children's Health Queensland	\$1,657,633	\$302,679	4%	15	4	5%
Darling Downs	\$84,560	\$81,560	1%	3	3	4%
Gold Coast	\$3,818,687	\$1,343,958	20%	27	14	19%
Mackay	\$62,093	\$57,093	1%	1	1	1%
Metro North	\$3,864,929	\$1,541,436	23%	38	17	23%
Metro South	\$3,864,929	\$1,252,684	19%	35	11	15%
North West	\$68,224	\$68,224	1%	1	1	1%
South West	\$0	\$0	0	0	0	0
Sunshine Coast	\$762,271	\$185,209	3%	7	5	7%
Torres and Cape	\$0	\$0	0	0	0	0
Townsville	\$2,226,795	\$906,639	13%	18	13	18%
West Moreton	\$579,564	\$493,975	7%	1	1	1%
Wide Bay	\$0	\$0	0	0	0	0

HHSs: succesful applications



HHSs: total grant funding awarded



● Gold Coast
● Cairns and Hinterland
● North West

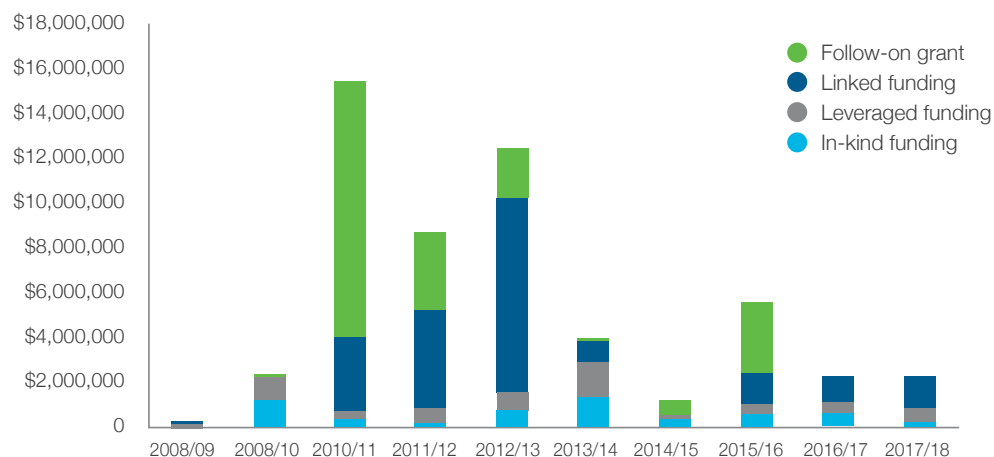
● Townsville
● Mackay
● Darling Downs

● West Moreton
● Central Queensland
● Sunshine Coast

● Metro South
● Children's Health Queensland
● Metro North

Additional funding associated with projects

To help measure the impact of its research programs, EMF captures data on additional funding associated with research projects. This data is collected during the lifetime of projects and beyond. For consistency, EMF attributes funding data to the year EMF awarded a grant to the research.



FINANCIAL YEAR	IN-KIND FUNDING	LEVERAGED FUNDING	LINKED FUNDING	FOLLOW-ON GRANT	TOTAL
2008/09	\$92,800	\$0	\$108,259	\$0	\$201,059
2009/10	\$1,202,334	\$1,012,058	\$0	\$182,286	\$2,396,678
2010/11	\$322,771	\$427,629	\$3,285,097	\$11,313,301	\$15,348,798
2011/12	\$80,000	\$743,765	\$4,379,610	\$3,509,901	\$8,713,276
2012/13	\$705,324	\$816,313	\$8,656,868	\$2,235,801	\$12,414,306
2013/14	\$1,331,244	\$1,580,343	\$927,000	\$40,000	\$3,878,586
2014/15	\$377,421	\$94,940	\$0	\$696,950	\$1,169,311
2015/16	\$605,275	\$334,576	\$1,412,478	\$3,285,609	\$5,637,938
2016/17	\$607,829	\$476,937	\$1,166,788	\$0	\$2,251,554
2017/18	\$262,235	\$539,113	\$1,440,000	\$0	\$2,241,348
Total	\$5,587,233	\$6,025,673	\$21,376,100	\$21,263,847	\$54,252,854

Definition of funding:

Follow-on grant: New funding to continue an area of research building upon the EMF grant, e.g. to enable the pilot EMF grant to progress to a larger clinical trial or further investigate one of the findings of the EMF grant

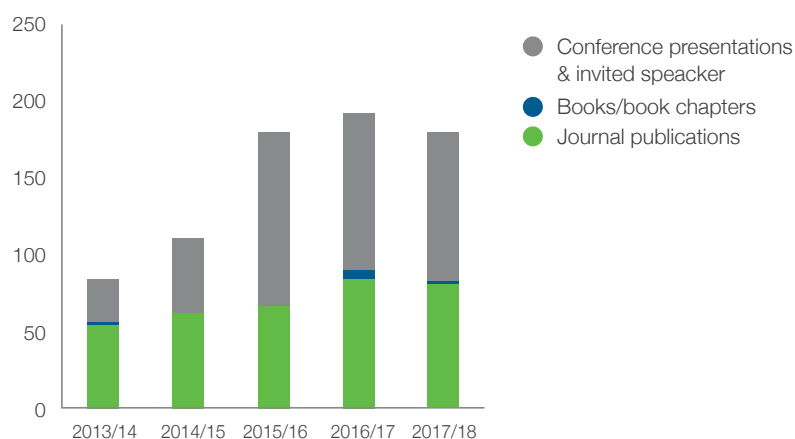
Linked: Funding secured for the same research but which is not contingent on the EMF grant, e.g. funding for the same project at other sites or countries

Leveraged: Additional funding secured for the same research project in conjunction with the EMF grant

In-kind: Goods and/or services provided at no charge

Research publications

In line with academic institutions, EMF includes publications as one measure of research impact. EMF gathers data from final reports submitted at the completion of EMF-funded projects. A substantial number of additional historical publications and presentations are frequently reported following the publication of the EMF Annual Report, as such the historical publication figures shown here vary from those reported in previous annual reports.



FINANCIAL YEAR	JOURNAL PUBLICATIONS	BOOKS/ BOOK CHAPTERS	CONFERENCE/ INVITED SPEAKER	TOTAL
2013/14	56	1	29	86
2014/15	64	1	46	111
2015/16	69	1	112	182
2016/17	87	4	103	194
2017/18	80	2	98	180

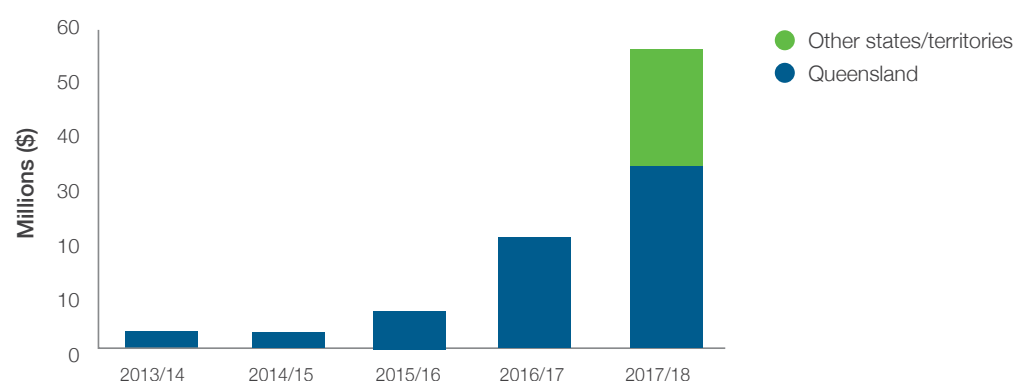
Economic impact of EMF Research Programs

The figures presented are drawn from published economic evaluations of individual research projects and, in some cases data provided by researchers ahead of publication. This data does not take into account projects for which there has been no economic evaluation nor the impact of EMF's RSN.

It should be noted that in several cases (PAPT, PARIS I and ACRE), there has been subsequent clinical adoption in other Australian States and Territories for which there is no available economic estimates.

For one project, PAPT, there is the estimated potential for an additional \$23 million annually in improved patient outcomes for Queensland. This estimate has not been included in this calculation.

Annual economic benefits delivered by projects which have had EMF funding



FINANCIAL YEAR	NO. PROJECTS DELIVERING ECONOMIC BENEFITS		ESTIMATED VALUE OF ECONOMIC BENEFITS		TOTAL VALUE
	Queensland	Other States/ Territories	Queensland	Other States/ Territories	
2013/14	3	--	\$10,971,671	--	\$10,971,671
2014/15	3	--	\$11,171,671	--	\$11,171,671
2015/16	4	--	\$15,224,671	--	\$15,224,671
2016/17	5	--	\$29,406,965	--	\$29,406,965
2017/18	8	1	\$33,672,490	\$21,750,000	\$55,422,490
Total			\$100,447,099	\$21,750,000	\$122,197,099

Details of projects included in this economic impact estimate

	PROJECTS DELIVERING ECONOMIC BENEFITS (YEAR IMPLEMENTED CLINICALLY, WHERE KNOWN)	KEY PUBLICATIONS	FUNDING BODIES FOR RESEARCH
2013/14	New treatment protocol for drunk patients; Implemented at Gold Coast University Hospital	<ul style="list-style-type: none"> Deutrom R., "No use in sobering up boozers", <i>The Courier Mail</i>; 2016, 25 October. Retrieved from: www.couriermail.com.au/news/queensland/monitoring-intoxicated-patients-better-than-using-iv-fluid-drips/news-story/a9aa5297ffef7584ccc0b9b4ec34645b#load-story-comments Perez S., Keijzers G., Steele M., Byrnes J., and Scuffham P.A., "Intravenous 0.9% sodium chloride therapy does not reduce length of stay of alcohol-intoxicated patients in the emergency department: A randomised controlled trial", <i>Emergency Medicine Australasia</i>, 2013; 25: 527–534. doi: 10.1111/1742-6723.12151 <p><i>Note: EMF has been told that the RBWH has also adopted this protocol, but we only have an estimate for the GCUH.</i></p>	<ul style="list-style-type: none"> 2011 EMF Trainee Grant (\$40,000)
	Hospital in Nursing Home (HiNH) program; Implemented at Royal Brisbane and Women's Hospital	<ul style="list-style-type: none"> Fan L., Lukin B., Zhao J., Sun J., Dingle K., Purtil R., Tapp S., Hou X. Y., "Cost analysis of improving emergency care for aged care residents under a Hospital in the Nursing Home program in Australia", <i>PLoS ONE</i>, 2018; 13(7):e0199879. doi.org/10.1371/journal.pone.0199879 	<ul style="list-style-type: none"> 2009 EMF Project Grant (\$297,846) Other: Queensland Health (Clinical Excellence Division and Metro North HHS)
	Patient Admission Prediction Tool (PAPT); Available in 27 major hospitals in Queensland (31 EDs in total) in 2013 and accessible to all 50 Queensland by 2015.	<ul style="list-style-type: none"> Dods S., "Impact case study: Improving patient care and reducing waiting times", <i>CSIRO</i>, 2013, July. Retrieved from: https://aehrc.com/wp-content/uploads/2015/07/ICS_Health.pdf Crilly J., Boyle J., Jessup M., Wallis M., Lind J., Green D., FitzGerald, G., "The Implementation and Evaluation of the Patient Admission Prediction Tool: Assessing Its Impact on Decision-Making Strategies and Patient Flow Outcomes in 2 Australian Hospitals", <i>Quality Management in Health Care</i>: 2015; 24(4): 169-176. doi: 10.1097/QMH.0000000000000070 	<ul style="list-style-type: none"> 2008 EMF Project Grant (\$100,000) Other: CSIRO and Queensland Health
2015/16	Accelerated Chest Pain Risk Evaluation (ACRE) Project: chest pain diagnostic protocol; Implemented in 8 Queensland EDs in 2015/16 and available in 19 by 2016/17.	<ul style="list-style-type: none"> Parsonage, W.A., Milburn, T., Ashover, S., Skoien, W., Greenslade, J.H., McCormack, L. and Cullen, L., "Implementing change: evaluating the Accelerated Chest pain Risk Evaluation (ACRE) project", <i>The Medical Journal of Australia</i>, 2017; 207(5):201-205. 	<ul style="list-style-type: none"> 2008 EMF Project Grant (\$200,000) Other: Queensland Health – Clinical Excellence Division
2016/17	Change to clinical guidelines following PARIS I trial in late 2016 with nasal high flow adopted in all metro and regional EDs to treat infants with bronchiolitis.	<ul style="list-style-type: none"> Franklin, D., Babl F.E., Schlapbach L. J., Oakley E., Craig S., Neutze J., Furry J., Fraser J.F., Jones M., Whitty J.A., Dalziel S.R., Schibler A., "A Randomized Trial of High-Flow Oxygen Therapy in Infants with Bronchiolitis", <i>N Engl J Med</i>, 2018; 378:1121-1131. doi: 10.1056/NEJMoa1714855. <p><i>Note: The economic evaluation of this program is yet to be published. Estimates for Queensland trial sites provided by research team. This was for avoided retrievals only.</i></p>	<ul style="list-style-type: none"> 2012 EMF Staff Specialist Grant (\$69,924) 2014 EMF Program Grant (\$50,800) Other: NHMRC (\$1.3 million), UQ, Mater Foundation, and local hospital foundations
2017/18	IMPACT chest pain diagnostic protocol; adopted by 6 EDs during 2017/18.	<ul style="list-style-type: none"> Cullen, L., Greenslade, J.H., Hawkins, T., Hammett, C., O'Kane, S., Ryan, K., Parker, K., Schluter, J., Dalton, E., Brown, A.F. and Than, M., "Improved Assessment of Chest pain Trial (IMPACT): assessing patients with possible acute coronary syndromes", <i>The Medical Journal of Australia</i>, 2017; 207(5):195-200. PMID: 28987132 Bate P., "New tool helps rural patients with chest pain", <i>Queensland Country Life</i>, 2017, 18 September. Retrieved from: www.queenslandcountrylife.com.au/story/4932096/new-tool-helps-rural-patients-with-chest-pain/?cs=4703 	<ul style="list-style-type: none"> 2010 EMF Program Grant (\$622,939) 2012 EMF Scholarship Grant (\$225,000) 2015 EMF Staff Specialist Grant (\$69,395) Other: Queensland Health – Clinical Excellence Division
	CREDIT intervention program to reduce cannulation; Implemented at RBWH	<ul style="list-style-type: none"> Hawkins T., Greenslade J.H., Suna J., Williams J., Rickard C.M., Jensen M., Donohue M., Cho E., Van Hise C., Egerton-Warburton D., Cullen L., "Peripheral Intravenous Cannula Insertion and Use in the Emergency Department: An Intervention Study", <i>Academic Emergency Medicine</i>, 2018;25:26–32. doi: 10.1111/acem.13335 	<ul style="list-style-type: none"> 2015 EMF Project Grant (\$80,000)
	Evaluation of POCT testing in Northern Territory shown to reduce retrieval costs from remote health centres	<ul style="list-style-type: none"> Spaeth B.A., Kaambwa B., Shephard M.D., Omond R., "Economic evaluation of point-of-care testing in the remote primary health care setting of Australia's Northern Territory", <i>Clinicoecon Outcomes Res</i>, 2018 May 29;10:269-277. doi: 10.2147/CEOR.S160291. <p><i>Note: POCT has been provided for several years in the Northern Territory, but this was the first year an economic estimate of the cost benefits was available.</i></p>	<ul style="list-style-type: none"> 2015 EMF Rural and Remote Grant (\$95,730)
	GEDI program for elderly; Implemented at Nambour General Hospital. The program is being piloted at Cairns Hospital and Ipswich Hospital from 2018.	<ul style="list-style-type: none"> Marsden, E., Craswell, A., Taylor, A., Coates, K., Crilly, J., Broadbent, M., Glenwright, A., Johnston, C. and Wallis, M., "Nurse-led multidisciplinary initiatives to improve outcomes and reduce hospital admissions for older adults: The Care coordination through Emergency Department, Residential Aged Care and Primary Health Collaboration project", <i>Australasian Journal on Ageing</i>. 2018 Jun;37(2):135-139. doi: 10.1111/ajag.12526. [Epub 2018 Apr 3] <p><i>Note: Estimates for the cost benefits of implementing GEDI at Nambour provided by research team. No estimates are available for the pilot study in 2018.</i></p>	<ul style="list-style-type: none"> 2017 EMF Project Grant (\$100,000) Other: Australian Federal government, Sunshine Coast Wishlist Foundation, Queensland Health - Health Improvement Unit

Research Support Network

Key research metric changes for EMF pre and post RSN

RESEARCH METRIC (EMF GRANTS)	PRE RSN 2013-2014)	POST RSN (2016-2017)
Number of new principal investigator applicants	17	55
Percent of grants awarded to new investigators	20	30
Total number of grant applications submitted	48	84

RSN's key performance indicators from 2015 – 2017[^] (metrics for hubs only)

	2015 ^{^^}	2016	2017
Enhancement of emergency medicine research activity			
Research ideas for improving patient care	25	51	84
Grant applications submitted (all funders)	12	37	75
Research Strategy developed for ED	0	11	14
Active research projects (funded and unfunded)	36	52	139
Research projects in development	12	58	62
Develop Emergency Medicine research capacity			
New Investigator grant applications (EMF and other)	5	20	35
New ED grant applications	3	31	33
Emergency professionals engaging in research activities	23	83	181
ACEM accredited special skills post for research (working towards)	0	0	5
Research support staff (FTE)	0	5.5	8.5
Establish and maintain collaborations in Emergency Medicine research			
Collaborative research projects	33	47	93
Collaborative research grant applications	10	35	36
Engagements with potential collaborators	9	64	274
Research Development Manager visits	40	246	276
Increased awareness of Emergency Medicine research			
Educational events sponsored	11	24	27
Emergency professionals presentations	6	22	61
Regular ED research meetings	3	26	67

[^] The RSN team reports on a calendar year rather than a financial year.

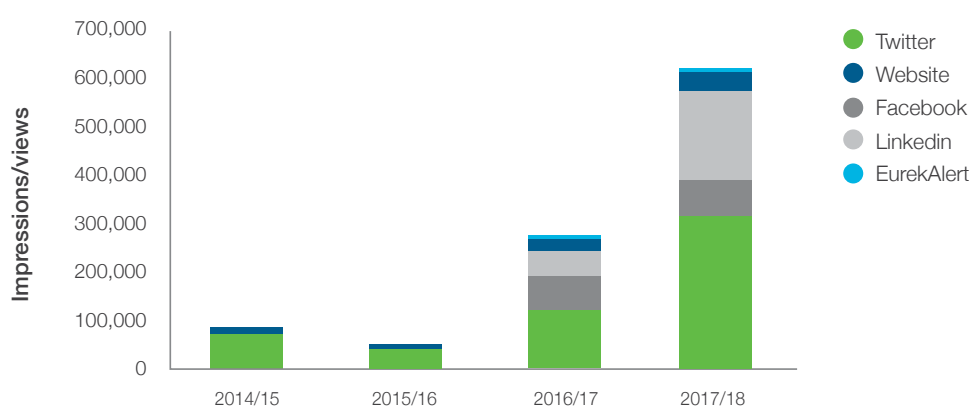
^{^^} This data does not include metrics from Children's Health Queensland HHS

Engagement

EMF staff presentations at conferences

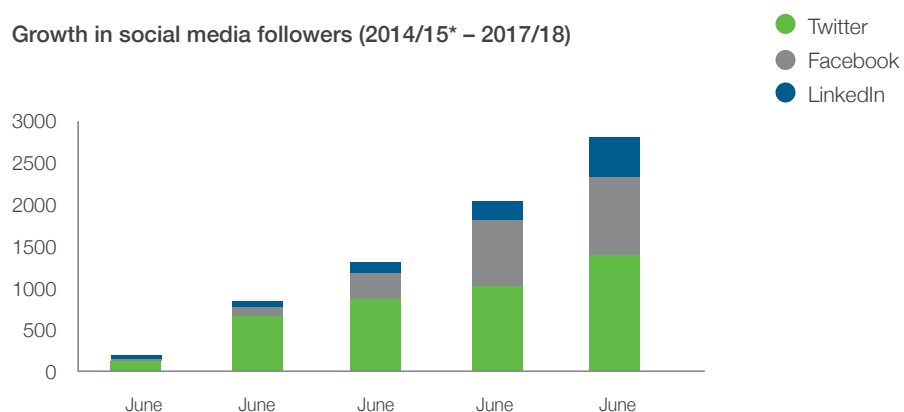
CONFERENCE	DATE & LOCATION	POSTER/ORAL PRESENTATION TOPIC
Australian Association of Social Workers National Symposium 2017	30 November 2017, Hobart	'Exploring the experiences of a 24/7 social work service in a tertiary emergency department and conveying the outcomes through a research support network' (Oral)
Fire, Cyclone & Flood Disaster Management and Recovery Forum	29 November 2017, Brisbane	'Impacts on Children's Networks Following a Natural Disaster' (Oral)
Gold Coast Health Research Week Conference	28-30 November 2017, Gold Coast	'A research network invigorates emergency medicine research in Queensland' (Oral)
34th Annual Scientific Meeting Australasian College for Medicine	19-23 November 2017, Sydney	'Preparing for Mass Casualties' (Poster)
6th Annual NHMRC Symposium on Research Translation	14 November 2017, Brisbane	'Translating emergency medicine research through hospital and community stakeholders with a Research Support Network' (Poster)
HSRAANZ 10th Health Services and Policy Research Conference	1-3 November 2017, Gold Coast	'Building collaboration between emergency medicine and community care through a research support network' (Oral)
ANZICS/ACCCN Intensive Care Annual Scientific Meeting	11-13 October 2017, Gold Coast	'Transition from emergency department to intensive care unit' (Oral)
Don't Forget the Bubbles	28-30 August 2017, Brisbane	(Oral)
9th Annual Emergency Department Management Conference	31 July – 1 August 2017, Sydney	'Supporting multi-disciplinary emergency medicine research and its translation' (Oral)

Impressions/views for EMF accounts (2014/15* – 2017/18)



FINANCIAL YEAR (30 JUNE)	TWITTER	FACEBOOK	LINKEDIN	WEBSITE	EUREKALERT	YEAR TOTAL	YEAR GROWTH
2014/15	73,243	^^	^^	14,910	--	88,153	--
2015/16+	39,623	1,005	1,393	6,025	--	52,979	-40%
2016/17	127,191	63,151	55,205	29,864^^	6,558	269,623	409%
2017/18	326,000	63,862	189,133	37,581	5,855	622,431	131%

Growth in social media followers (2014/15* – 2017/18)



FINANCIAL YEAR (30 JUNE)	TWITTER	GROWTH	FACEBOOK	GROWTH	LINKEDIN	GROWTH
2013/14	150	--	20	--	28	--
2014/15	700	367%	80	300%	80	186%
2015/16	869	24%	335	318%	125	26%
2016/17	1048	21%	780	132%	223	78%
2017/18	1419	35%	942	20%	454	103%

Total social media posts (2016/17 – 2017/18)**

FINANCIAL YEAR (30 JUNE)	TWITTER	FACEBOOK	LINKEDIN	YEAR TOTAL
2016/17	231	183	117	531
2017/18	461	265	243	961

* EMF social media accounts launched in 2014

+ No Communication/Marketing Manager from October 2015 to June 2016

^^ Incomplete data

++ Data only posts only available from 2016

Research newsletter

EMF research newsletter statistics (2017/18)

EDITION	NO. RECIPIENTS	TOTAL OPENS
August 2017	2241	1785
November 2017	2020	1824
February 2018	1090	478
May 2018	1111	1054

Note: The EMF newsletter database was cleansed in early 2018, which significantly reduced the number of recipients.

Media coverage

Media coverage of EMF-funded research (1 July 2017 – 30 June 2018)

DATE	INTERVIEWEES	STORY	MEDIA COVERAGE
12/6/18	Ms Brooke Spaeth	On-site pathology testing keeps patients close to home while saving millions	<ul style="list-style-type: none"> • News Medical Life Sciences • Central Advocate (Northern Territory) • Flinders University • EurekAlert
30/5/18	Dr Shane George	A leading children's doctor is calling for public help to fund potentially life-saving research. It's aimed at finding a faster way to diagnose sepsis	<ul style="list-style-type: none"> • 7 News Gold Coast • ABC Radio Gold Coast
3/5/18	Mr Lachlan Parker	Australian paramedics find new drug to quickly and safely calm violent patients	<ul style="list-style-type: none"> • The Age • The Canberra Times • Sydney Morning Herald • Brisbane Times • The Courier-Mail • Queensland Country Life • Northern Daily Leader • Redland City Bulletin • Jimboomba Times • My Sunshine Coast News • Daily Mail Australia • Science Daily • News.com • Health Medicine Network • News Medical Life Sciences • 6minutes • Medical Xpress • Medical Web Times • Yahoo News • EurekAlert
10/4/18	(Ipswich Hospital)	Hospital joins DV trial	<ul style="list-style-type: none"> • Queensland Times
22-24/03/2018	A/Prof Andreas Schibler and Donna Franklin	High-Flow O2 Therapy Feasible for Infants With Bronchiolitis	<ul style="list-style-type: none"> • Channel 9 News • Medpage Today • Medical Xpress • Doctors Lounge • UQ News • Finance Network News • Deutsches Ärzteblatt • Quotidiano Sanità
15/2/18	Dr Sarah Boxall	Mackay researcher's \$57K study could change global practice	<ul style="list-style-type: none"> • Channel 7 News (Mackay) • Daily Mercury (Mackay)
7/2/18	(Cairns Hospital)	The Cairns Hospital now has a dedicated team in the Emergency Department to support older patients.	<ul style="list-style-type: none"> • Channel 7 News – Cairns
5/2/18	Dr Adam Holyoak	In-depth interview on brown snake envenomation point of care test research project	<ul style="list-style-type: none"> • ABC Radio – Townsville
12/2/18 & 26/2/18	Prof Louise Cullen	30% of emergency patient cannulas unnecessary	<ul style="list-style-type: none"> • ABC Radio National – Health Report with Norman Swan • The Courier-Mail • The Australian Hospital + Healthcare Bulletin
11/12/17	A/Prof Kevin Chu	\$10 m headache for EDs	<ul style="list-style-type: none"> • The Courier-Mail
13/9/17	A/Prof Luregn Schlabach	Hope for blood test to crack the mystery illness sepsis	<ul style="list-style-type: none"> • The Courier-Mail • Channel 7 News
4/9/2017	Prof Louise Cullen	Patients with chest pain sent home faster in Qld hospital changes	<ul style="list-style-type: none"> • The Sydney Morning Herald • Qld Country Life • Medical Xpress

Appendices



Contents

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Queensland Research Program grant schemes

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Research publications (2017/18)

Appendix 3:
Final reports – Queensland research program

Appendix 4:
EMF Board, committees and panels

Ipswich Hospital Emergency Medicine Staff Specialist,
Dr Rose Jones pictured with research collaborators Ms Maria Unwin
from the University of Tasmania and A/Prof Nicholas
Ralph from the University of Southern Queensland.

Appendix 1: Queensland Research Program grant schemes

EMF Queensland Research Program grant schemes summary (following changes to the Program from Round 30, June 2018)

GRANT SCHEME	FUNDING	ABOUT	ELIGIBILITY
Trainee (to be phased out by 2020)	Up to \$40,000	Funding for clinicians new to research.	Queensland Health* employed emergency medicine trainees or senior medical officers supervised by an eligible FACEM (or FRACP PEM) providing patient care in Emergency Department.
Staff Specialist (to be phased out by 2020)	Up to \$100,000	Seed funding for innovative research that may have the potential for future funding by granting bodies.	Queensland Health* employed FACEM (or FRACP PEM) providing patient care in Emergency Department as the principal Investigator.
Project (from 2020 the Investigator eligibility to change to match the JumpStart and Leading Edge grants)	Up to \$150,000 per year for three years (total of \$450,000)	Whole or partial funding to run larger projects with the aim of generating data to seek further funding from alternative sources. Projects that include collaboration between multiple sites and/or disciplines leveraged funding, in-kind support. Health economic analysis is desirable.	Queensland Health* employed FACEM (or FRACP PEM) providing patient care in Emergency Department as the principal Investigator.
Jumpstart	Up to \$40,000	Seed funding for innovative research involving new collaborations and research teams. Project outcomes will have potential to lead to further funding from granting bodies.	<ul style="list-style-type: none"> Principal Investigator must be a Queensland Health* clinician who provides direct clinical care to patients in emergencies within: Emergency Departments or Queensland Ambulance Service or Retrieval Services Queensland. Must have at least one Queensland Health* FACEM (or FRACP PEM) co-investigator, who is providing direct clinical care to patients in pre-hospital or Emergency Department setting.
Leading Edge	Up to \$100,000	<ul style="list-style-type: none"> Seed funding for innovative research that may have the potential for future funding by granting bodies Funding to leverage additional funding from other granting bodies Original research that demonstrates importance to emergency care. 	<ul style="list-style-type: none"> Principal Investigator must be a Queensland Health* clinician engaged in providing direct clinical care to patients in emergencies within: Emergency Departments or Queensland Ambulance Service or Retrieval Services Queensland. Must have at least one Queensland Health* FACEM (or FRACP PEM) co-investigator providing direct clinical care to patients in pre-hospital or Emergency Department setting.

*This includes employees of Mater Misericordiae Health Services Brisbane Ltd, who work in the Mater Public Hospital.

Appendix 2: Final reports – Queensland research program

TRAINEE GRANTS

PROJECT TITLE LADDER RELATED INJURIES			
Principal investigator	Dr Gabriella Wood	PI Institution	Nambour General Hospital
Co-investigators	Dr Ogilvie Thom Kym Roberts Prof Kirsten Vallmuur Dr Rob Eley Chantelle Judge Connie Reed Cara Joyce Cabilan	Collaborating institution	Queensland University of Technology The University of Queensland Princess Alexandra Hospital
Amount	\$18,633	Grant Period	2015-2017
Additional funding	\$110,560 (in-kind) \$2500 (leveraged)		
Publication	Caliban, C.J., Vallmuur, K., Eley, R., Judge, C., Cochrane, S., Reed, C., Riordan, J., Roberts, K., Thom, O. and Wood, G., 2018. Impact of ladder-related falls on the emergency department and recommendations for ladder safety. <i>Emergency Medicine Australasia</i> , 30(1), pp.95-102. doi: 10.1111/1742-6723.128		
Key outcome(s)	The research team found the typical ladder fall patient was male, over the age of 50 years and used a domestic ladder. They identified that most falls occurred due to ladder movement and slips or missteps. The main contributing factor was a combination of user features and flaws in ladder setup.		

PROJECT TITLE DIAGNOSIS OF ACUTE CORONARY OCCLUSION IN PATIENTS WITH A VENTRICULAR PACED RHYTHM			
Principal investigator	Dr Gary Mitchell	PI Institution	Royal Brisbane and Women's Hospital
Co-investigators	Prof Louise Cullen Dr Stephen Smith Dr Kenneth Dodd	Collaborating institution	Hennepin County Medical Center, University of Minnesota
Amount	\$16,866	Grant Period	2015-2017
Additional funding	\$11,295 (in-kind)		
Key outcome(s)	Dr Mitchell is leading the Brisbane site in a large international study. Data analysis of the international study is still ongoing, but the study has the potential to provide a new diagnostic tool for diagnosing acute coronary occlusion (ACO) in patients with pacemakers.		

PROJECT TITLE A COMPARISON BETWEEN AIR AND NITROX GAS FOR RECREATIONAL SCUBA DIVERS TO 18MSW			
Principal investigator	Dr Denise Blake	PI Institution	The Townsville Hospital
Co-investigators	Dr Julia Bruce-Thomson A/Prof Lawrence Brown Pedro Bisaro Corry Van den Broek	Collaborating institution	James Cook University
Amount	\$19,382	Grant Period	2010-2018
Additional funding	\$7629 (Townsville Hospital Private Practice Trust Fund) \$2000 (in-kind)		
Key outcome(s)	Townsville emergency specialist Dr Denise Blake ran a clinical study to see if switching to nitrox gas for shallow dives could reduce the risk of decompression illness, also known as 'the bends'. This study closed in December 2017 and at the time of this report, the research results were being written up for peer-reviewed publication.		

STAFF SPECIALIST GRANTS

PROJECT TITLE ACCURACY OF TRAUMA ULTRASOUND IN THE PREHOSPITAL ENVIRONMENT (TUPHEN STUDY)			
Principal investigator	Dr Stephen Rashford	PI Institution	Royal Brisbane and Women's Hospital
Co-investigators	Dr Daniel Bodnar Dr Emma Bosley	Collaborating Institution	Queensland Ambulance Service
Amount	\$32,075	Grant Period	2010-2017
Additional funding	\$9,827 (in-kind)		
Publications	<p>Bodnar, D., Rashford, S., Hurn, C., Quinn, J., Parker, L., Isoardi, K., Williams, S., Enraght-Moony, E. and Clarke, B., "Characteristics and outcomes of patients administered blood in the prehospital environment by a road based trauma response team", <i>Emergency Medicine Journal</i>, 2013;31(7):583-588.</p> <p>Bodnar, D., Rashford, S., Williams, S., Enraght-Moony, E., Parker, L. and Clarke, B., "The feasibility of civilian prehospital trauma teams carrying and administering packed red blood cells", <i>Emergency Medicine Journal</i>, 2012;31(2):93-95.</p>		
Key outcome(s)	<p>In this study, clinicians evaluated paramedics' use of a portable ultrasound to detect internal bleeding and injury in patients via 'Focussed Assessment with Sonogram in Trauma' (FAST). QAS has subsequently embedded the ultrasounds in their High Acuity Response Unit. They were the first ambulance service in Australia and one of very few services in the world to have paramedics using prehospital ultrasound.</p>		

PROJECT TITLE CRITICAL EVALUATION OF A TARGETED POINT OF CARE (POC) ROTEM AND MULTIPLATE GUIDED COAGULATION AND HAEMOSTASIS MANAGEMENT PROGRAM IN SEVERE TRAUMA AND CRITICAL BLEEDING			
Principal investigator	Dr Don Campbell	PI Institution	Gold Coast University Hospital (GCUH)
Co-investigators	Dr James Winearls Dr Andre Bulmer Dr David Pearson Dr Indu Singh	Collaborating Institutions	Griffith University The Prince Charles Hospital
Amount	\$69,263	Grant Period	2014-2017
Additional funding	\$70,000 (in kind)		
Key outcome(s)	<p>This research led to four large Queensland Emergency Departments* adopting the POC device, ROTEM® to rapidly identify and treat trauma patients at risk of bleeding to death due to Trauma Induced Coagulopathy' (TIC). These Emergency Departments are the only ones in Australia using POC testing (either ROTEM or the alternative test called TEG) to manage blood products in trauma patients from the time they arrive at hospital.</p> <p><i>*GCUH, Royal Brisbane and Women's Hospital, Princess Alexandra Hospital and The Townsville Hospital.</i></p>		

PROJECT TITLE DESCRIBING THE EXPERIENCES OF SOCIAL WORKERS IN A TERTIARY EMERGENCY DEPARTMENT			
Principal investigator	Dr Alexandra Markwell	PI Institution	Royal Brisbane and Women's Hospital
Co-investigators	Ms Tegwen Howell A/Prof Carol Windsor	Collaborating institution	Queensland University of Technology
Amount	\$14,735	Grant Period	2015-2017
Additional funding	\$41,987 (in-kind)		
Key outcome(s)	<p>This was the first-ever study of Australia's only 24/7 onsite emergency department social work service at the RBWH. The research has garnered interest from other large emergency departments in Australia, New Zealand and Canada and to improvements to the service at the RBWH.</p>		

PROJECT TITLE WHAT ARE THE STRUCTURES, PROCESSES AND OUTCOMES OF AN EMERGENCY DEPARTMENT AMBULANCE OFFLOAD NURSE (EDAOLN) MODEL OF CARE?			
Principal investigator	A/Prof David Green	PI Institution	Gold Coast University Hospital
Co-investigators	Prof Julia Crilly Prof Marianne Wallis Dr Emma Bosley Prof Paul Scuffham	Institutions	Griffith University University of the Sunshine Coast Queensland Ambulance Service Australian eHealth Research Centre, CSIRO
Amount	\$40,553	Grant Period	2013-2017
Additional funding	\$79,800 (in-kind)		
Publication	Greaves, T., Mitchell, M., Zhang, P. and Crilly, J., "The impact of an Emergency Department ambulance offload nurse role: A retrospective comparative study", <i>International Emergency Nursing</i> , 2017; 32:39-44. doi: 10.1016/j.ienj.2016		
Key outcome(s)	In this project, the researchers found an Emergency Department Ambulance Offload Nurse (EDAOLN) could potentially play an important role in reducing patient treatment delays in emergency departments. The EDAOLN successfully reduced the time it took for patients arriving by ambulance to be offloaded within 30 minutes; and the time taken to see a doctor was slightly shorter as was total length of ED stay.		

PROJECT TITLE BASEL SYNCOPE EVALUATION STUDY: BASEL IX STUDY			
Principal investigator	Professor Louise Cullen	PI Institution	Royal Brisbane and Women's Hospital
Co-investigators	Prof William Parsonage A/Prof Jaimi Greenslade Ms Tracey Hawkins	Collaborating institutions	<ul style="list-style-type: none"> Switzerland: Kantonsspital Baselland, Spital Lachen, University Hospital Basel, University Hospital Zurich, Lucerne General Hospital, Hopitaux Universitaires de Genève; New Zealand: Christchurch Hospital Poland: Medical University of Silesia USA: Baylor College of Medicine Spain: Hospital del Mar, Hospital Clinic of Barcelona, Hospital Clinico San Carlos Italy: Saint-Andrea Hospital Belgium: Université Libre de Bruxelles Czechia: University Hospital Brno Germany: Klinikum Nürnberg
Amount	\$32,100	Grant Period	2014-2018
Additional funding	\$24,129 (in-kind)		
Publication	Badertscher, P., Nestelberger, T., de Lavallaz, J. du F., et al, "Prohormones in the Early Diagnosis of Cardiac Syncope", <i>Journal of the American Heart Association: Cardiovascular and Cerebrovascular Disease</i> , 2017;6(12):e006592. doi.org/10.1161/JAHA.117.006592		
Key outcome(s)	Analysis of the data collected in this international multi-centre study is ongoing, but the research team believe it will lead to a protocol for the evaluation of syncope. Partial findings were published at the end of 2017, with a biomarker (MRproANP) identified. This marker could help significantly improve the early detection of cardiac-related syncope.		

PROJECT GRANT

PROJECT TITLE			
ADDING "INSULT TO INJURY" - THE EFFECT OF FRESH AND AGED BLOOD TO OXYGENATION, METABOLISM AND ORGAN FUNCTION IN A CLINICALLY RELEVANT SEPSIS MODEL			
Principal investigator	Dr Andrew Staib	PI Institution	Princess Alexandra Hospital
Co-investigators	Prof John Fraser Dr Yoke Lin Fung A/Prof Kiran Shekar A/Prof Michelle Chew Prof Michael Reade Dr John-Paul Tung Dr Charles McDonald Prof Kathryn Maitland	Institutions	The Prince Charles Hospital (Critical Care Research Group) Australian Red Cross Blood Service The University of Queensland Imperial College London Australian Defence Force Australian National University Nambour General Hospital Queensland University of Technology
Amount	\$204,402	Grant Period	2012-2018
Additional funding	\$205,324 (in-kind) \$980,811 (NHMRC: 1061382) \$96,297.21 (TPCH Foundation) \$84,300 (Australian Defence Health Foundation) \$3,400 (Intensive Care Foundation)		
Publications	<p>Byrne, L., Obonyo, N.G., Diab, S., Dunster, K., Passmore, M., Boon, A.C., Hoe, L.S., Hay, K., Van Haren, F., Tung, J.P., Cullen, L., Shekar, K., Maitland, K., and Fraser, J., "An ovine model of hyperdynamic endotoxemia and vital organ metabolism", <i>Shock: Injury, Inflammation, and Sepsis: Laboratory and Clinical Approaches</i>, 2018;49(1):99-107. doi.org/10.1097/SHK.0000000000000904</p> <p>Byrne, L. and Van Haren, F., "Fluid resuscitation in human sepsis: Time to rewrite history?", <i>Annals of intensive care</i>, 2017;7(1):.4. doi: 10.1186/s13613-016-0231-8</p> <p>van Zyl N., Milford E.M., Diab S., Dunster K., McGiffin P., Rayner S.G., Staib A., Reade M.C., Fraser J.F., "Activation of the protein C pathway and endothelial glycocalyx shedding is associated with coagulopathy in an ovine model of trauma and haemorrhage", <i>J Trauma Acute Care Surg</i>, 2016; 81(4):674-684. doi: 10.1097/TA.0000000000001190.</p> <p>Milford E. M. and Reade M. C., "Comprehensive review of platelet storage methods for use in the treatment of active haemorrhage", <i>Transfusion</i>, 2016;56 S2: S140-S148. doi:10.1111/trf.13504</p> <p>Obonyo N. G., Fanning J. P., Ng A.S. Y., Pimenta L. P., Shekar K., Platts D. G., Maitland K. and Fraser J. F., "Effects of volume resuscitation on the microcirculation in animal models of lipopolysaccharide sepsis: a systematic review", <i>Intensive Care Medicine Experimental</i>, 2016; 4 1: 1-16. doi:10.1186/s40635-016-0112-3.</p> <p>van Zyl N.; Milford E. M., Diab S.; Dunster K.; Reade M, Fraser J.F., Staib A., "Acute traumatic coagulopathy in an ovine model of trauma and haemorrhage", <i>Emergency Medicine Australasia</i>, 2015;27(S1);51-52. doi. org/10.1111/1742-6723.12416</p> <p>van Zyl, N., Reade, M.C. and Fraser, J.F., "Experimental Animal Models of Traumatic Coagulopathy: A Systematic Review", <i>Shock</i>, 2015;44(1):16-24. doi: 10.1097/SHK.0000000000000372</p>		
Key outcome(s)	This research group successfully developed a new animal model for sepsis, which could change the way we treat the sepsis and septic shock in humans. The knowledge generated by the research team has the potential to inform new clinical guidelines and practice regarding transfusion strategies in patients suffering from sepsis and trauma. In addition, the animal model and monitoring techniques developed by the research team for this project are also being used in an NHMRC-funded sepsis study, looking at the use of fluid transfusions (EMF is also co-funding this project, ID: EMPJ-358R25-2016).		

PROGRAM GRANT

PROJECT TITLE QUALITY LINKING OF HEALTH DATA TO ENABLE THE MEASUREMENT AND EVALUATION OF PATIENT AND HEALTH SERVICE OUTCOMES			
Principal investigator	Professor Gerben Keijzers	PI Institution	Gold Coast University Hospital
Co-investigators	Prof Julia Crilly Mr John O'Dwyer Mrs Trudy Teasdale Dr Emma Bosley Dr James Linda Ms Jane Hancock Ms Naomi Dwyer	Institutions	Griffith University Queensland Ambulance Service Australian eHealth Research Centre, CSIRO
Amount	\$104,833	Grant Period	2013-2017
Key outcome(s)	By tracking the patient journey from ambulance through to discharge, researchers were able to identify bottlenecks in services for two vulnerable patient groups—the elderly and those with mental health issues. The outcomes have the potential to inform care delivery opportunities for patients entering emergency departments.		

RESEARCH SCHOLARSHIP

PROJECT TITLE MANAGEMENT OF PAEDIATRIC STATUS EPILEPTICUS IN AUSTRALIA AND NEW ZEALAND			
Principal investigator	Dr Jeremy Furyk	PI Institution	The Townsville Hospital
Co-investigators	A/Prof Kerriane Watt A/Prof Franz Babl Dr Stuart Dalziel	Institutions	Griffith University University of the Sunshine Coast Queensland Ambulance Service Australian eHealth Research Centre, CSIRO
Amount	\$150,000	Grant Period	
Additional funding	\$15,000 (in-kind) \$30,000 (PhD Stipend: NHMRC CRE PEM) \$20,000 (Informed Consent-SERTA) \$40,000 (SEARCH – SERTA)		
Publications	<p>S.R., McBain-Rigg K., Stepanov N. and Babl F.E., "Community attitudes to emergency research without prospective informed consent: A survey of the general population", <i>Emerg Med Australas</i>, 2018 May 2. doi: 10.1111/1742-6723.12958</p> <p>Furyk J., Ray R., Watt K., Dalziel S.R., Oakley E., Mackay M., Dabscheck G., Riney K. Babl F.E., a PREDICT study, "Consensus research priorities for paediatric status epilepticus: A Delphi study of health consumers, researchers and clinicians", <i>Seizure</i>, 2018; 56:104-9. doi: 10.1016/j.seizure.2018.01.025.</p> <p>Furyk J., Watt K., Emeto T.I., Dalziel S., Bodnar D., Riney K. and Babl F.E., "Review article: Paediatric status epilepticus in the pre-hospital setting: An update.", <i>Emerg Med Australas</i>. 2017;29(4):383-390. doi: 10.1111/1742-6723.12824.</p> <p>Furyk J., McBain-Rigg K., Watt K., Emeto T.I., Franklin R., Franklin D., Schibler A., Dalziel S.R., Babl F.E., Wilson C., Phillips N. and Ray R., "Qualitative evaluation of a deferred consent process in pediatric emergency research: A PREDICT study", <i>BMJ Open</i> 2017;7:e018562. doi:10.1136/bmjopen-2017-018562</p> <p>Dalziel S.R., Furyk J., Bonisch M., Oakley E., Borland M., Neutze J., Donath S., Sharpe C., Harvey S., Davidson A., Craig S., Phillips N., George S., Rao A., Cheng N., Zhang M., Sinn K., Kochar A., Brabyn C., Babl F.E.; PREDICT research network, "A multicentre randomised controlled trial of levetiracetam versus phenytoin for convulsive status epilepticus in children (protocol): Convulsive Status Epilepticus Paediatric Trial (ConSEPT) - a PREDICT study", <i>BMC pediatrics</i>. 2017 Jun 22;17(1):152. PubMed PMID: 28641582. Pubmed Central PMCID: 5480418.</p> <p>Furyk J.S., Lawton L., Ting J.Y., Taylor D.M., "Perspective: Informed Consent in emergency care research: An oxymoron", <i>Emergency medicine Australasia: Emerg Med Australas</i>, 2017;29(1):110-2. doi.org/10.1111/1742-6723.12642 Epub 28 July 2016.</p> <p>Furyk J. & Dalziel S. (2018), "Seizures and non-epileptic events". In Cameron P., Browne G.J., Mitra B., t Dalziel S. and Craig S., (Eds), <i>Textbook of Paediatric Emergency Medicine</i>. Elsevier Health Sciences, United Kingdom (3rd ed; pp243 – 247).</p>		
Key outcome(s)	Dr Jeremy Furyk engaged with the community as well as medical specialists to identify key nine research priorities for childhood status epilepticus. He also surveyed parents and the public to better understand the way critically ill children are recruited into emergency department studies— finding that overall, the majority of parents and community members were supportive of 'research in emergency circumstances without prospective informed consent'.		

CAPACITY BUILDING GRANT

Principal investigator	Dr Jeremy Furyk	Institution	The Townsville Hospital
Co-investigators	Prof Peter Aiken Dr Ben Close Dr Denise Blake		
Amount	\$210,000	Grant Period	2012-2017
Additional funding	\$210,000 (Townsville Hospital Private Practice Trust Fund) \$552,108 (Trauma & Disaster Management Scheme, SERTA, Baxter, Australian Institute of Tropical Health and Medicine; QEDSAP)		
Key metrics	Significant research activity: 15 new projects, including 7 multisite Queensland/Australasian/ international trials Awarded 16 EMF grants worth \$923,505 Extensive collaborations: including with the London School of Hygiene and Tropical Medicine, PREDICT network, Paediatric Critical Care Research Group and ACEM Clinical Trials Network Increased research output: 72 journal publications and 27 conference presentations Increased staff involvement in research Culture change, including bimonthly research meetings and weekly research team meetings Staff education: research literacy training was introduced as part of Registrar training & regular journal clubs held Two of lead researchers undertook PhDs: Dr Jeremy Furyk and Dr Denise Blake		
Key research areas/ projects	Trauma: FEISTY & FEISTY Jr Pain and Sedation: TARGET, SIESTA, IV versus oral paracetamol Paediatrics: PARIS I (bronchiolitis), CONCEPT (status epilepticus), THRIVE (intubation), RAPIDS (sepsis) Kidney stones Gastrointestinal bleeding: Halt-IT Vascular medicine stroke research Respiratory: AANZDEM Headache research Hyperbaric medicine		

Appendix 3: Selected research publications (2017/18)

- Abraham, L.J., Thom, O., Greenslade, J.H., Wallis, M., Johnston, A.N., Carlström, E., Mills, D. and Crilly, J., "Morale, stress and coping strategies of staff working in the emergency department: A comparison of two different-sized departments", *Emergency Medicine Australasia*, 2018; 30(3): 375-381. doi: org/10.1111/1742-6723.12895 [Epub 2018 Jan 23]
- Babl, F.E., Oakley, E., Dalziel, S.R., Borland, M.L., Phillips, N., Kochar, A., Dalton, S., Cheek, J.A., Gilhotra, Y., Furyk, J. and Neutze, J., "Accuracy of clinician practice compared with three head injury decision rules in children: a prospective cohort study", *Annals of emergency medicine*, 2018; 71(6):703-710. doi: 10.1016/j.annemergmed.2018.01.015. [Epub 2018 Feb 14]
- Badertscher P., Nestelberger T., Du Fay De Lavallaz J., Than M., Cullen L., Miro O., Martin-Sanchez F.J., Morawiec B., Christ M., Di Somma S., Peacock F., Osswald S., Reichlin T., Mueller C., "P468 Natural history of syncope: insights from the BASEL IX study", *European Heart Journal*, 2017; 38(1): ehx501.P468. doi: 10.1093/eurheartj/ehx501.P468
- Badertscher P., Nestelberger T., de Lavallaz J.D.F., Than M., Morawiec B., Kawecky D., Miró Ò., López B., Martin-Sanchez F.J., Bustamante J., Geigy N., Christ M., Di Somma S., Peacock W.F., Cullen L., Sarasin F., Flores D., Tschuck M., Boeddinghaus J., Twerenbold R., Wildi K., Sabti Z., Puelacher C., Rubini Giménez M., Kozhuharov N., Shrestha S., Strebel I., Rentsch K., Keller D.I., Poepping I., Buser A., Kloos W., Lohrmann J., Kuehne M., Osswald S., Reichlin T., Mueller C., "Prohormones in the Early Diagnosis of Cardiac Syncope", *J Am Heart Assoc*, 2017; 6(12): pii: e006592. doi: 10.1161/JAHA.117.006592.
- Begley, J.L., Butson, B. and Kwa, P., "The emergency surgical airway", *Emergency Medicine Australasia*, 2017; 29(5), pp.570-575. <https://doi.org/10.1111/1742-6723.12850>
- Blake, D.F., Young, D.A. and Brown, L.H., "Transcutaneous oximetry: variability in normal values for the upper and lower limb", *Diving and hyperbaric medicine*, 2018; 48(1):2-9. doi:10.28920/dhm48.1.2-9
- Borland, M., Dalziel, S., Lyttle, M. and Babl, F., "Vomiting with head injury in children presenting to emergency departments: A PREDICT study", *Pediatrics*, 2018; 141(4): e20173123. doi: 10.1542/peds.2017-3123.
- Borland, M.L., Dalziel, S.R., Phillips, N., Dalton, S., Lyttle, M.D., Bressan, S., Oakley, E., Hearps, S.J., Kochar, A., Furyk, J. and Cheek, J.A., on behalf of the Paediatric Research in Emergency Department International Collaborative group, "Vomiting with head trauma and risk of traumatic brain injury", *Pediatrics*, 2018;141(4). pii: e20173123. doi: 10.1542/peds.2017-3123.
- Brownlie, J., "Change and challenge the expected: Nurse practitioner emergency department vulnerable patients model of care", *The Journal for Nurse Practitioners*, 2017; 13(7): e335. doi:10.1016/j.nurpra.2017.05.044
- Brownlie, J., "Not just morning sickness", *The Journal for Nurse Practitioners*, 2017; 13(7): e353. doi: 10.1016/j.nurpra.2017.05.086
- Burkett, E., Martin-Khan, M.G. and Gray, L.C., 2017. Quality indicators in the care of older persons in the emergency department: A systematic review of the literature. *Australas J Ageing*. 2017;36(4):286-298. doi: 10.1111/ajag.12451. [Epub 2017 Jul 31]
- Byrne, L., Obonyo, N.G., Diab, S., Dunster, K., Passmore, M., Boon, A.C., Hoe, L.S., Hay, K., Van Haren, F., Tung, J.P. and Cullen, L., "An Ovine Model of Hyperdynamic Endotoxemia and Vital Organ Metabolism", *Shock: Injury, Inflammation, and Sepsis: Laboratory and Clinical Approaches*, 2018;49(1):99-107. doi: 10.1097/SHK.0000000000000904
- Cabilan, C.J., Vallmuur, K., Eley, R., Judge, C., Cochrane, S., Reed, C., Riordan, J., Roberts, K., Thom, O. and Wood, G., "Impact of ladder-related falls on the emergency department and recommendations for ladder safety", *Emerg Med Australas*, 2018; 30(1):95-102. doi: 10.1111/1742-6723.12854.[Epub 2017 Sep 14]
- Carlton, E.W., Pickering, J.W., Greenslade, J., Cullen, L., Than, M., Kendall, J., Body, R., Parsonage, W.A., Khattab, A. and Greaves, K., "Assessment of the 2016 National Institute for Health and Care Excellence high-sensitivity troponin rule-out strategy", *Heart*, 2018; 104(8), pp.665-672.doi: 10.1136/heartjnl-2017-311983. [Epub 2017 Sep 1]
- Chapman, A.R., Lee, K.K., McAllister, D.A., Cullen, L., Greenslade, J.H., Parsonage, W., Worster, A., Kavsak, P.A., Blankenberg, S., Neumann, J. and Sørensen, N.A., "Association of High-Sensitivity Cardiac Troponin I Concentration With Cardiac Outcomes in Patients With Suspected Acute Coronary Syndrome", *JAMA*, 2017;318(19):1913-1924. doi:10.1001/jama.2017.17488
- Chiew, A.L., Isbister, G.K., Kirby, K.A., Page, C.B., Chan, B.S. and Buckley, N.A., "Massive paracetamol overdose: an observational study of the effect of activated charcoal and increased acetylcysteine dose (ATOM-2)", *Clinical Toxicology*, 2017;55(10):1055-1065. doi: 10.1080/15563650.2017.1334915. [Epub 2017 Jun 23]
- Clemence, M.C., Henderson, A., Greenbury, C.B., Norton, R.E. and Furyk, J., "A survey of the antibiotic prescribing practices of doctors in an Australian Emergency Department", *Infection, Disease & Health*, 2018; 23(2):67-73. doi.org/10.1016/j.idh.2017.12.001
- Crilly, J., Cameron, C.M., Scuffham, P.A., Good, N., Scott, R., Mihala, G., Sweeny, A. and Keijzers, G., "Emergency department presentations in infants: Predictors from an Australian birth cohort", *Journal of Paediatrics and Child Health*, 2017;53(10):981-987. doi: 10.1111/jpc.13617 [Epub 2017 Jul 25]
- Cullen, L., Greenslade, J.H., Hawkins, T., Hammett, C., O'Kane, S., Ryan, K., Parker, K., Schluter, J., Dalton, E., Brown, A.F. and Than, M., "Improved Assessment of Chest pain Trial (IMPACT): assessing patients with possible acute coronary syndromes", *The Medical Journal of Australia*, 2017; 207(5):195-200. PMID: 28987132

- Forero, R., Nahidi, S., De Costa, J., Mohsin, M., Fitzgerald, G., Gibson, N., McCarthy, S. and Aboagye-Sarfo, P., "Application of four-dimension criteria to assess rigour of qualitative research in emergency medicine", *BMC Health Serv Res*, 2018; 18(1):120. doi: 10.1186/s12913-018-2915-2.
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- Fulbrook, P., Jessup, M. and Kinnear, F., "Implementation and evaluation of a 'Navigator' role to improve emergency department throughput", *Australas Emerg Nurs J.*, 2017; 20(3):114-121. doi: 10.1016/j.aenj.2017.05.004 [Epub 2017 Jun 16]
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- Gelbart, B., Schlapbach, L., Ganeshalingham, A., Ganu, S., Erickson, S., Oberender, F., Hoq, M., Williams, G., George, S. and Festa, M., "Fluid bolus therapy in critically ill children: A survey of practice among paediatric intensive care doctors in Australia and New Zealand", *Critical Care and Resuscitation*, 2018;20(2):131.
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Appendix 4: EMF Board, committees and panels

EMF BOARD MEMBERS AND MEETING ATTENDANCE

Table A4.1: Board members and attendance

NAME	18/7/17	4/10/17	14/11/17 (& AGM)	31/1/18 (STRATEGY MEETING)	13/3/18	9/5/18	TOTAL
Chair: Dr Anthony Bell	Y	Y	Y	Y	Y	Y	6/6
Dr Peter Isdale AM	Y	Y	Y	Y	Y	Y	6/6
Dr Michael Sinnott	Y	Y	Y	Y	A	Y	5/6
Dr David Spain	Y	Y	Y	A	Y	Y	5/6
A/Prof Ed Oakley	Y	Y	Y	Y	Y	Y	6/6
Dr John Wakefield	Y	Y	A	A	Y	Y	4/6
Mr Jason Currie	Y	Y	Y	A	Y	Y	5/6
Key: Y – In attendance; A – Not in attendance, apology received prior to meeting							

FINANCE, RISK AND AUDIT COMMITTEE: ROLE AND RESPONSIBILITIES

The Finance, Risk and Audit Committee provide an oversight of the integrity of the EMF's statutory financial reports and statements. It also monitors EMF to ensure an appropriate framework is in place to identify and manage risk and ensures that EMF is complying with regulatory, prudential, legal and ethical standards. The Committee is responsible for reviewing EMF's compliance with all internal guidelines, policies and procedures. However, overall responsibility for risk oversight and management rests with the full board. The Committee is made

up of EMF Board Directors and external volunteers, who are listed in Table A4.2. In 2018, EMF welcomed Cathy Montesin, who is a Director at InterFinancial Corporate Finance, to the FRAC. EMF Board Member, Dr Peter Isdale AM, also joined the FRAC in June 2018 in anticipation of the Chair, Jason Currie, stepping down from the Committee later in the year.

Download the Committee's Terms of Reference: http://emergencyfoundation.org.au/wp-content/uploads/2017/05/FRAC_Terms-of-reference_updated-EMF_April-2017.pdf

Table A4.2: Finance, Risk and Audit Committee members and attendance

NAME	12/9/17	31/10/17	21/2/18	18/4/18	19/6/18	TOTAL
Chair: Mr Jason Currie* (EMF Board Member representative)	Y	Y	Y	Y	Y	5/5
Mr Paul Monaghan BComm, PGradCert HPolMgmt, MAICD, FCPA, FACHSM	T	T	T	T	T	5/5
Ms Susanne Le Boutillier BA, GDIR Bus, GradCert Bus, GAICD	T	A	T	T	T	4/5
Mr Scott Bryant BBus, CPA	Y	A	T	T	T	4/5
Ms Beth Chapman BBus, CPA	Y	Y	Y	Y	Y	5/5
Ms Cathy Montesin BBus (Hons), GradDipAppFinInv, ACA					Y	1/1
Dr Peter Isdale AM (ex-officio EMF Board Member representative)					Y	1/1
Key: Y – In attendance; T – Teleconference; A – Apology received prior to meeting						

Not a member at this time

* Mr Currie stepped down as Chair of the FRAC at the last meeting for 2017/18.

SCIENTIFIC ADVISORY COMMITTEE: ROLE AND RESPONSIBILITIES

The purpose of this Committee is to provide strategic advice to the EMF Board on scientific matters for the EMF. It also audits research matters referred by EMF as well as complaints made to EMF and oversees an annual audit of EMF grant administration processes. The members of this Committee and their attendance at meetings in 2017/18 are outlined in Table A4.3. In late 2017, the Chair, Dr Ogilvie Thom stepped down and was replaced by Dr Ellen Burkett. EMF also farewelled Prof Daniel Fatovich from the SAC while welcoming new members, A/Prof Stephen Macdonald and A/Prof Jamie Seymour.

Download the Committee's Terms of Reference: <http://emergencyfoundation.org.au/wp-content/uploads/2017/10/EMF-SAC-ToR-reviewed-Oct-2017.pdf>

Table A4.3: Scientific Advisory Committee members and attendance

NAME	19/8/17	19/10/17	7/12/17	19/4/18	21/6/18	TOTAL
Chair: Dr Ellen Burkett <i>MBBS, FACEM</i>	A	Y	Y	Y	T	4/5
Outgoing Chair: Dr Ogilvie Thom <i>MBBS, FACEM</i>	Y	Y				2/2
A/Prof Ed Oakley <i>(EMF Board Member representative)</i>	Y	A	Y	Y	A	3/5
Prof Marianne Wallis <i>RN, BSc (Hons), FRCNA, PhD</i>	Y	Y	Y	Y	T	5/5
A/Prof Diann Eley <i>BSc, MSc, PhD</i>	Y	Y	A	Y	T	4/5
Prof Daniel Fatovich <i>MBBS, PhD, FACEM</i>	A	A	Y			1/3
Dr Amith Shetty <i>MBBS, FACEM</i>	Y	Y	Y	Y	T	5/5
A/Prof Stephen Macdonald <i>BSc(Hons), MBChB, MRCP, DipChildHealth, PhD, FRCP, FACEM</i>					T	1/1
A/Prof Jamie Seymour <i>BSc (Hons), DPhil</i>					T	1/1
Ms Lisa van den Berg <i>(EMF representative)</i>	Y	Y	Y	Y	A	4/5
Dr Jonathan Staggs <i>(EMF representative)</i>	A	Y	Y			2/3
Tegwen Howell <i>(EMF representative)</i>					Y	1/1
Key: Y – In attendance; T – Teleconference; A – Not in attendance, apology received prior to meeting						

Not a member at this time

STRATEGIC GRANTS COMMITTEE: ROLE AND RESPONSIBILITIES

The Strategic Grants Committee reviews the Research Evaluation Panel scores and makes recommendations for research grant applications and delivers a set of final recommendations to the EMF Board of Directors. The Committee's advice is based on strategic direction and expected impact, with close consideration, for the Queensland Research Program, of current Queensland Science and Research Priorities. This Committee only meets following a grant round. Attendance in 2017/18 and the list of Committee members are outlined in Table A4.4.

Download the Committee's Terms of Reference: http://emergencyfoundation.org.au/wp-content/uploads/2018/03/SGC_Terms-of-reference_March-2018.pdf

Table A4.4: Strategic Grants Committee members and attendance

NAME	13/7/17	9/11/17	TOTAL
Chair: Ms Jane Schmitt <i>LLB, LLM, GAICD</i>	Y	Y	2/2
Dr Peter Isdale AM <i>(EMF Board Representative)</i>	Y	Y	2/2
Professor Gerry FitzGerald <i>MD, FACEM, FRACMA, FCHSM</i>	Y	Y	2/2
Dr Andrew Spiller <i>BSc, MBBS (Hons), FRACGP, FACEM</i>	Y	Y	2/2
Key: Y – In attendance; A – Not in attendance, apology received prior to meeting			

RESEARCH EVALUATION PANEL: ROLE AND RESPONSIBILITIES

The Research Evaluation Panel has responsibility for reviewing applications for scientific merit and other scoring criteria. This panel consists of external expert reviewers who are able to comment on the application. The Panel is comprised of the Chair and numerous appropriately qualified reviewers selected bi-annually from a pool of expert reviewers. EMF strives to enrol from a balanced panel of reviewers who are experts in their fields, whether they are based in Australia or overseas. The Foundation also aims, where possible, to have each application assessed by three independent expert reviewers consisting of a subject field expert, a relevant research methodology expert and an Emergency Medicine specialist to assess the contribution of the proposal to the field. The 38 members of the Panel in 2017/18 are listed in Table A4.5.

Download the Panel's Terms of Reference: http://emergencyfoundation.org.au/wp-content/uploads/2018/07/REP-EMF-QLD-Terms-of-reference_updated_Jun18-1.pdf

Table A4.5: Research Evaluation Panel members (2017/18)

NAME	QUALIFICATIONS	POSITION
Chair: Dr Peter Isdale AM	PhD, BA (Hons). MAICD	See profile on page 9
Prof Peter Aitken	MBBS, EMDM, MClinEd, DrPH, FACEM	Senior Director Health Disaster Management Unit, Queensland Health
Dr Mani Arora	BMedSc (Hons), MBBS (Hons), DipAnat, MScSurg, MS, MSportsMed	Consultant Orthopaedics and Sports Medicine Surgeon, Fortis Hospital (Mohali, India); Adjunct Lecturer, University of New England; Associate Lecturer, The University of Queensland, Australia; Honorary Adjunct Senior Teaching Fellow, Bond University
Dr Tim Baker	MBBS(Hons), BMedSc (Hons), MClinEd, FACEM	Director, Centre for Rural Emergency Medicine, Deakin University; Emergency Physician at Portland District Health and South West Healthcare
Dr Kylie Baker	MBBS, FACEM	Senior Medical Officer, Ipswich Emergency Department; Senior Lecturer, School of Medicine, The University of Queensland; Faculty Member of the Australian Institute of Ultrasound
Dr Janet Bray	PhD, GDipAppSci(AppStats), GCert(ResearchMeth), PGDip(CritCare), GDipAppSci(Nurs)	Senior Research Fellow/Heart Foundation Fellow, Monash University; Associate Director of NHMRC Centre of Research, Australian Resuscitation Outcomes Consortium, Monash University; Adjunct A/ Prof Curtin University

NAME	QUALIFICATIONS	POSITION
Dr Marc Broadbent	RN, PhD, MEd, GradCertAdult Ed & Training, MACMHN, FACN	Senior Lecturer, University of the Sunshine Coast
Dr Nathan Brown	BSc, PhD	Research Manager, Emergency Trauma Centre, Royal Brisbane and Women's Hospital
Dr Emily Callander	BA, PhD	Senior Research Fellow - Health Economics, Australian Institute of Tropical Health and Medicine, James Cook University; Honorary Senior Research Fellow, Mater Research Institute, The University of Queensland
Dr Giles N Cattermole	MA, BM, BCh, FRCER, MRCSEng, DTM&H, DMCC, DipIMCRCSEd	Associate Head of Department and Program Director, Emergency Department, Centre Hospitalier Universitaire de Kigali, University of Rwanda
Dr Martin Downes	Dip Comp Sc, BVSc, GCertPublicH, PhD, AEA, IEA	Senior Research Fellow, Griffith University
A/Prof Trudy Dwyer	RN, ICUCert, BHlth, GradDipFlexLrn, MClinEd, PhD	Associate Professor, Central Queensland University
Dr Vinay Gangathimmaiah	MBBS, MPH, FACEM	Staff Specialist, Emergency Medicine, Townsville Hospital
Dr Riesa Ginsberg	MBBS, FACEM	Senior Staff Specialist, Emergency Department, Redcliffe Hospital
A/Prof Bamini Gopinath	BTech(Hons), PhD	Associate Professor (Northern), Kolling Institute of Medical Research; Principal Research Fellow Sensory Loss Epidemiology, The Westmead Institute for Medical Research, The University of Sydney
A/Prof Jaimi Greenslade	PhD, MSc(Statistics), Bpsych(Hons)	Principal Research Fellow, Emergency and Trauma Centre, Royal Brisbane and Women's Hospital
Dr Tim Haina	BMedSci(Biochem), GradDip Clinical Ultrasound, MBBS, FACEM	Emergency Consultant, QEII Jubilee Hospital
Dr Wilhelmina (Willa) Huston	BSc (Hons), PhD	Associate Head of School (Teaching and Learning), School of Life Sciences, University of Technology Sydney; Associate Member, ithree - Institute of Infection, Immunity and Innovation, University of Technology Sydney
Dr Lisa Kalisch Ellett	BPharm, PhD	NHMRC – ARC Dementia Research Development Fellow, University of South Australia
Prof Gerben Keijzers	MBBS, MSc(Epi), PhD, FACEM	Senior Staff Specialist Emergency Physician, Gold Coast University Hospital; Honorary Professor Emergency Medicine, Bond University; Associate Professor, Griffith University
Professor Graham Kerr	BSc, MPE, PhD	Professor, School of Human Movement Studies, School of Exercise & Nutrition Science and Program Leader, Injury Prevention, Institute of Health & Biomedical Innovation, Queensland University of Technology
Dr David Lim	DrPH, Grad Cert in Academic Practice	Senior Lecturer, Rural Interprofessional Education Team Leader, Flinders University
Dr Judy Lowthian	PhD, MPH, BAppSc (SpPath), LMusA	Principal Research Fellow, Bolton Clarke Institute; Senior Research Fellow, School of Public Health & Preventive Medicine, Monash University
A/Prof Stephen Macdonald	BSc(Hons), MBChB, DipCH, MRCP, MRCPG, FACEM FRCP	Senior Lecturer in Emergency Medicine, University of Western Australia; Emergency Physician, Royal Perth Hospital; Research Fellow, Centre for Clinical Research in Emergency Medicine, Harry Perkins Institute of Medical Research
Prof Andrea Marshall	RN, PhD, MRCNA	Professor of Acute and Complex Care Nursing, Griffith University and Gold Coast Health
Dr Tom Meehan	PhD, MPH, MSc, BHealthSc	Director of Service Evaluation and Research at the Park, Centre for Mental Health Brisbane; Professor, Department of Psychiatry, The University of Queensland

NAME	QUALIFICATIONS	POSITION
Dr Carla Meurk	BSc, MSc(Hons), PhD	Principal Researcher, Queensland Centre for Mental Health Research; Project Manager, Queensland Forensic Mental Health Service; Honorary Senior Fellow, The University of Queensland
Dr Biswadev (Dev) Mitra	MBBS, MHSM, PhD, FACEM	Consultant Emergency Physician, Emergency and Trauma Centre, The Alfred; Head of Clinical Research, National Trauma Research Institute; Adjunct Professor, Department of Epidemiology and Preventive Medicine, School of Public Health and Preventive Medicine, Monash University
Dr Son Nghiem	PhD	Senior Research Fellow, Centre for Applied Health Economics, Griffith University
Prof Greg Peterson	BPharm(Hons), PhD, MBA, FSHP, FACP, GAICD, AACPA, ARPharmS, FPS	Director, Health Services Innovation Tasmania; Professor of Pharmacy, School of Medicine, University of Tasmania; Locum community pharmacist; Adjunct Professor at University of Canberra and Manipal University, India
Prof Anu Rammohan	MA, PhD	Professor of Economics, UWA Business School; Associate Dean (International), Faculty of Arts, Business, Law and Education, University of Western Australia
Dr Michael Reade	MBBS(Hons), BSc(Hons), MPH, DPhil, DMedSc, DMCC, DIMCRCSEd, PGCertAME, AFRACMA, FHEA, FCCP, FCCM, FANZCA, FCICM, Colonel (Aust Army)	Australian Defence Force Professor of Military Medicine and Surgery, University of Queensland and ADF Joint Health Command; Director of Clinical Services, 2nd General Health Battalion, Australian Regular Army; Eminent Staff Specialist Intensive Care, Royal Brisbane and Women's Hospital; Senior Visiting Medical Officer Anaesthetist, Ipswich Hospital; Adjunct Professor, Department of Epidemiology and Preventative Medicine, Monash University; Honorary Principal Fellow, Department of Surgery, University of Melbourne
Dr Mark Scott	MBBS (Hons), FACEM	Senior Staff Specialist, Emergency Department, Caboolture Hospital
Dr Karen Theobald	BAppSc, GCert (HigherEd), MHLthSc, DPhil	Associate Professor and Director of Academic Programs, School of Nursing, Queensland University of Technology.
A/Prof Kerriane Watt	BSc (Hons), PhD	Associate Professor, Injury Epidemiology / Research Methodology and Associate Dean, Research Education, College of Public Health, Medical & Veterinary Sciences, James Cook University
Prof Julian White AM	MBBS, MD, FACTM	State Consultant Clinical Toxinologist and Head of Toxinology, Women's and Children's Hospital South Australia; Associate Professor , The University of Adelaide
Dr Teresa Williams	BN, ICU Cert, RN, MHLth Sci(Res), PGDipClinEpi, PhD	Senior Research Fellow, Prehospital and Emergency Care Research UNIT (PRECRU), School of Nursing, Midwifery and Paramedicine, Faculty of Health Sciences, Curtin University (Bentley Campus)
Dr James Winearls	BSc (Hons), MBBS, MRCP, FCICM	Consultant Intensivist, Intensive Care Unit, Gold Coast University Hospital

Glossary

A

A/Prof	Associate Professor
AACPA	Australian Association of Consultant Pharmacy
AANZDEM	Australia and New Zealand Dyspnea in Emergency Departments Study
ABN	Australian Business Number
ACA	Associate Chartered Accountant
ACCCN	Australian College of Critical Care Nurses
ACEM	Australasian College of Emergency Medicine
ACN	Australian Company Number
ADAPT	Accelerated Diagnostic Protocol
AEA	American Economics Association
AFRACMA	Associate Fellow Royal Australasian College of Medical Administrators
AM	Order of Australia, Member of the Order
AMAQ	Australia Medical Association – Queensland
ANZICS	Australian and New Zealand Intensive Care Society
ARPharmS	Associate of the Royal Pharmaceutical Society
AusHSI	Australian Centre for Health Services Innovation

B

BA	Bachelor of Arts
BAppSc	Bachelor of Applied Science
SpPath	Speech Pathology
BBus	Bachelor of Business
BCh	Baccalaureus Chirurgiae (Bachelor of Surgery)
BComm	Bachelor of Commerce
BEcon	Bachelor of Economics
BHlth	Bachelor of Health
BM	Bachelor of Medicine
BMedSc	Bachelor of Medical Science
BPharm	Bachelor of Pharmacy
BPsych	Bachelor of Psychology
BSc	Bachelor of Science
BScAgr	Bachelor of Science, Agriculture
BTech	Bachelor of Technology
BVSc	Bachelor of Veterinary Science

C

COPD	Chronic Obstructive Pulmonary Disease
CONSEPT	Convulsive Status Epilepticus Paediatric Trial
CPA	Certified Practicing Accountant
CREDIT	Cannulation Rates in the Emergency Department Intervention Trial
CSE	Convulsive status epilepticus
CSIRO	Commonwealth Scientific Research Organisation

D

DGR	Deductible Gift Recipient (Australian tax exemption)
DIMCRCSEd	Diploma in Immediate Medical Care, Royal College of Surgeons of Edinburgh
DipAnat	Diploma of Anatomy
DipCH	Diploma in Chirurgiae (surgery)
DipChildHealth	Diploma Children's Health
DipIMCRCSEd	Diploma in Immediate Medical Care, Royal College of Surgeons of Edinburgh
DMCC	Diploma in the Medical Care of Catastrophes

DMedSc	Diploma in Medical Science
DPhil	Doctor of Philosophy
Dr	Doctor
DrPH	Doctor of Public Health
DFV	Domestic and family violence

E

ED	Emergency Department
EMDM	European Master in Disaster Medicine
EMF	Emergency Medicine Foundation

F

FACEM	Fellow of the Australasian College of Emergency Medicine
FACHSM	Fellow of the Australasian College of Health Service Management
FACN	Fellow of the American College of Nutrition
FACP	Fellow of the American College of Physicians
FACRRM	Fellow of the Australian College of Rural and Remote Medicine
FACTM	Fellowship of the Australasian College of Tropical Medicine
FANZCA	Fellow of the Australian and New Zealand College of Anaesthetists
FCCM	Fellowship of Critical Care Medicine
FCCP	Fellow of the American College of Chest Physicians
FCICM	Fellow of the College of Intensive Care Medicine of Australia and New Zealand
FCPA	Fellow of the Charter Practising Accountant (Australia)
FEISTY	Fibrinogen Early In Severe Trauma study
FHEA	Fellowship of the Higher Education Academy
FPS	Fellow of the Psychonomic Society
FRAC	Finance, Risk and Audit Committee
FRACP	Fellow of the Royal Australian College of Physicians
FRACGP	Fellow of the Royal Australian College of General Practitioners
FRCEM	Fellow of the Royal College of Emergency Medicine
FRCP	Fellowship of the Royal College of Physicians of London
FSB	Fellow of the Society of Biology
FSHP	Florida Society of Health-System Pharmacists
FTE	Full time equivalent

G

GAICD	Graduate of the Australian Institute of Company Directors
GCert	Graduate Certificate
Higher Ed	Higher Education
ResearchMeth	Research Methodology
PublicH	Public Health
GCPA	Graduate of CPA Australia
GCUH	Gold Coast University Hospital
GDipAppSci	Graduated Diploma Applied Science
AppStats	Applied Statistics
Nurs	Nursing
GDipCBL	Graduate Diploma Case Based Learning
GDIR	Graduate Diploma of Business in Industrial Relations

GEDI	Geriatric Emergency Department Intervention
GradDip	Graduate Diploma
AppFinInv	Applied Finance and Investment
GradDipFlexLrn	Graduate Certificate in Flexible Learning and Simulation

H

HSRAANZ	Health Services Research Association of Australia & New Zealand
HHS	Hospital and Health Service
HiNH	Hospital in Nursing Home program
Hons	Honours

I

ICUCert	Intensive Care Unit Certificate
IEA	International Economics Association
IMPACT	IMProved Assessment of ChesT pain protocol
IV	Intravenous

L

LCCH	Lady Cilento Children's Hospital
LLB	Bachelor of Laws
LLM	Master of Laws
LMusA	Licentiate in Music, Australia (Diploma)

M

MA	Master of Arts
MACMHN	Member of the Australian College of Mental Health Nurses
MAICD	Member of the Australian Institute of Company Directors
MBA	Master of Business Administration
MBBS	Bachelor of Medicine, Bachelor of Surgery
MBChB	Bachelor of Medicine, Bachelor of Surgery
MClinEd	Master of Clinical Education
MD	Doctor of Medicine
MEcSt	Master of Economic Studies
MEd	Master of Education
MHlthSc	Master of Health Science
Res	Research
MHSM	Masters in Health Systems Management
MIP	Master of Intellectual Property Law
MPE	Master of Physical Education
MPH	Master of Public Health
MRCGP	Member of the Royal College of General Practitioners (UK)
MRCNA	Member of the Royal College of Nursing Australia
MRCP	Member of the Royal College of Physicians
MRCS	Member of the Royal Colleges of Surgeons of Great Britain and Ireland
MSc	Master of Science
Epi	Epidemiology
MScSurg	Master of Science – Surgery
MSportsMed	Master of Sports Medicine
MSSc	Master of Social Science

N

NHMRC	National Health & Medical Research Council
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P

PAH	Princess Alexandra Hospital
PAPT	Patient Admission Prediction Tool
PARIS	Paediatric Acute Respiratory Intervention Studies
PEM	Paediatric Emergency Medicine
PGradCert/PGCert	Postgraduate Certificate
HPolMgmt	Health Policy and Management
AME	Authorised Medical Examiner
PGDip/PGradDip	Postgraduate Diploma
CritCare	Critical Care
ClinEpi	Clinical Epidemiology
J	Journalism
PhD	Doctor of Philosophy
PHO	Principal House Officer
POC	Point of care
POCT	Point of care testing
PREDICT	Paediatric Research in Emergency Departments International Collaborative
Prof	Professor
Psych	Psychology

Q

QAS	Queensland Ambulance Service
QERC	Queensland Emergency Research Collaborative
QIMR	Queensland Institute of Medical Research
QLD	Queensland
QPS	Queensland Police Service
QTC	Queensland Treasury Corporation
QUT	Queensland University of Technology

R

RBWH	Royal Brisbane and Women's Hospital
RDM	Research Development Manager
REP	Research Evaluation Panel
RN	Registered Nurse
ROTEM	Rotational thromboelastometry
RSN	Research Support Network
RSQ	Retrieval Services Queensland

S

SAC	Scientific Advisory Committee
SCUH	Sunshine Coast University Hospital
SGC	Strategic Grants Committee
SIESTA	Sedation for Acute Agitation in Emergency Departments Patients: Targeting Adverse Events

T

TEG	Thromboelastogram
THRIVE	Transnasal Humidified Rapid-Insufflation Ventilatory Exchange

U

UK	United Kingdom
UQ	The University of Queensland
USC	University off the Sunshine Coast
USQ	University of Southern Queensland
US/USA	United States of America
UWA	University of Western Australia

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Thank you to the following active collaborators

IN AUSTRALIA

Queensland Hospitals/Health services

Bundaberg Base Hospital
Caboolture Hospital
Cairns Hospital
Caloundra Hospital
Children's Health Queensland – Centre for Children's Health Research
Gatton Hospital
Gladstone Hospital
Gold Coast HHS
Gold Coast Private Hospital
Gold Coast University Hospital
Gympie Hospital
Hervey Bay Hospital
Ipswich Hospital
John Flynn Private Hospital
Kilcoy Base Hospital
Lady Cilento Children's Hospital
Logan Hospital
Mackay Base Hospital
Maryborough Hospital
Mater Adult Public Hospital, Brisbane
Mater Children's Public Hospital, Brisbane
Metro North HHS
Mount Isa Hospital
Nambour General Hospital
Pindara Private Hospital
Princess Alexandra Hospital
Queen Elizabeth II Jubilee Hospital
Redcliffe Hospital
Redlands Hospital
Robina Hospital
Rockhampton Base Hospital
Royal Brisbane and Women's Hospital
Sunshine Coast HHS
Sunshine Coast University Hospital
The Prince Charles Hospital – Critical Care Research Group
The Townsville Hospital
Thursday Island Hospital
Thursday Island Primary Health Care Centre
Toowoomba Hospital
Warwick Hospital
West Moreton HHS
Wide Bay Public Health Unit

Interstate Hospitals/Health services

Armada Health Service
Austin Health
Austin Hospital
Calvary Mater Newcastle
Dandenong Hospital
Fiona Stanley Hospital
Frankston Hospital

John Hunter Hospital
Liverpool Hospital
Monash Medical Centre
Prince of Wales Hospital, Sydney
Princess Margaret Hospital for Children
Royal Adelaide Hospital
Royal Children's Hospital, Melbourne
Royal Darwin Hospital
Royal Hobart Hospital
Royal North Shore Hospital
Royal Perth Hospital
Sir Charles Gairdner Hospital
St George Hospital
Sunshine Hospital
The Alfred Hospital
The Canberra Hospital
The Children's Hospital at Westmead
The Queen Elizabeth Hospital
Women's and Children's Hospital, Adelaide

Government

Australian Defence Force
Queensland Ambulance Service
Queensland Police Service
Queensland Health

- Clinical Forensic Medicine Unit
- Health Disaster Management Unit
- Retrieval Services Qld

Queensland Pathology

Universities & Research Institutes

Australian National University
Bond University
Central Queensland University
CSIRO – Australian eHealth Research Centre
Flinders University
Griffith University

- Centre for Applied Health Economics
- Menzies Health Institute Queensland
- School of Nursing & Midwifery

Harry Perkins Institute of Medical Research – Centre for Research in Emergency Medicine
James Cook University
Monash University – Australian and New Zealand Intensive Care Research Centre (ANZIC-RC)
Murdoch Children's Research Institute
QIMR Berghofer Medical Research Institute
Queensland University of Technology
Australian Centre for Health Services Innovation
School of Nursing
Royal Darwin Hospital – Menzies School of Health Research
Southern Cross University

The University of Queensland
The University of Sydney
University of Newcastle, Australia
University of Southern Queensland
University of Sydney
University of Tasmania
University of the Sunshine Coast
University of Western Australia

Industry

Adrenaline Dive
Australian Red Cross Blood Service
CareFlight NT
Medicines Manufacturing Innovation Centre
Pulmatix, Testing Services
The Dive Academy, Port Douglas

OVERSEAS

Auckland City Hospital, NZ
Baylor College of Medicine, USA
Christchurch Hospital, NZ
Diver's Alert Network America, USA
Government of Canada – Defence Research Development
Hennepin County Medical Center, University of Minnesota, USA
Hopitaux Universitaires de Geneve, Switzerland
Hospital Clinic of Barcelona, Spain
Hospital Clinico San Carlos, Spain
Hospital del Mar, Spain
Imperial College London, UK
Kantonsspital Baselland, Switzerland
Kidzfirst Hospital, NZ
Klinikum Nürnberg, Germany
London School of Hygiene and Tropical Medicine, UK
Lucerne General Hospital, Switzerland
Medical University of Silesia, Poland
Saint-Andrea Hospital, Italy
Spital Lachen, Switzerland
Starship Children's Hospital, NZ
The Sahlgrenska Academy, University of Gothenburg, Sweden
University of Auckland, NZ
Trollhattan Norra Älvsborgs County Hospital - Trollhättan, Sweden
Université Libre de Bruxelles, Brussels
University Hospital Basel, Switzerland
University Hospital Brno, Czech Republic
University Hospital Zurich, Switzerland
University of Otago, NZ
Wellington Regional Hospital, NZ

2017/18 Grant Recipients

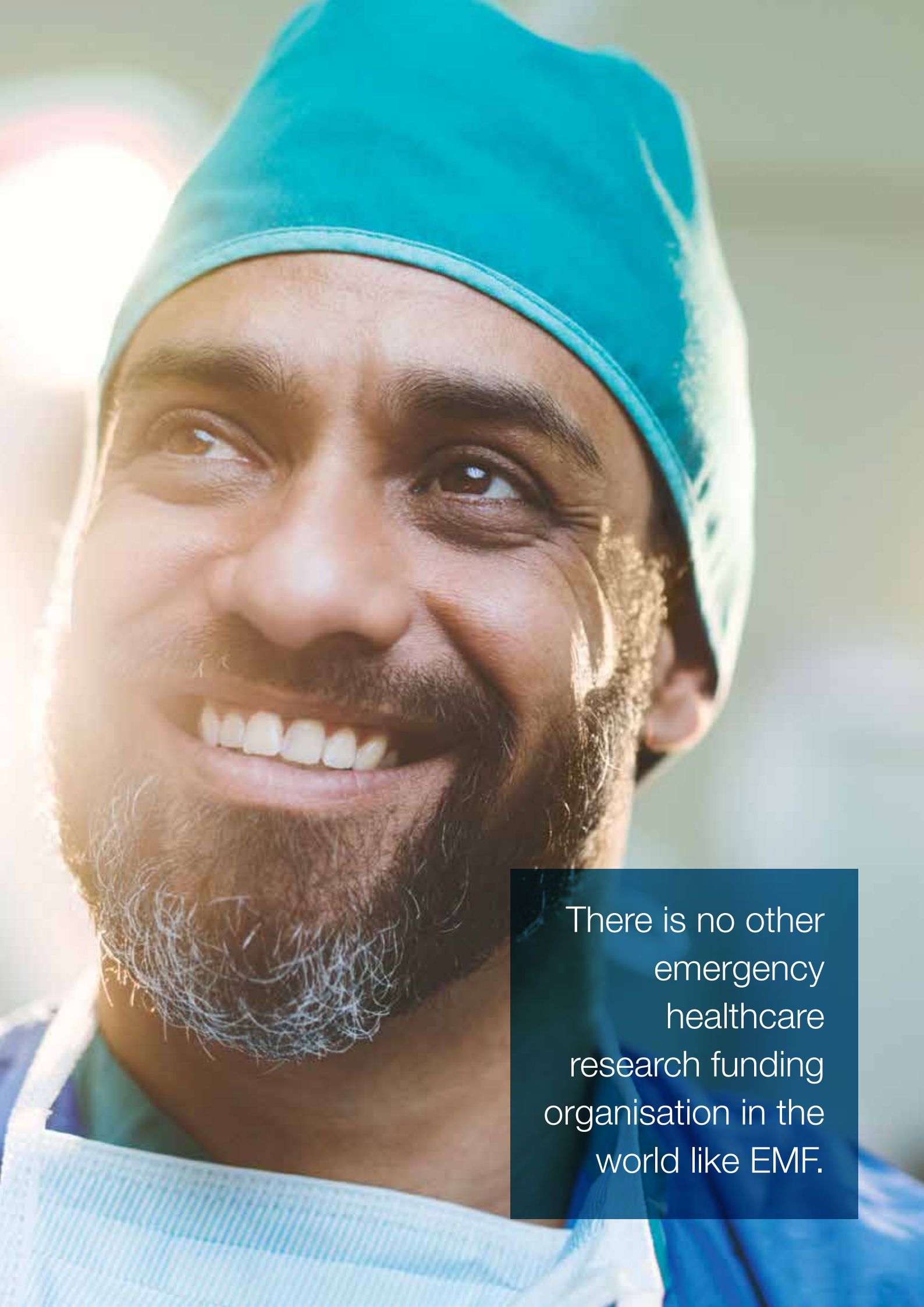
EMF congratulates the recipients of the 19 grants awarded this year. The projects involve 109 researchers from 34 institutions in Australia and New Zealand.

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Dr Alan Yan

Bond University
Bundaberg Base Hospital
Cairns Hospital
Caloundra Hospital
Calvary Mater Newcastle
Central Queensland University
Dandenong Hospital
Gatton Hospital
Gold Coast HHS
Gold Coast University Hospital
Griffith University
Hervey Bay Hospital
Ipswich Hospital
James Cook University
Lady Cilento Children's Hospital
Logan Hospital
Mackay Base Hospital
Maryborough Hospital
Monash Medical Centre
Murdoch Children's Research Institute
Nambour General Hospital
Prince of Wales Hospital
Princess Alexandra Hospital
QIMR Berghofer Medical Research Institute
Queensland Health (Retrievals)
Queensland University of Technology
Redcliffe Hospital
Robina Hospital
Rockhampton Base Hospital
Royal Brisbane and Women's Hospital
Royal Children's Hospital
Starship Children's Hospital
Sunshine Coast HHS
The Prince Charles Hospital
The Townsville Hospital
The University of Queensland
Thursday Island Hospital
Toowoomba Hospital
University of Southern Queensland
University of Tasmania
University of the Sunshine Coast
Women and Children's Hospital



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