



The Prince Charles Hospital

Research Report 2019

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The Prince Charles Hospital
Foundation Grants 2018

71

Active Grants 2018

83

Higher Degree Students
Supervised During 2018

91

TPCH Publications

Key Statistics

PHDS AWARDED


Dr Renelle Hewetson

➊ *Social participation after right hemisphere stroke: Exploring facilitators and barriers to communication-based participation.*


Dr Annalicia Vaughan

➋ *The response of human bronchial epithelial cells to outdoor air pollution: Interventions to protect the diseased lung against diesel emission exposure.*


Dr Petra Lawrence

➌ *Pilot study to determine the feasibility of early interventions for emergency department attendees who present with moderate and high levels of psychological distress.*


Dr Sandra Miles

➍ *Sensory and motor interventions for very early school-age children: A cluster pragmatic randomised controlled trial examining effect on development, behaviour and academic learning outcomes.*


Dr Matthias Kleinheyer

➎ *Considerations for the Design and Control of Pulsatile Rotary Total Artificial Hearts.*

PHDS SUBMITTED


Sam Liao

➏ *The Interaction between Left Ventricular Assist Devices and Intraventricular Flow: an In silico Evaluation*


Andrew Stephens

➐ *A Starling-like Physiological Control System for Ventricular Assist Devices*


Weilan Mo

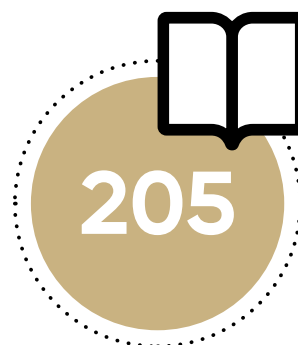
➑ *Human Heart B-Adrenoceptors, Arrhythmias and Control by Phosphodiesterases*

STUDENTS



■ Hons: 26
■ Masters: 28
■ PhD: 70

PUBLICATIONS



➒ 205 articles and book chapters

**Dr Kenneth Sinclair****Early Career Scientist Award in Transplantation**

International Society for Heart and Lung Transplantation

**Dr Indira Prasadam****Young Investigator Award**

Osteoarthritis Research Society International (OARSI)

**Prof John Fraser****Clinical Researcher Award**

Australian Society for Medical Research

**TPCH Charlies Week**

- Paul Zimmerman Award for Best New Investigator – India Lye
- Richard Slaughter Award for Best Clinical Research Presentation – Martin Canning
- Michael Ray Award for Basic Science/Translational Research Presentation – Dr Jacky Suen
- Graeme Nielson Best Published Paper in 2017 – Prof Dan Chambers

MNHHS 2018 Research Excellence Awards

- Research Support Award – Prof Ian Yang
- Clinical Research Award – Queensland Lung Transplant Program Clinical Trial Team
- Researcher of the Year – Prof Kwun Fung

**TPCH 2018 Staff Excellence Awards**

- Innovation Award – Jim Crowhurst
- Rising Star of Research – Amanda Corley



Alexis Perros – Young Investigator Award for Best Abstract by someone under 35yrs of age – Australian & New Zealand Society of Blood Transfusion



Sacha Rozenwaijg – Best Medical Poster – Australia and New Zealand Intensive Care Society Annual Scientific Meeting



Prof Scott Bell, Prof Peter Sly, Dr Luke Knibbs, Dr Tim Kidd and Prof Claire Wainwright – Australian Museum-Eureka Award (Infectious Diseases)



Prof Tony Rahman – Australia Day Award – Queensland Health



Eric Wu – Sezai Innovative Research Award – International Society for Mechanical Circulatory Support



Michael Simmonds – Young Tall Poppy Award – Australian Institute of Policy and Science



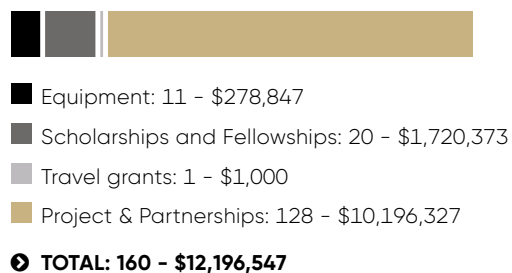
Dr Jo Pauls – 3rd Prize Poster Award – European Society for Artificial Organs



Damian Williams, Tracy Nowicki, Prof Paul Fulbrook & Dr Sandra Miles – Australian New Zealand Skin Safety Award – 3M/Wounds Australia

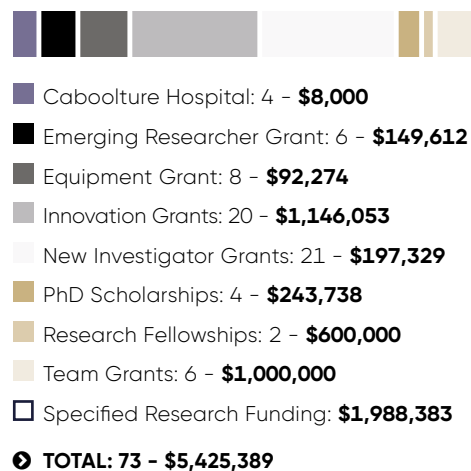
Key Statistics continued...

GRANTS AWARDED



Key fellowships: **Dr Peter Lazzarini** – NHMRC Early Career Fellowship; **Dr Jack Bell** – Medical Research Futures Fund TRIP Fellow

TPCHF AWARDED GRANTS



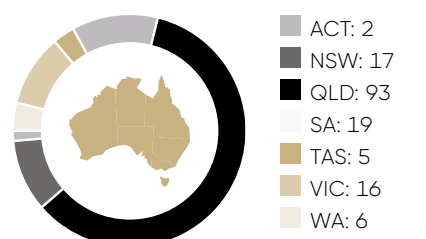
NOTABLE MENTIONS

A/Prof Peter Hopkins was elected Programme Chair for the International Society for Heart and Lung Transplantation Annual Scientific Meeting to be held in Sydney 2021

ICETLab applied for 3 provisional patents

Prof Tony Rahman – Invited to present to HRH Queen Elizabeth at the Royal College of Physicians, UK 500th year Anniversary Celebration.

PRESENTATIONS







Foreword

When talented people with purpose come together great things happen.

This year's Research Report is a tribute to the medical, nursing and allied health teams—the scientists, engineers and researchers who have taken on the challenge to find ways to improve our lives. However, there are other people who are equally as important in this effort to make things better. To the patients who have volunteered themselves in clinical trials and studies, your generosity—the giving of yourself—is a gesture which will help future generations. We thank you. To the funders and donors, you have bought the time to allow the researchers to undertake the exploration for the answers. Your contribution has a direct and tangible impact, every \$44 powers another hour of research.

This Research Report touches on milestones, achievements and activities of the research community at The Prince Charles Hospital. However, there is a village of people who are behind each of these stories. For every presentation, award, academic highlight, publication and medical breakthrough has been a collaboration across people and institutions—each pivotal in the journey to improve health.

This year has seen the development of research careers with another eight PhDs awarded or submitted. There

has been international award recognition for three researchers, 160 grants received, 205 publications and book chapters, 293 presentations globally, and a presentation to HRH Queen Elizabeth.

Over \$12 million in funding was received with collaborative institutions, of which The Prince Charles Hospital researchers have been instrumental in their success. The Prince Charles Hospital Foundation's initiative "The Common Good" was awarded \$3.6 million in grants and a further \$1.5 million in direct research funding, with all funds donated through the community, businesses and events.

This report is simply a snapshot of what has occurred during 2018. Behind every report are countless hours of applications, preparations, negotiations, collaborations, frustrations and data collection. It will never tell the full, human story of the determination and desire it takes to find the answers, the sacrifices made, the family support required, the anxiety experienced. We hope however it records and reflects the achievements – and allows every person involved to take a moment and appreciate the fact that every step has been worthwhile – every step is leading us closer and closer to the outcomes which will save and improve the quality of our lives.

Thank you for being a part of The Common Good.



Christopher Morton
Chair

The Prince Charles
Hospital Foundation



Dr Eamonn Eeles
Chair

The Prince Charles
Hospital Foundation
Research Council



Michael Hornby
Chief Executive Officer

The Prince Charles
Hospital Foundation



Michele Gardner
Executive Director

The Prince Charles
Hospital



HEAD OF RESEARCH GROUP

- A/Prof Dorothy Radford

KEY MEMBERS OF RESEARCH GROUP

- Theresa Malpas
- Michael Reye Baldini
- Angela Hedge
- Dr Christopher Whight
- Dr Vishva Wijesekera
- Dr Ryan Maxwell
- Dr Kylie Burns
- Dr Wendy Chan
- Dr Yong Wee

Adult Congenital Heart Unit

The Adult Congenital Heart Unit aims to improve the quality of life of patients with congenital heart disease. Our research ensures they have access to world-class cardiac care in line with international standards. Our role is to work with those in our care closely to understand the long-term complications of congenital heart disease and support happy, healthy lives.

A DYNAMIC FIELD OF STUDY

Modern medical advancements mean that children born with congenital heart diseases are surviving into adult life in greater numbers than ever before. Some of our patients have been the first to benefit from surgical procedures that were not possible a generation ago, making congenital heart research a dynamic field of study.

As a result, we place a huge emphasis on direct care and patient knowledge, ensuring regular contact with those in our care.

We work especially closely with young patients to support them as they get older to live with both the psychological and physical impacts of their condition.

HIGHLIGHTS

Our contribution to The Australian and New Zealand Fontan Registry continued to position us as a leader in our field through 2018. As part of this, we were involved in running a transition education day with Heart Kids, an Australia-wide group providing support to patients and families with congenital heart disease. We are proud to have built a strong relationship with Heart Kids in 2018.

Additionally, in 2018, and in line with a yearly trend, we saw more and more healthcare providers identify our unit as Queensland's main referral centre, resulting in more patients coming to us from the Queensland Children's Hospital and other locations.

We also increased our outreach and telehealth services to regional locations across Queensland and northern New South Wales.

COLLABORATIONS

The research undertaken by our group has been made possible by the Australian and New Zealand Fontan Registry in collaboration with many hospitals and research units across both countries.



HEAD OF RESEARCH GROUP

- A/Prof David Reid

KEY MEMBERS OF RESEARCH GROUP

- | | | |
|---------------------|----------------------|--------------------------|
| • Prof Scott Bell | • Emma Megram | • Kathleen Hall |
| • Dr Daniel Smith | • Angela Matson | • Robyn Cobb |
| • Dr Megan France | • Jenna Stonestreet | • Bec Chambers |
| • Dr George Tay | • Felicity Loel | • Dr Tim Kidd |
| • Michelle Wood | • Karen Herd | • Rebecca Stockwell |
| • Tracy McMahon | • Rachel Gothmann | • Joshua Arunkumar |
| • Andrea Beavers | • Verne Keegan | • Dr Ama-Tawiah Essilfie |
| • Margaret Lysaught | • Kate McMorran | • Dr Pramila Maniam |
| • Tiffany Jong | • Julieta Castellini | |
| • Vanessa Moore | • Trent Donnelly | |

The Adult Cystic Fibrosis Centre

The goal of our research centre is to improve understanding of Cystic Fibrosis (CF) and the quality of life of adults living with the disease. CF is a multi-system disease that predominantly affects the lungs and digestive system.

DELIVERING THE BEST CARE FOR PATIENTS

CF unfortunately has no cure, making our outcomes critical to our community who need this research to help them live longer and healthier lives. The work we do is multi-faceted and includes a range of clinical and operational research, and research that addresses both the medical and psycho-social impacts of living with the condition. We also have a very efficient clinical trials facility that allows our patients to access new treatments, even at early phases of development.



Our unit is one of the largest CF research centres in the southern hemisphere, and with some of the most state-of-the-art research facilities at our disposal, we have the capacity to invest in high impact, groundbreaking research.

Our team has a strong international reputation, with members of the group considered opinion leaders in the field. We are lucky to be able to collaborate with expert researchers around the world including doctors, microbiologists, chemists, epidemiologists and allied health professionals, and work together to deliver the best care for CF patients.

HIGHLIGHTS

In 2018, our research into cross-infection continued to garner us international recognition and awards. By demonstrating that cross-infection of the lungs occurs between patients with CF, we have implemented a new infection control policy in the hospital with ensuite bathrooms and new ventilation systems.

These measures will not only mean a reduction in cross-infection for our patients, but they represent a proven infection control measure that other hospitals can replicate. Prof Scott Bell and his collaborative team were awarded the prestigious Australian Museum-Eureka Award for this research.

We have also had many achievements within the field of CF dietetics including the publication of a new clinical support and training package, development of a national mentoring program to CF dietitians, contributions to patient education resources, and the delivery of numerous lectures to universities across Australia.

PRESENTATIONS AND PUBLICATIONS

We presented at numerous national and international conferences. The team were part of delivering over 30 papers, publications and articles in 2018.

RESEARCH COLLABORATIONS

We work with multiple research and educational institutions on a global scale.



HEAD OF RESEARCH GROUP

- Dr Frances Kinnear

KEY MEMBERS OF RESEARCH GROUP

- | | | |
|-----------------------|----------------------|---------------------|
| • Prof Wayne Hazell | • Dr Gavin Fincher | • Amanda Smith |
| • A/Prof Colin Myers | • Dr Rajeev Jarugula | • Jeanette Probyn |
| • Dr Neil Grant | • Dr Hanh Pham | • Julie Craig |
| • Dr Alastair Newton | • Dr Kim Hansen | • Sandra Manderson |
| • Dr David Wood | • Dr Peter Rizzo | • Virginia Blakeley |
| • Dr Michelle Davison | • Dr Rose Fahy | • James Fleming |
| • Dr Sue Hobbins | • Dr Allison Fifoot | • Louise Spooner |
| • Dr Polash Adhikari | • Dr Melanie Rule | • Sam Giess |
| • Dr Faye Jordan | • Sarah Hazelwood | • Lynda Briggs |
| • Dr Linda Symington | • Tanya Montford | • Susan Smith |

Adult's, Children's and Emergency Research Group

The aim of our group is to produce top-quality research in the field of emergency medicine. To provide the best patient care possible, we strive for research outcomes that directly impact the practice of emergency medicine. Emergency care research can be fraught with complications due to the unplanned nature of the emergency environment with multiple patients arriving around the clock. To be effective in this field, our research must consider this challenge, alongside the complex collaborations that occurs within our multidisciplinary team of staff.

RESEARCH WITH A DIRECT IMPACT

We have selected the projects carefully to maximise the likelihood of successful research outcomes while also successfully upskilling our team in investigative methods. As this practical approach continues to grow our team's capacity for research, we are able to participate in complicated projects tackling the more difficult medical issues.

Ultimately, we want to improve our understanding of how the decisions we make in the emergency room determine overall patient outcomes and keep patients and staff as safe as possible. To achieve this, our research portfolio includes a cross-section of research into diagnostic challenges, harm minimisation measures, patient management procedures and safety initiatives. Alongside research that is patient-centered, we also use research to maximise the safety and wellbeing of those who practice on the frontline of emergency medicine.

HIGHLIGHTS

In 2018, we were pleased to demonstrate our growing research strength and capacity with 25 studies in active recruitment or commencing in early 2019. Most notably, our pneumothorax study finished a seven-year long recruitment phase and the work has been submitted for publication in a major journal. Excitingly, the results of this trial have the potential to change practice for this condition on a global scale.

Additionally, we continued to drive excellence in the field of sepsis research. The importance of the study in which we are currently engaged has been recognized with the principal investigator of the study, Dr Stephen MacDonald, being the recipient of the Individual Global Sepsis Award at the International Sepsis Forum this year.

Presentation of early trial findings have also resulted in a best paper award at the Annual Scientific Meeting of the Australasian College for Emergency Medicine plus they have been published in a high-ranking journal with a much larger trial currently in the planning stages.

We were successful in attracting a large grant for a potentially ground-breaking Queensland asthma study, looking at the relationship between pollens in the air and viral infection patterns in asthma presentations. We look forward to seeing where this research will take us in 2019.

PRESENTATIONS AND PUBLICATIONS

In 2018, there were nine published, peer-reviewed papers and seven presentations.

RESEARCH COLLABORATIONS

New and ongoing collaborations with many research groups, universities and scientific institutions Australia-wide also enhanced our ability to conduct high-quality practice-changing research this year.



HEAD OF RESEARCH GROUP

- Prof Norm Morris

KEY MEMBERS OF RESEARCH GROUP

- A/Prof Petrea Cornwell
- Dr Jack Bell
- Dr Peter Lazzarini
- Dr James Walsh
- Dr Nicole Bellet

Allied Health Research Collaborative

Our vision is to be a nationally recognised research unit delivering outcomes that support healthy, happy and productive lives. To achieve this, we bring together clinicians from allied health, internal medicine and nursing to implement an evidence-based practice that improves both in-hospital care and long-term outcomes for patients.

IMPROVING REHABILITATION PROCESSES

There are many disciplines that fall under allied health including physiotherapy, dietetics, occupational health, podiatry and speech pathology; to be successful as team, we strive for continuous improvement across each discipline.

Our common goal is improving rehabilitation processes through varied research projects taking place across the hospital.

This includes addressing issues such as in-patient malnutrition and other barriers to recovery, including frailty in stroke or transplant patients. We also focus more on vulnerable patients, such as those with multiple diseases or the frail and aging, as they are more likely to be at risk of harm or injury whilst in our care.

HIGHLIGHTS

2018 was a successful year for our group with the award of over \$400,000 in new funding and two research fellowships through the National Health and Medical Research Council.



A major highlight was the roll out of a new approach to nutritional care across 11 hospitals in Queensland based on our work addressing malnutrition at The Prince Charles Hospital. We were proud to see our research result in a state-wide change to nutritional care.

Additionally, we continued to publish and supervise projects aimed at optimising rehabilitation outcomes for heart and lung transplant patients. In 2018, we implemented new muscle strength testing for individuals attending heart and lung transplant clinics and look forward to seeing how this measure will support improved patient care and management procedures.

PRESENTATIONS AND PUBLICATIONS

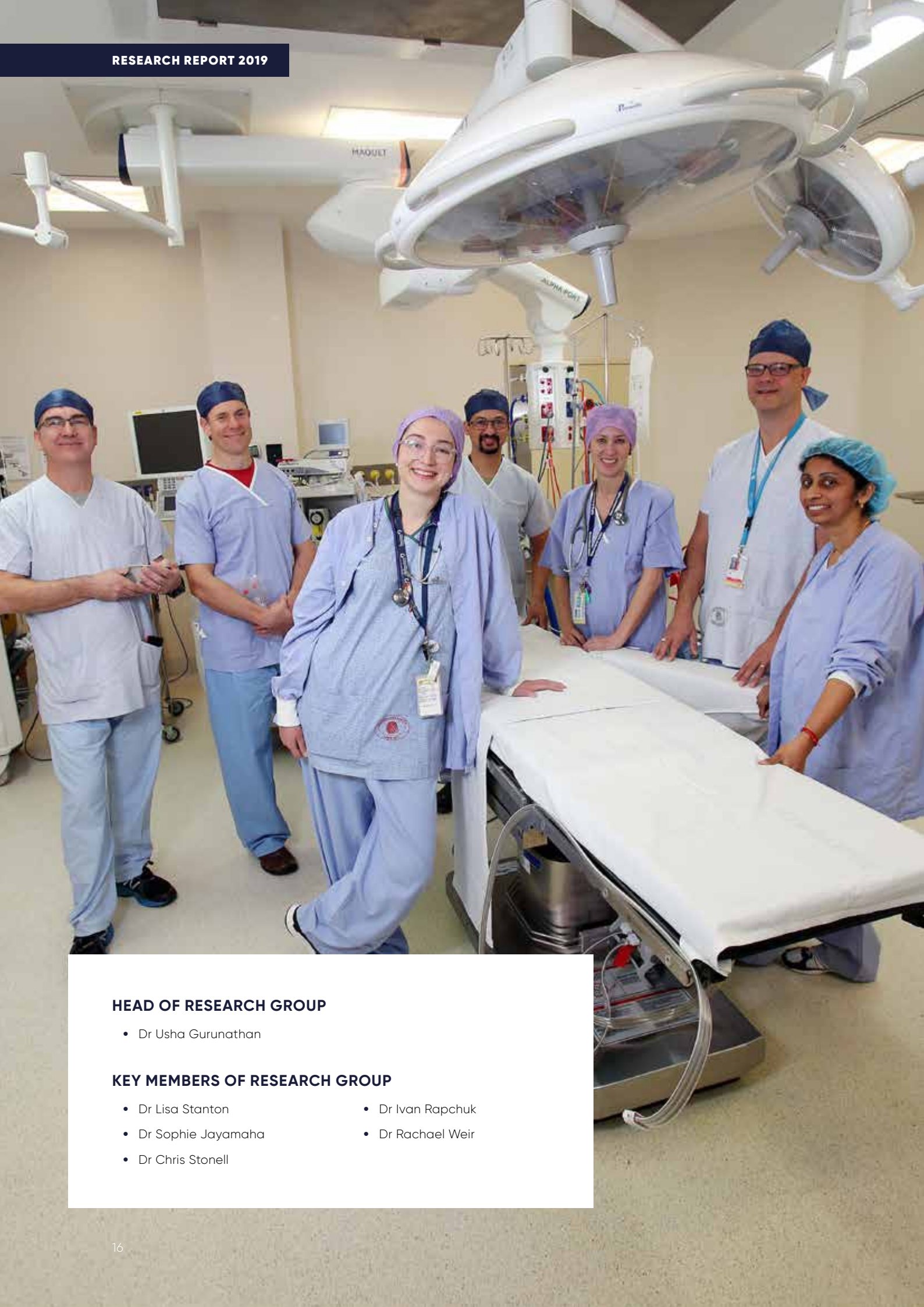
Researchers from our group published over 50 peer-reviewed manuscripts in 2018.

STUDENTS

Our fellows maintained a substantial student supervision load, with the group supervising 30 research higher degree students in 2018. Six of these higher degree students submitted their thesis or graduated in 2018 and a further four students completed an undergraduate program.

RESEARCH COLLABORATIONS

In 2018, we collaborated broadly on a local level and internationally with researchers in Canada, the UK, Ireland, New Zealand, Hong Kong and the USA.



HEAD OF RESEARCH GROUP

- Dr Usha Gurunathan

KEY MEMBERS OF RESEARCH GROUP

- Dr Lisa Stanton
- Dr Sophie Jayamaha
- Dr Chris Stonell
- Dr Ivan Rapchuk
- Dr Rachael Weir

Anaesthesia Research Group

The focus of our research is to improve the safety and quality of anesthetic care. Maximising the well-being of surgical patients is our core priority, and although the direction of our work evolves in line with surgical advancements, our research is guided by this founding principle.

QUALITY OF ANAESTHETIC PRACTICE IS KEY

Our team is committed to a collaborative approach that reinforces the importance of quality anaesthetic practice as key to advanced modern medicine. Whilst reducing surgical risk is fundamental, studies into patient benefits, such as reduced pain after surgery, faster recovery times and increased quality of recovery have become more important avenues as our field has evolved over time.



Our specific areas of interest include studies into cognitive impairment, frailty and pain relief after surgery, and improving patients' health before surgery.

We are proud to be at the forefront of international anaesthesia research and working alongside other internal groups and external research institutions on a range of exciting and diverse research projects.

HIGHLIGHTS

2018 represented a year of exciting growth for the group as we took on more leadership roles in research projects. Our principal investigator, Dr Gurunathan, received a total of \$80,000 for group projects to be initiated in 2018 and 2019. To work in collaboration

with other disciplines, we were awarded an additional \$150,000.

We also completed the first multi-centre trial initiated by our department in 2018. The results of the study, looking at the effects of anesthetic drugs on memory after an endoscopy procedure, will improve our understanding of the effects of commonly used anaesthetics.

Additionally, we completed a collaborative pilot study looking at links between frailty and obesity in cardiac patients, with the results initiated a new large-scale, three-year project.

PRESENTATIONS AND PUBLICATIONS

The outcomes of two international multi-centre landmark studies were published in top level journals and presented at the Australian and New Zealand Society of Cardiac and Thoracic Surgeons Annual Scientific Meeting. Four of our investigator-initiated studies were also published in 2018.

COLLABORATIONS

The Anaesthesia Research Group worked with various other research groups and externally with support from the University of Queensland, University of Melbourne, Royal Brisbane and Women's Hospital, and QIMR Berghofer.



20 Years of Research and Counting

Walk into the laboratory of the Cardiovascular Molecular and Therapeutics Translational Group and you'll feel as if you've crossed into a unique and exciting dimension of science. Pipes and pumps, tanks filled with water at precisely 37 degrees Celsius to replicate the conditions of the human body, bubbling tubes crossing over one another—Associate Professor Peter Molenaar's lab is an intriguing sight.

HEART RESEARCH

Perhaps most remarkable, are the small, glass vials holding tiny tissue samples from explanted hearts—contracting and relaxing through a simulated, electrical impulse—mimicking a human heartbeat while being tested with various life-saving drugs.

But the lab holds far more than just these experiments. It encompasses a long and rich history of research, collaboration and commitment spanning over more than two decades.

20 years ago, Peter relocated his laboratory to The Prince Charles Hospital to further support heart research. It provided the opportunity to work with both cardiology and surgical programs all under one roof—a factor that would save him from transporting precious heart tissue samples collected in hospitals back to the laboratory.



Having the support of the heart surgeons in this hospital was tremendously important. All of the surgeons, every single one of them, have been incredibly helpful over the years.

Perhaps this sense of collaboration is what makes Peter's lab so inviting. Scientists, hospital staff and students have all worked in the lab throughout its decades-long history. Each have been fundamental in its success and have been key in nurturing a strong interface between the research and clinical worlds.

"The lab acts as a nucleus of this multidisciplinary team. The physicians interact with their patients daily and the scientists bring expertise in their specific areas of research. When we're finding ways to save lives, both are equally as important."

However, heart disease statistics are still frightening. Approximately half of all patients with heart failure will die in the five years following their diagnosis—of that number, half of those will be of sudden death. It is a shocking reality for cardiac researchers like Peter. "Our real burning aim is to develop medicines or new ideas that will help these people, or lay the foundations for new medicines," he explained.

The real reward has been the connection he has had with patients. Peter has personally had the opportunity to meet some of the transplant patients who have generously donated their explanted hearts to research following surgery.



They've trusted us that maybe one day, we can provide some answers or solutions that will help other patients. Those patients provide the motivation to continue doing this work—it's an absolute pleasure to be doing so.



HEAD OF RESEARCH GROUP

- Dr Christopher Raffel

KEY MEMBERS OF RESEARCH GROUP

- | | | |
|-------------------------|-----------------------------------|-----------------------|
| • Maricel Roxas | • A/Prof Haris Haqqani | • Dr Peter Tesar |
| • Sandra Phillips | • Dr Russell Denman | • Dr Anil Prabhu |
| • Estelle Beevors | • Dr Scott McKenzie | • Dr Anthony Putrino |
| • Megan Mearns | • Dr Yee Weng Wong | • Dr Wendy Chan |
| • Suzanne Spencer | • A/Prof Christian Hamilton-Craig | • Dr George Javorsky |
| • Kathryn Stibijl | • Prof Gregory Scalia | • Dr Askhay Mishra |
| • Irena Rymar | • Dr Niranjana Gaikwad | • A/Prof David Platts |
| • Winnie Chu | • Dr Ryan Markham | • Dr Damian Roper |
| • Bernice Enever | • Dr Stephen Kyranis | • Dr Katherine Lau |
| • Julie Bailey-Bradshaw | • Dr Andrew Clarke | • Dr Rustem Dautov |
| • Hannauh Rheault | | |

Cardiology Clinical Research Centre

The Cardiology Clinical Research Centre is one of the largest research sites in Australia for coordinating and conducting international clinical trials and investigative cardiology research. The focus of our group is to find new surgical approaches for major heart procedures and gain experience using the latest techniques and technology in the field.

PIONEERING MAJOR HEART PROCEDURES

We want to find the most advanced and best effective surgical procedures for treating life-threatening heart conditions, such as structural heart disease, acute coronary syndrome and heart failure. We also invest in researching drug therapies with the goal of finding better ways of managing a range of heart conditions.

Since our group's inception, we have sought to pioneer less invasive cardiac surgical techniques and find lower risk alternatives to open heart surgery. Our ability to carry out lower risk procedures is critical to improving patients' chance of survival, longevity and quality of life.

We are committed to delivering the most advanced surgical techniques in the world for heart patients, and as these techniques become the new global standard of care, remain at the forefront of their evolution.

HIGHLIGHTS

In 2018, there were 45 projects undertaken by our group, either singularly or in collaboration with others.

Many of these were long-term clinical trials, including research to find a new treatment for diastolic heart failure and a new surgical technique for mitral valve surgery. The progress of these two projects this year has made us confident that we will achieve good outcomes and this research will represent a significant contribution to the field of cardiology.

Our heart failure nurse practitioner was additionally selected to become a principal investigator for an international trial into the recommended low-salt diet for heart failure patients. We are excited at the opportunity to formally assess this expert opinion and proud to have our first nurse practitioner take the lead on an international project.

2018 represented another exciting year for our team with the evolution of ongoing projects and the launch of new research. We received multiple awards, worked with leading international institutions and presented our work all over the globe. As one of the largest multicenter cardiology research sites in the country, we are proud to be considered a department that is at the forefront of international cardiology, championing innovation and pushing boundaries every year.

PRESENTATIONS AND PUBLICATIONS

Numerous presentations and publications were delivered by our group to national and international acclaim.

Cardiology Clinical Research Centre continued...

AWARDS

We were awarded the following commendations in 2018:

- TPOCH 2018 Staff Excellence Awards, Research Support Award—Runner Up
- TPOCH 2018 Staff Excellence Awards, Innovation Award—Winner
- MNHHS 2018 Research Excellence Awards, Research Support Award—Finalist
- MNHHS 2018 Research Excellence Awards, Excellence in Performance Award—Finalist
- MNHHS 2018 Research Excellence Awards, Innovation Award—Highly Commended
- Asia Pacific Heart Rhythm Society, Taipei 2018, Young Investigator Award—Runner Up

RESEARCH COLLABORATIONS

In 2018, we worked closely with the other cardiac departments locally and Australia-wide, with support from different universities, research partners and hospitals. Our global partners included institutions across Europe, the USA and Singapore.



“

We are committed to delivering the most advanced surgical techniques in the world for heart patients.

—Cardiology Clinical Research Centre



HEAD OF RESEARCH GROUP

- Dr Rishen Naidoo

KEY MEMBERS OF RESEARCH GROUP

- | | | |
|----------------------|-----------------------|-------------------|
| • Dr Peter Tesar | • Dr Bishwo Shrestha | • Dr Doug Bell |
| • Dr Andrew Clarke | • Dr Lachlan Marshall | • Dr Lincoln Chen |
| • Dr Homayoun Jalali | • Dr Charlie Liu | • Bronwyn Pearse |
| • Dr Dong Kang | • Dr Sean Goh | • Susan Smith |
| • Dr Livia Williams | • Dr Felicity McIvor | • Donalee O'Brien |
| • Dr Anil Prabhu | • Dr William Foot | • Catherine Saxon |
| • Dr Morgan Windsor | • Dr Vinod Sharma | |
| • Dr Bruce Thompson | • Dr Fiona Doig | |

Cardiothoracic Surgery Research Unit

The Cardiothoracic Surgery Research Unit supports focused, interdisciplinary and collaborative research projects into heart and lung diseases. As the largest cardiothoracic service in Australia, we aim to provide leadership in the field and provide the evidence-base necessary for medical teams across the country to address complex cardiothoracic surgical issues and optimise their patient care.

RESEARCH AT THE PRINCE CHARLES HOSPITAL

We ensure all our research is clinically relevant and evidence-based, as increased survival rates and healthier patient recoveries are the main determinants of success for our group. Communication and collaboration are key factors in the research and the partnerships we have developed with other departments, local universities and international research intuitions.

A collaborative ethos creates a supportive research culture for staff, especially for junior researchers, and ensures that cardiothoracic research at The Prince Charles Hospital has a strong future.

HIGHLIGHTS

In 2018, we were part of over 20 collaborative studies and delivered tangible changes to patient care. Staff were recognised for their research innovation with the award of two project grants, the first looking at new technology in allograft pulmonary valves, and the second aiming to improve psychosocial care for cardiac surgical patients. We are also proud to

announce that one of our junior staff was accepted onto the cardiothoracic surgery training program. This is the first time this has happened in this hospital in ten years.

Many of our studies in 2018 were related to testing new equipment and technology, including our successful ongoing research into rapid deployment aortic valves.

After demonstrating that the new 'Intuity' valve can be safely implanted with good results, we were able to start evaluating another option, the 'Inspiris Resilia' aortic valve, suitable to use in some heart procedures.

This is an exciting development as these are new pieces of technology that will hopefully prolong valve durability and potentially reduce the re-operation rates.

Additionally, in the field of new devices, the 'Impella' device for ventricular assistance has been and continues to be used in our high-risk patients in a collaborative process involving cardiology, anaesthesiology, critical care and cardiothoracic surgery. This work is ongoing, and we are excited to see how this technology could improve heart patient care in 2019.

PRESENTATIONS AND PUBLICATIONS

We published 16 conference articles, eight peer reviewed journal papers and worked with new international collaborators.

RESEARCH COLLABORATIONS

In 2018, we continued our long-standing research collaborations with other cardiac and acute care services, the Australian Red Cross Blood Service and the University of Queensland. We also worked with researchers in the USA and New Zealand as part of multi-centre trials.



From Diesel Emissions to High Fibre Diets: Changing the way we look at Lung Disease

Dr Annalicia Vaughan is exploring new avenues in thoracic medicine with the support of The Common Good.

PURSuing MEDICAL RESEARCH

People pursue medical research for many reasons; to advance modern science, to improve health outcomes, or even to find better ways to prevent and treat illnesses. For Dr Annalicia Vaughan, research is all about grassroots beginnings that could one day open even more avenues in medicine.

After completing her Bachelor of Science in 2012, Annalicia aimed to study medicine, however decided to extend her studies with a research honours year.



Research played to my strengths, I developed new skills and was able to do the things in science I enjoyed.

Annalicia first began her research career in the UQ Thoracic Research Centre at The Prince Charles Hospital. Surrounded by an inspiring team, she was encouraged to apply for a New Investigator grant through The Common Good to support her research.

Her initial project focused on air pollution, specifically the effects of diesel and biodiesel emissions on lung cells. While it may seem like there is a clear answer to this issue, Annalicia broke the subject down even further.

"When diesel is combusted, it goes from this liquid form to a gaseous form—some solid particles remain, and these are far more toxic," she explained.

Annalicia was able to isolate certain cellular effects caused by different diesel components, allowing her to investigate what exactly was causing so much harm to lung cells from these emissions.

With her initial research complete, Annalicia was successful in applying for a PhD Scholarship, which allowed her to expand the topic. These opportunities have enabled Annalicia's research focus to evolve—from investigating the effects of diesel emissions cells, she is now comparing different biodiesels to see if she can find a safer alternative.

"Biodiesels often have lower levels of toxic particles than diesel emissions, but we don't know the effect of biodiesels on the lungs. Current testing doesn't look at the biological effects, but instead the chemistry of the emissions," she explained. "That's where my research is interesting, because it looks at the cellular effects of these emissions."

In the final stages of her PhD, Annalicia received a Research Fellowship. She is the first researcher to receive all three grants from The Common Good. "The timing and conditions of the Fellowship allowed me to apply even when I was still writing up my PhD thesis—it's a unique opportunity."

Annalicia is now performing a clinical trial to see if dietary fibre can reduce inflammation in lung cells through healthy gut bacteria. Her work has the extraordinary potential to change the way we look at lung disease.



The potential that my work could give anyone a better quality of life is incredibly motivating. I would really like to see some of the things that I'm working on actually implemented into people's lives.



HEADS OF RESEARCH GROUP

- A/Prof Peter Molenaar
- A/Prof Haris Haqqani
- Dr Yee Weng Wong
- Dr Wendy Chan

KEY MEMBERS OF RESEARCH GROUP

- Elizabeth Cheesman
- Dr Weilan Mo
- Dr Alex Dashwood
- Matt Wells
- Dr Nicole Bartnikowski
- Jo Maddicks-Law
- Jayne Bancroft
- Cassandra Vale

Cardio-Vascular Molecular and Therapeutics Translational Group

The Cardio-Vascular Molecular and Therapeutics Translational Group uses cutting-edge laboratory research to improve outcomes for patients with heart disease. With our research, we give patients hope for survival by identifying new drug treatments and pioneering advanced therapeutic options.

CONFIDENCE IN NEW HEART MEDICINES

Most of our research takes place in our in-vitro human heart laboratory, where our expertise in the use of human heart tissue is employed to test new medicines, understand their mechanisms, and predict possible adverse effects before they are given to patients.



The progressive nature and poor prognosis of heart diseases are what drives us to identify essential new medicines.

Not only is our research essential to helping the individuals in our care, but the vigorous testing procedures we use ensure the medical profession has confidence in any new medicines that make it past the research stage.

Working collaboratively as a joint health service and university academic unit means our research priorities are formulated by urgency, research plans designed strategically, and data interpreted vigorously. We are very fortunate and privileged that our work gives us the chance to save the lives of not only individual patients, but that it will also come to save many more lives in the future.

HIGHLIGHTS

In 2018, we continued our exciting work using human heart tissue to test new medicines and advance knowledge in the field of beta-blockers and ryanodine receptors. Human ventricle from patients with heart failure undergoing heart transplantation was used for this research, where we established a useful model of ventricular arrhythmia in the lab.

We tested a few different drug interventions this year with interesting findings, including predicting that activation of B1 and B2 adrenoceptors mediates arrhythmias, phosphodiesterases can control dangerous arrhythmias, and patients receiving the beta-blocker carvedilol have a reduced probability of arrhythmias.

As we move forward with this research, we will learn more about the mechanisms of arrhythmias and how to manage them with different beta blockers and drug combinations.

PRESENTATIONS AND PUBLICATIONS

The group delivered a small number of presentations and publications in 2018.

STUDENTS

After three years of dedicated hard work, Dr Weilan Mo successfully completed her PhD. We were proud to see her take up a post-doctoral research position at the University of Massachusetts.

RESEARCH COLLABORATIONS

We worked locally with other cardiac research teams, universities across Australia, and internationally with support from researchers in Spain and the UK.

HEAD OF RESEARCH GROUP

- Prof John Fraser

KEY MEMBERS OF RESEARCH GROUP

- | | | |
|-----------------------------|--------------------------------|------------------------|
| • A/Prof David Platts | • Dr Kei Sato | • Lauren Beard |
| • A/Prof Gianluigi Li Bassi | • Dr Kris Skeggs | • Lynette James |
| • A/Prof Haris Haqaani | • Dr Liam Byrne | • Mahe Bouquet |
| • A/Prof Jae-Seung Jung | • Dr Louise See Hoe | • Margaret Passmore |
| • A/Prof Jason Peart | • Dr Meredith Redd | • Marie Lyager |
| • A/Prof Kiran Shekar | • Dr Maximilian Malferttheiner | • Matthew Wells |
| • A/Prof Peter Molenaar | • Dr Monica Ng | • Mengyao Yang |
| • Alessandro Ferraioli | • Dr Nchafatso Obonyo | • Olivia Zeckovic |
| • Amanda Corley | • Dr Nicole Bartnikowski | • Oystein Tronstad |
| • Arlanna Esguerra | • Dr Sacha Rozencwajg | • Polly He |
| • Ben Fraser | • Dr Sai Raman | • Prof David McGiffin |
| • Braden Cupitt | • Dr Sebastiano Colombo | • Prof Jonathan Chan |
| • Carmen Ainola | • Dr Takako Akimoto | • Prof Stig Steen |
| • Dave Mullins | • Dr Viktor von Bahr | • Sam Huth |
| • Dr Bruno Vidal | • Dr Wayne Dyer | • Samantha Livingstone |
| • Dr Charles MacDonald | • Dr Xiaomeng Wang | • Sanne Pedersen |
| • Dr Connie Boon | • Emily Wood | • Sara Diab |
| • Dr Jacky Suen | • Fergal Temple | • Sara Maxwell |
| • Dr John-Paul Tung | • Gabriela Simonova | • Tanya Anderson |
| • Dr Jonathan Millar | • Hollier O'Neill | • Taryn Smith |
| • Dr Jonathon Fanning | • India Lye | • Tayah McMaster |
| • Dr Kafa Walweel | • Janice Reid | • Tristan Shuker |
| • Dr Karin Wildi | • John Canning | • Vanessa Taylor |
| • Dr Katrina Ki | • Kieran Hyslop | • Will Crawford |

Critical Care Research Group

The aim of the Critical Care Research Group is to increase understanding of the many issues that face critically ill patients and find new or improved treatment methods for hard-to-treat diseases. With our research, we aim to improve survival rates and quality of life for patients with life threatening conditions, such as heart disease, lung disease, sepsis and other critical conditions.

COMMITMENT, COLLABORATION AND PATIENCE

The nature of our research is multifaceted and complex. As a result, it takes many years to turn what we learn in a clinical setting into a standard procedure or approach that will save lives every day in hospitals across the world. This means the requirement for success in our field is nothing less than long-standing commitment, collaboration and patience from an international team.

As a world-renowned research centre, our patients have access to some of the best treatments and brightest medical professionals in the field. The hard work of our group means more deaths can, and will be, prevented by research that delivers innovation, new discoveries and radical advancements in care for the critically ill.

HIGHLIGHTS

2018 was a busy and exciting year for our group with thirteen studies either ongoing, or newly commenced. Like previous years, our work was praised via awards, international recognition and significant financial

investment, including \$1.3 million in funding from the University of Queensland.

Most notably, the "ICU of the Future" project gathered momentum in 2018. The aim of this project is to develop an improved ICU experience, encompassing what patients and their families value most. With this research, we are hoping to improve patient outcomes and reduce the burden of critical care on the hospital budget.

This is the first time a patient-centred approach to ICU design has been explored in Australia. Although this project is still in its early stages, we are already seeing very promising results.

We were proud to have completed four experimental studies in sepsis and heart disease research, including the first successful completion of a heart transplant with hypothermic ex-vivo perfusion. This kind of innovation is another example of how, year-in-year-out, we are continuing to break new ground in critical care.

In testament to our collaborative networks across Australia and New Zealand, we completed recruitment of an 11-site point prevalence study of ECMO infections and cannulae dressing and securement practices, which will be the first to describe the prevalence of nosocomial infection across the two countries. This will be an important starting point in addressing the unacceptably high infection rates in these vulnerable patients.

PRESENTATIONS AND PUBLICATIONS

Our team presented internationally with multiple invitations to showcase our research findings. We led a high number of presentations at The Prince Charles Hospital's Charlie's Week, including 28 "Hour of Power" presentations. We also included our research on nasal cannulation techniques into a new medical textbook and were the only contributors from the southern hemisphere invited to do so.

Critical Care Research Group continued...

AWARDS

The team won multiple awards in 2018, including:

- Australian Society for Medical Research, Clinical Researcher Award 2018 – Prof John Fraser
- The Prince Charles Hospital's Charlie's Week, Paul Zimmerman Best New Investigator Award – Dr Jacky Suen
- The Prince Charles Hospital's Charlie's Week, Michael Ray Best Basic Science Award – Indy Lye
- The Prince Charles Hospital, Rising Star of Research Award – Amanda Corley

STUDENTS

We supervised seven honors students in 2018 and six PhD students.

RESEARCH COLLABORATIONS

We continued to maintain and grow our research collaborations across the globe in 2018, with active and ongoing collaborators from 20 countries. Our ties with global ECMO researchers continues to be strong with ongoing collaborations with the global ECMO body, ELSO, and the research-driven network ECMONet. We are ramping up our collaborations with our Asia Pacific neighbours in the specialty of ECMO to broaden our research efforts and improve patient outcomes on a broader scale.

Within intensive care networks across Australia and New Zealand we actively foster collaboration in this network and sit on many management committees for studies which will ultimately shape and improve the care we provide to the critically ill.

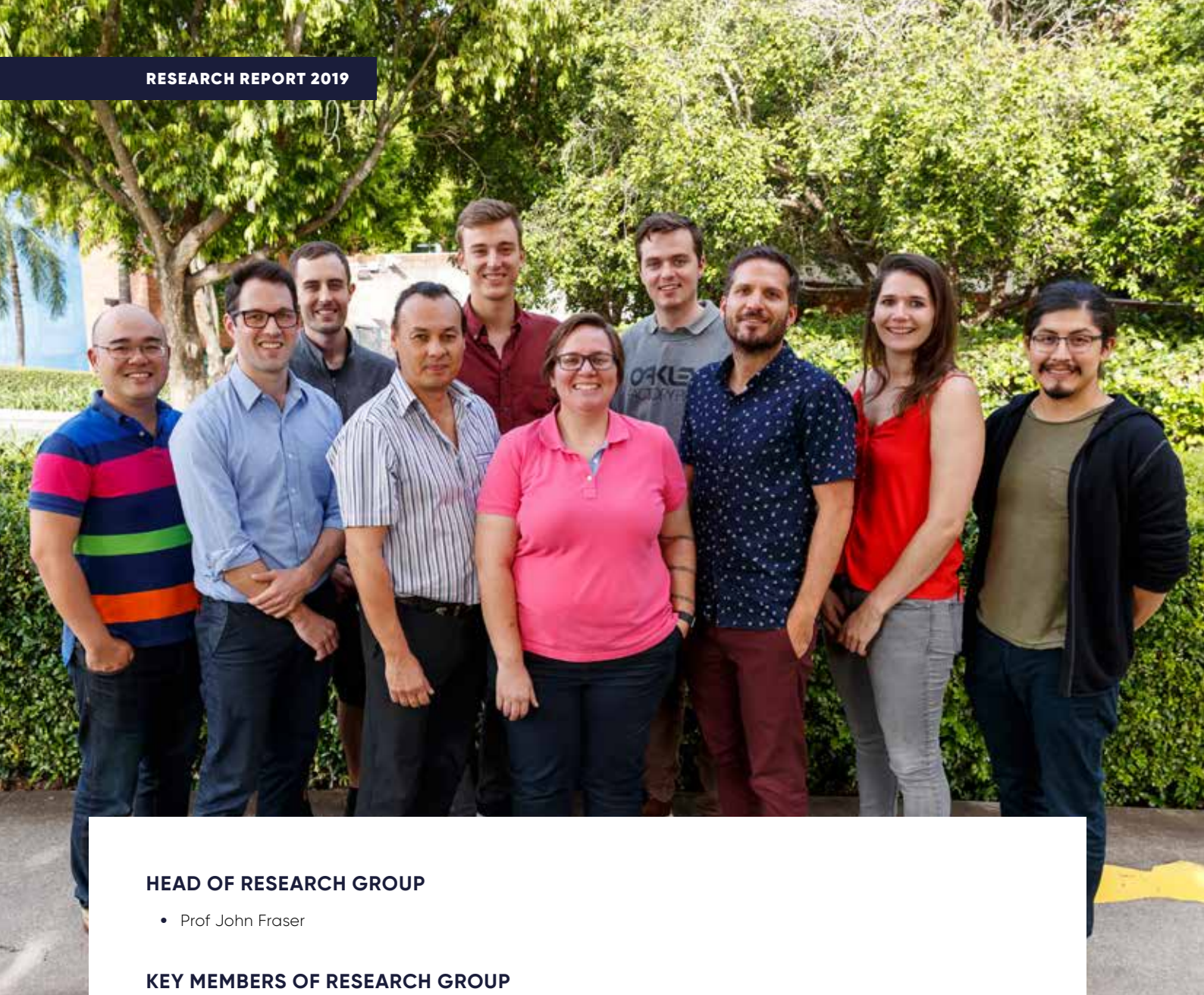


“

The nature of our research is multifaceted and complex. As a result, it takes many years to turn what we learn in a clinical setting into a standard procedure or approach that will save lives every day in hospitals across the world.

– Critical Care Research Group

Above: Back row: Dr Jae-Seung Jung, Dr Andrew Maymet, Steven Stoyak, Tristan Shuker, Bradley Roberts, Dr Jo Pauls, Stefan Bindorger, Dr Jack Suen, Alice Boone, Carmen Ainola, Kieran Hyslop, Dr Katrina Ki, Talvin Lee, Dr Karin Wildi; Middle row: John Canning, Dr Sainath Raman, Joshua Chinchilla, Olivia Zeekovic, Mahe Bouquet, Kristy Garrick, Margaret Passmore, Hollier O'Neil, Dr Kafa Walweel, Tayah McMaster, Lauren Beard; Front row: Dr Chris Chan, Janice Reid, Emily Wood, Dr Louise See Hoe, Dr Meredith Redd, Dr Xiaomeng Wang, Dr Kei Sato, Dr Sebastiano Colomba.



HEAD OF RESEARCH GROUP

- Prof John Fraser

KEY MEMBERS OF RESEARCH GROUP

- | | | |
|--------------------------|----------------------|--------------------------|
| • Prof Geoff Tansley | • Anthony McNamee | • Sebastien Schott |
| • Dr Jo Pauls | • Dr Michael Stevens | • Dilan Fernando |
| • Dr Frey Munoz | • Vivian Koh | • Adam Gluchowski |
| • Dr Chris Chan | • Liam O'Connell | • Bryce Thompson |
| • Dr Nicole Bartnikowski | • Nathan Corvino | • Heidi Ting |
| • Dr Shaun Gregory | • Vasu Lakkoju | • Prof Robert Salamonson |
| • Eric Wu | • Oscar Vossage | • Prof Matthew Dargusch |
| • Dr Sam Liao | • Dante Stephens | • A/Prof Tim Dargaville |
| • Dr Andrew Stephens | • Madison Beare | • Prof Zhiyong Li |
| • Eleonore Bolle | • Dylan Lightbody | • Dr Benjamin Simpson |
| • Alice Boone | • Kurt Glover | • A/Prof Cara Wrigley |
| • Clayton Semenzin | • Melanie Smarzoch | • Dr Danniel Mullany |
| • Martin Mapley | • Celine Leung | • Prof Nobuo Watanabe |
| • Kristy Garrick | • Masataka Inoue | • A/Prof Einly Lim |
| • Raymond Ho | • Kokuke Igarashi | |
| • Dr Michael Simmonds | • Joshua Rolls | |

The Innovative Cardiovascular Engineering and Technology Laboratory

Our group uses innovative research in the field of biomedical engineering to dramatically reduce deaths from cardiovascular diseases. Our emphasis is on designing and evaluating devices used by seriously ill heart failure patients, such as mechanical circulatory support systems and ventricular assist devices, and their controllers such as sensors and patient alert systems.

INNOVATIONS WITHIN CARDIOVASCULAR ENGINEERING

Our research is predominantly laboratory based and involves developing in-vitro, in-vivo, ex-vivo and computer models, which can be translated into clinical practice to directly benefit our patients. With cardiovascular disease being the leading cause of death in the developed world, we also want our work to inform medical, engineering and other health professionals via international publications and presentations.

It is important that our research has both clinical and teaching functions so that medical professionals, locally and further afield, can learn from our innovations.

HIGHLIGHTS

In 2018, we were excited to have grown our student researcher cohort to over 30 members, applied for three patents for new devices, and have been a multi-award winning team for another year. We had

over 30 different projects start or remain ongoing that covered a wide range of research, including ventricular assist device development, physiological control systems, patient monitoring, implantable sensors, blood-device compatibility and cannulation strategies.

Developing new medical devices takes significant time and as a result, our projects are long-term endeavours without annual reporting of specific outcomes. In 2018, as in prior years, we have continued to progress towards having multiple pieces of technology move closer to being approved for use in everyday clinical care.

AWARDS

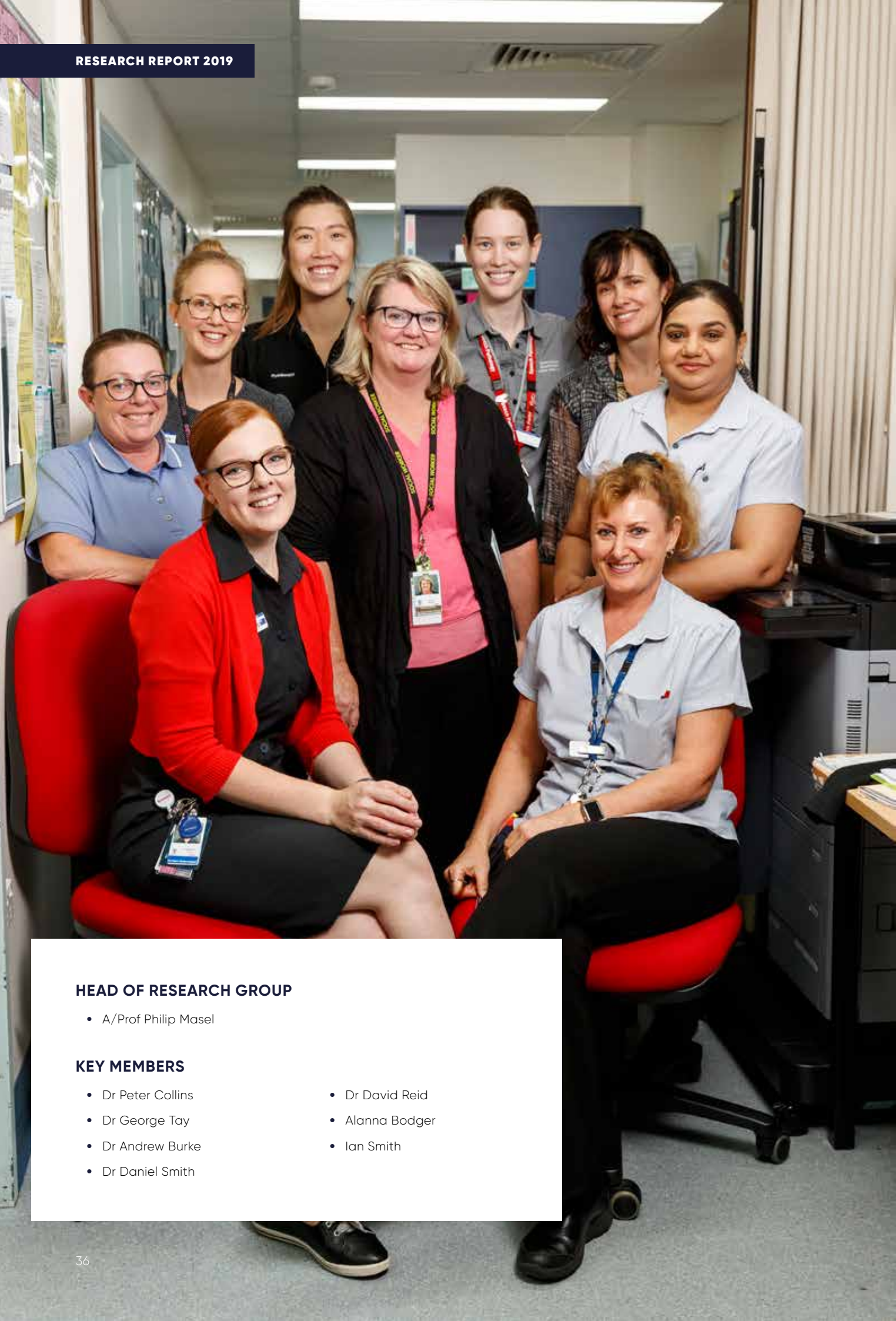
Members of our group were awarded the Innovative Research Award at the Annual Meeting of the International Society for Mechanical Circulatory Support and the Young Tall Poppy Award from the Australian Institute of Policy and Science.

STUDENTS

The group takes on a large student load each year, including four post-doctoral researchers, 11 PhD students and 17 honours students in 2018. We were proud to have Matthias Kleinheyer awarded his PhD this year, with another two PhDs submitted.

RESEARCH COLLABORATIONS

Ongoing national collaborations include other research departments, universities and research institutions across Australia. Internationally, we had continued support from researchers in Germany, Japan, Malaysia and China.



HEAD OF RESEARCH GROUP

- A/Prof Philip Masel

KEY MEMBERS

- Dr Peter Collins
- Dr George Tay
- Dr Andrew Burke
- Dr Daniel Smith
- Dr David Reid
- Alanna Bodger
- Ian Smith

Core Thoracic Research Group

The Core Thoracic Research Group supports new medical interventions into lung diseases and aims to improve the care available for patients living with serious respiratory conditions. We strive to evaluate and fill gaps in knowledge related to the diagnosis and management of a variety of common lung diseases.

ADVANCING LUNG DISEASE RESEARCH

As a group, we cover a diverse range of diseases although most of our research focuses on understanding and improving treatments for COPD and bronchiectasis.

We aim for our research to contribute to greater understanding of lung diseases globally and offer the best possible outcomes for all patients, giving them greater quality of life.

To achieve this, our group strongly encourages multidisciplinary research, aims to publish original research, and encourages our researchers to present their work both in Australia and internationally. We are a collaborative research site working alongside other departments, external research institutions and hospitals to collectively advance the field of lung disease research.

HIGHLIGHTS

In 2018, we had 12 studies in progress, which investigated a range of lung health issues. Particularly, our work in reviewing patients with pulmonary embolism and pulmonary arteriovenous malformations, a rare condition that affects blood flow between the heart

and the lungs, has given us a better understanding of these life threatening conditions.

Additionally, our research into COPD highlighted too many variable approaches to managing hypoxia in our COPD patients. As a result, we discovered that a standard process for this condition was required and through this we have used our research to streamline the care we offer to for better outcomes.

PRESENTATIONS AND PUBLICATIONS

We published one paper this year.

RESEARCH COLLABORATIONS

Internal collaborators include other lung research units and allied health. Externally, we were supported by the Queensland University of Technology.



HEAD OF RESEARCH GROUP

- Prof Gregory Scalia

KEY MEMBERS OF RESEARCH GROUP

- | | |
|--------------------------------------|----------------------|
| • Prof Jonathon Chan | • Dr Anthony Putrino |
| • A/Prof David Platts | • Natalie Kelly |
| • A/Prof Darryl Burstow | • Maricel Roxas |
| • A/Prof Christian Hamilton
Craig | |

The Catheterisation Laboratory, Haemodynamics and Echocardiography Research Group

Our group studies the use of advanced echocardiology and sonogram technologies with the goal of advancing cardiology practice and improving treatments for patients with serious heart diseases. By using the most advanced techniques in echocardiology and driving research into new screening programs, our research ultimately leads to life-saving interventions for heart patients.

THE CATHARSIS PROGRAM

We are a group of cardiologists, echocardiologists, allied health practitioners and cardiac nurses who together, are delivering the world's largest echocardiography comparative study, known as the Catharsis Program. Our goal is to perform many high resolution, protocol-driven echocardiograms on a broad range of heart patients and use the data to validate existing procedures or recommend new techniques.

The patients in our study, and those who will benefit most from our research, are those with life threatening heart conditions, including coronary disease, valve disease and pulmonary hypertension. Our group's research is an integral part of the hospital wide collaborative effort to find new treatment options and better care pathways for heart patients.

HIGHLIGHTS

2018 was an exciting year for our team with multiple international presentations and publications. We had 16 studies in progress or completed, and the Catharsis Program continued to enrol heart patients and collect informative data.

This year, we saw exciting new correlations and understanding of the ways that echocardiography can diagnose cardiac conditions without the need for invasive tests. This is an exciting outcome for the project and is showing how our research has the potential to influence heart patient care and diagnostics.

PRESENTATIONS AND PUBLICATIONS

We produced multiple publications this year and were featured nationally and internationally. We presented our research to the Cardiac Society of Australia and New Zealand, American Society of Echocardiography (Tennessee), European Society of Cardiology (Munich), Cardiac Imaging and Intervention Summit (Beijing), and Cardiology Update in Echocardiography (Kenya).

STUDENTS

We supervised two masters students and one PhD student this year.

RESEARCH COLLABORATIONS

In 2018, we worked very closely with other cardiac departments, most significantly with critical care cardiology and medical imaging.



HEAD OF RESEARCH GROUP

- Prof Tony Rahman

KEY MEMBERS OF RESEARCH GROUP

- | | | |
|---------------------------|---------------------|-------------------|
| • Prof John Croese | • Dr James Thomas | • Ann Vandeleur |
| • Prof Alex Loukas | • Dr Jan Lian | • Jennifer Harch |
| • Prof James McCarthy | • Dr Greg Miller | • Leisa McCann |
| • Prof Nathan Subramanian | • Dr Paul Giacomini | • Hayley Thompson |
| • Prof Greg Anderson | • Dr Paul Chapman | • Toni Schmid |
| • A/Prof Andrew Clouston | • Dr Asim Khokhar | • Davoud Pourmazi |
| • Dr Ruth Hodgson | • Dr Sarah Kentwell | |

Gastrointestinal Health Research Group

The goal of our research group is to perform high quality gastroenterological and liver research and research into the public health concerns that relate to these fields. We focus on interventions and treatments for life-threatening and life-limiting conditions such as hepatitis, cirrhosis, hepatic encephalopathy and coeliac disease.

FINDING NEW TREATMENTS AND BETTERING PATIENT SUPPORT

Our ethos is to combine expertise, capability, and external knowledge to achieve the best outcomes for a range of patients.

Within our research projects, we are finding ways to identify conditions earlier, searching for new treatments, and supporting individuals to better manage their health. These outcomes are vitally important with respect to our research into liver diseases, given they represent a major public health crisis with many difficult social, family and personal impacts.

It is important to us that our work benefits the community in a tangible way and, after it is clinically tested, translates to major improvements to public health.

HIGHLIGHTS

In 2018, our biggest achievements related to three key research areas: coeliac disease, hepatic encephalopathy and hepatitis. In the field of hepatitis, we launched a new initiative treating inmates in Woodford prison. Since May 2018, we have screened over 400 individuals and treated over 150 with the goal to eradicate the disease from the prison. We are immensely proud of our ongoing commitment to

treating hepatitis C in the community and it is our great hope that what we have achieved, including our methods, can be emulated in towns and cities across the world.

In recognition of this outstanding work, Prof Tony Rahman was an Australia Day Awards Winner for services to hepatitis C and we were also awarded a Queensland Health Award for Excellence and Connecting Healthcare.

Another big achievement in 2018 was our coeliac disease and hookworm trial. Although it appears that hookworm infection will not restore gluten tolerance in coeliac sufferers, the data collected has led to many new studies, which will help us understand more about other aspects of the disease, such as inflammatory markers and genetic components. We look forward to analysing the results and creating more exciting research pathways.

Lastly, we had a big breakthrough in our hepatic encephalopathy research. This study, identifying a specific chemical found in the breath of patients, has proven to be successful. This is an exciting step towards finding a single reliable test for this disease that does not currently exist anywhere in medical practice.

PRESENTATIONS AND PUBLICATIONS

Several publications were put out this year and findings were presented to The Brisbane Liver Group, Australian Gastroenterology Week and the American Association of Liver Diseases in San Francisco.

STUDENTS

The team supervised two PhD students in 2018.

RESEARCH COLLABORATIONS

National collaborations included the Queensland University of Technology, QIMR Berghofer, Concord Hospital and CSIRO. We had international support from research institutions in New Zealand and Canada.



HEAD OF RESEARCH GROUP

- Dr Eamonn Eeles
- Dr Chrys Pulle

KEY MEMBERS OF RESEARCH GROUP

- A/Prof Jeffery Rowland
- Dr Lucy Dakin
- Dr Ling Lan
- Dr Jack Bell
- Margaret Morton
- Leah Thompson
- Sally Barrimore
- Margaret Turner
- Rhonda Mead
- John Deeth

Internal Medicine Services

We are a collective of highly-skilled, interdisciplinary clinicians comprising the Dementia Research Unit, Investigator driven research and the Network for Orthopaedic Fracture Education and Research (NOFEAR). Together, we manage a portfolio of diverse projects in dementia, stroke and fracture recovery, which includes international clinical trials and other cutting-edge translational research.

IMPROVING CLINICAL CARE

The aim of Internal Medicine Services research is to improve clinical care for the hospital's most vulnerable patients, such as the frail and aging, and those with cognitive decline.

Part of our ethos is a commitment to delivering continuous improvements in patient care and research that can be undertaken in the hospital setting. The Internal Medicine Dementia Research Unit is the only research site in Queensland providing dementia patients with access to clinical trials for new drug therapies.

Since our group's inception, we have been responsible for this kind of pioneering research. Innovation is part of our research vision, and as a group, we strive for vast improvements to care delivery and treatment options for many vulnerable patients.

HIGHLIGHTS

In 2018, 17 new research studies commenced in addition to ongoing work from previous years. Our most groundbreaking research continues to be in our clinical drug trials, where we have been undertaking Australia-first research.



In collaboration with the CSIRO and the Queensland Brain Institute, we have been exploring the neurochemistry of Alzheimer's disease with the view to being able to develop new, personalised drug treatments for this disease.

We successfully secured a grant to develop an app to manage information related to specialist consultations for inpatients. Since its creation, this app has been adopted by the Metro North Values Based Healthcare team and will be rolled out across the entire service.

PRESENTATIONS AND PUBLICATIONS

In 2018, we published 15 journal articles, presented seven oral presentations and eight posters. Locally, 11 members of our team presented at The Prince Charles Hospital's Charlie's Week.

AWARDS

We were awarded best poster at the Annual Scientific Meeting at the Australian and New Zealand Geriatric Society. We also won several awards at The Prince Charles Hospital's Charlie's Week.

RESEARCH COLLABORATIONS

Internally, we worked closely with other research departments, most notably allied health and critical care. We had international collaborations in the UK and New Zealand.



HEAD OF RESEARCH GROUP

- Wendy Strugnell

KEY MEMBERS OF RESEARCH GROUP

- | | |
|-----------------------------------|-----------------------|
| • Jim Crowhurst | • Dr Rachael O'Rourke |
| • A/Prof Christian Hamilton-Craig | • Stanley Redmond |
| • Dr Katrina Hopcraft | • Robyn Riley |
| • Dr Aaron Lin | • Dr Ian Sarno |
| • Dr Johanne Neill | • Andrew Trotter |
| | • Allan Wesley |

Medical Imaging Research Program

The Medical Imaging Research Program aims to progress the field of medical imaging and deliver improvements to diagnostic techniques such as X-ray, magnetic resonance imaging (MRI) and computerised tomography (CT) scanning. Our goal is to provide safer, faster and more accurate diagnoses of medical conditions using imaging, with a specific focus on improving cardiovascular health using MRI.

partnerships. Our success story remains the exercise-stress cardiac MRI program, which continues to help us manage patients with pulmonary hypertension.

Patients enrolled in the program are now undertaking a re-assessment after their initial treatment, and with the MRI program offering ongoing monitoring, we can keep evaluating the effectiveness of the program and the health status of our patients.

The results of our international lung screening trial from 2017 using low dose CT scanning has led to these results becoming the established protocol. In 2018, this meant many of our lung patients were exposed to much lower radiation doses and decreased potential patient harm as a result.

ADVANCEMENTS IN DIAGNOSIS CARDIOVASCULAR DISEASE

We are committed to improving how we treat and diagnose health problems and identifying potentially life-threatening conditions earlier by using the most advanced medical imaging techniques in the field. Our research group includes Australia's largest cardiac MRI service, The Richard Slaughter Centre of Excellence in Cardiovascular MRI.

Through a collaboration with Siemens Healthcare, we are exploring new techniques for diagnosing cardiovascular disease. As a national center for excellence, we have an Australia-wide reach and treat patients from all over the country. It is our vision that all Australians, especially those with life-threatening heart disease, benefit from access to the best technology in medical imaging, combined with our cutting-edge, professional expertise.

HIGHLIGHTS

Our group had seven key projects in 2018 with support from internal collaborations and external research

PRESENTATIONS AND PUBLICATIONS

We presented our research 17 times at local and international conferences and had nine publications.

RESEARCH COLLABORATIONS

We are thankful for support from other cardiology and thoracic medicine research groups, Siemens Healthcare and numerous other important collaborators including researchers from Germany and Canada.



HEAD OF RESEARCH GROUP

- A/Prof Brett Hughes

KEY MEMBERS OF RESEARCH GROUP

- Emma Wynd
- Kirsten Popplewell
- Vani Sathiaselalan
- A/Prof Zarnie Lwin
- Dr Matthew Burge
- Dr Po Inglis

Medical Oncology Research Group

Our group aims to improve survival outcomes for cancer patients, with a specific focus on helping those with lung cancer and mesothelioma. We have a long history of collaborative and pharmaceutical sponsored clinical trials in these key areas and we are considered a thought-leader in this field.

THE NEXT GENERATION OF INNOVATIVE RESEARCH

The advancements in cancer drugs and therapeutics in recent years have been remarkable, and as a very forward-thinking research group, we have been part of the growth of advanced immunotherapy and targeted drug therapies since our inception.

Despite the way new drugs have revolutionised cancer treatment in the past ten years, there are still vast improvements to be made to survival rates and quality of life for lung cancer patients. We consider it our research priority to be working on the 'next generation' of interventions and prioritising only the most innovative research, such as world-first clinical trials, brand new drug therapies and proposing radical alternatives to surgery.

HIGHLIGHTS

2018 was a very productive year for our group. We had 15 studies taking place, either in active recruitment or in follow up stages. In line with the success of previous years, we saw significant improvements to the health and well-being of our patients through their involvement in our clinical trials.



Most notably, we had positive outcomes treating different types of stage four non-small cell lung cancer with different drug therapies. This included studies targeting specific genetic variants; one known as anaplastic lymphoma kinase rearranged non-small cell lung cancer, and another known as epidermal growth factor receptor mutant non-small cell cancer.

We additionally commenced a national study in metastatic colorectal cancer with Dr Matthew Burge as the national chief investigator. We are proud to announce this is a research concept he developed and that he is leading this project for the Australasian Gastrointestinal Trials Group.

PRESENTATIONS AND PUBLICATIONS

In 2018, our group delivered over 80 publications and presentations.

RESEARCH COLLABORATIONS

Alongside our ongoing collaborations with different pharmaceutical companies, our research group had collaborations with Australian Lung Cancer Trials Group, Australasian Gastro-Intestinal Trials Group and Canadian Cancer Trials Group.



HEAD OF RESEARCH GROUP

- Prof Paul Fulbrook

KEY MEMBERS OF RESEARCH GROUP

- Dr Sandra Miles
- Josephine Lovegrove

Nursing Research and Practice Development Centre

The Nursing Research and Practice Development Centre exists to foster changes in hospital care through research and evidence-based practice. Since the department was founded in 2010, we have been focused on pressure injury prevention, falls prevention, emergency care and wound management.

IMPROVING NURSING PRACTICE AND PATIENT CARE

We are committed to reducing the occurrence and impact of these in addition to improving recovery and reducing prolonged hospital stays associated with these issues. Within our department, we take the role of research very seriously and want to achieve outcomes that improve nursing practice and have a direct impact on the quality of patient care.

Extending nursing capability in this way is achieved with hospital-wide support, and as a group, we have solid links with other departments, educational institutions and universities as part of a collaborative research culture dedicated to the delivering the best care.

HIGHLIGHTS

In 2018, we followed a trajectory of success akin to previous years. With over 40 projects taking place at different stages, we delivered many results throughout the year. As much of our work was directed towards reducing the impact of pressure injuries, this was our most recognised field of research.

We were proud to have been awarded three new research grants and have been the recipient of a Skin Safety Award at the Wounds Australia Conference, presented to an outstanding team who have implemented a sustainable patient care regimen to improve skin health.

PRESENTATIONS AND PUBLICATIONS

In 2018, we were part of co-writing and supporting 13 journal publications and 11 conference papers.

STUDENTS

We supported and supervised four PhD candidates, four masters students and one honours student.

RESEARCH COLLABORATIONS

We collaborated with many partners internally, state-wide and further afield including the Australian Catholic University, Alliance for Vascular Access Teaching and Research, Griffith University, Queensland Ambulance Service, Queensland University of Technology, Australian Catholic University, CSIRO and Latrobe University.



HEAD OF RESEARCH GROUP

- Dr Indira Prasadam
- Prof Ross Crawford
- Prof Yin Xiao

KEY MEMBERS OF RESEARCH GROUP

- Dr Antonia Rujia Sun
- Dr Sarah Whitehouse
- Dr Ibin Varghese
- Dr Allen Wu
- Dr Patrick Lau
- Salah Showiheen

Osteoarthritis Research Group

The goal of our group is to innovate in research across all areas of osteoarthritis including diagnosis, treatment options, potential cures and prevention methods. We look at the key risk factors, evaluate new ways of using medical imaging, and hope to find new treatments to repair damaged joints.

RESEARCH ACROSS DIAGNOSIS, TREATMENT, PREVENTION AND CURE

We also have a specific research focus on the relationship between the rise of obesity in Australia and higher rates of osteoarthritis. Far from being a minor health issue, osteoarthritis is a significant public health concern. It is known to affect one-in-four Australians and cost the health system more than \$4 billion annually.

As a disease with many different causes and effects, and one without a single, effective treatment option, it presents a unique set of challenges to researchers and clinicians alike. To be effective in our field, we take a holistic approach using an integrated team of clinicians, scientists and researchers working together. With this strategy, we hope to better understand osteoarthritis, how we can prevent it and treat it, and improve lives of those impacted.

HIGHLIGHTS

In 2018, our research focused on understanding more about the links between obesity and osteoarthritis. Across different projects in this field, we made four important observations:

- obesity, diabetes, hypertension, hypocholesteremia separately and together, can cause osteoarthritis;

- obesity can activate a certain inflammatory response in the body causing cartilage degradation;
- certain saturated fat diets cause osteoarthritis; and
- obesity can promote cartilage degeneration in three different ways, including causing induced oxidative stress.

These findings provide valuable insights into the development of obesity-associated osteoarthritis and provide new possibilities for treatment and prevention.

Additionally, we had some excellent progress in our research into using antioxidants to target mitochondria in the treatment of osteoarthritis. By addressing mitochondrial dysfunction, we were able to halt the disease progression in animal models. With further study, this approach could form the basis for a new osteoarthritis treatment option.

PRESENTATIONS AND PUBLICATIONS

We presented our research to Arthritis Queensland and the Translational Research Institute Health Forum in 2018.

AWARDS

We are proud of Dr Indira Prasadam who received the Young Investigator Award from Osteoarthritis Research Society International 2018 in the UK. This prestigious award recognises the top five Young Investigators in osteoarthritis research world-wide.

RESEARCH COLLABORATIONS

In 2018, we worked with support from allied health departments and local Queensland universities.



How Hookworms May Hold the Key for Finding a Cure

Hookworms are not the first thing that comes to mind when discussing coeliac disease. These blood-feeding parasites are considered a hinderance rather than an aid in making a big difference for people who rely on gluten free diets.

PROSPECT OF INCREASED TOLERANCE

In 2016, Professor John Croese set out to enhance the quality of life for people with coeliac disease in a unique trial. His previous research revealed that hookworm infections had the surprising potential of allowing patients to reintroduce gluten back into their diets. The increased tolerance to gluten was an exciting prospect, especially for those who had been on a very strict gluten free diet in the past.

While deliberately infecting yourself with a parasite seemed like an unpleasant thing to do, trial participant Joanna Wiseman was fascinated by the research. Diagnosed with asymptomatic coeliac disease, she was excited by the prospect of being able to expand her diet through the duration of the trial.



You hear about tapeworms and those can be pretty horrendous, but when you look at hookworms, they are these little, thread-like things. These didn't seem to be nearly as bad.

The hookworms were introduced through a small patch on her arm. "It was itchy for a few days, just like the nurses said it would be—they described the whole process quite well." Joanna explained that it was a nervous wait to see if the trial would work for her.

Starting with little pieces of pasta, she was able to slowly reintroduce gluten into her diet and amazingly, built up the amount of pasta she could eat with no

ill-effect over the weeks and months. "Coming to the end of the trial's first stage, I was able to eat a full bowl of pasta," she said.

The most exciting part was moving to the second stage of the trial. This meant, that for Joanna, her body was beginning to tolerate gluten and the first stage of the treatment had been successful.



Not having to read labels or stick to a strict plan when I was shopping was a big relief. I was really amazed at how much time and energy went into thinking about food every day as someone with coeliac disease."

One of the biggest potential successes for Joanna was that, any accidental cross-contamination containing gluten would not have such a dire effect on her health.

While Joanna's experience was overall positive, studies into this area of research are still ongoing. Professor Croese is in the final stages of analysing the trial's results to fully understand the effects of hookworms and increased gluten tolerance, with the aim of replicating these effects in medications and treatments.

MEDICAL DISCOVERIES PRODUCED HERE

PROUDLY SUPPORTED BY  THE COMMON GOOD
PEOPLE POWERING MEDICAL DISCOVERIES



HEAD OF RESEARCH GROUP

- Prof Daniel Chambers

KEY MEMBERS OF RESEARCH GROUP

- | | | |
|-----------------------------|---------------------|-------------------|
| • A/Prof Peter Hopkins | • Dr Viviana Lutzky | • Maria Pietsch |
| • A/Prof Brendan O'Sullivan | • Dr John McIntosh | • Avalon Knott |
| • Dr Simon Apte | • Maxine Tan | • Joel Yangson |
| • Dr Timothy Sladden | • Tharushi De Silva | • Dr James Walsh |
| • Dr Chandima Divithotawela | • Debra Enever | • Donna Hickling |
| • Dr John Feenstra | • Michelle Grant | • Trish Leisfield |
| • Dr Michael Trotter | • Sandy Bancroft | |
| • Dr Kenneth Sinclair | • Tracy Smith | |

Queensland Lung Transplant Service

The aim of the Queensland Lung Transplant Service is to improve health outcomes and survival for patients with advanced lung disease. Our research advances the number and effectiveness of treatment options available for lung patients, increases the success rate of transplant procedures, and ensures positive outcomes for transplant recipients so they can maintain quality of life in the future.

SAVING LIVES IN REAL TIME

Lung transplantation is often the only viable option for patients with lung disease. Improving this procedure and reducing the impact of post-lung transplant rejection and complications is essential to increasing survival rates and improving quality of life.



Our clinical trial centre is one of the largest in the world and enables us to take a powerful, multifaceted approach to fighting all aspects of lung disease.

As an internationally renowned research group, we have been responsible for numerous world first studies in transplantation and advanced lung disease. With a research program that is effectively embedded in the clinical setting, many of our projects save lives in real time. Importantly, we ensure we are a highly innovative group, and through conducting world first trials, act as an important catalyst progressing global understanding of lung diseases.

HIGHLIGHTS

In 2018, our research program continued to bring cutting-edge science to the clinic for the benefit of our patients. We saw several patient's lives directly saved by the dedication, imagination and talent of our incredible team.

In recognition of this work, members of our group were given prestigious appointments including Chair of the Pulmonary Fibrosis Australasian Clinical Trial Network, Programme Chair for The International Society for Heart and Lung Transplantation Conference 2021, a Clinical Professorship at the University of Queensland, an Adjunct Professorship and Associate Professorship at the Queensland University of Technology, and two new research fellowships at The Prince Charles Hospital.

Most of our work in 2018 was aimed at improving outcomes for patients with immune or fibrosis related transplant rejection and new research into silicosis. This was a mix of research driven projects and clinical trials, including our ongoing trial treating post-transplant rejection with stem cells, which represents the world's largest ever study of stem cell therapy for lung disease.

In our research into lung failure caused by lung fibrosis, we found a lipid metabolite, known as LPA, was increased in transplanted lungs, indicating that potentially inhibiting this metabolite may be a strategy for treatment. Excitingly, after discovering 'inhibitory antibodies' in the blood of transplant patients which allow dissemination of bacterial infection, we investigated whether plasmapheresis, a process that filters the blood and removes harmful antibodies, could be used to treat a patient not responding to antibiotics. This trial was life-saving and showed us a new way we could potentially treat bacterial lung infections.

Queensland Lung Transplant Service continued...



Lastly, we had an important breakthrough in the field of silicosis, a major health problem caused by silica exposure and arguably, a newly emerging workplace health crisis. At present, methods to measure silica in the lung are rudimentary and not enough is understood about the full risks of silica exposure.

In 2018, we developed a new method to measure silica in the lungs and are now investigating how this relates to lung inflammation. This development was an exciting breakthrough and the subject of much media interest in 2018.

PRESENTATIONS AND PUBLICATIONS

The groups were part of multiple presentations and publications in 2018.

AWARDS

The group received multiple awards this year in recognition of our life saving research. The most prestigious award went to Dr Ken Sinclair for his work on LPA. Ken, who is the group's most recent PhD student, won the International Society for Heart and Lung Transplantation Early Career Scientist Award. This international award is one of the most important and coveted in the field. Australians can be very proud that Ken brought the award to our shores for the first time.

Our team also won the Clinical Research Award at the Metro North Hospitals and Health Services Research Excellence Awards, and the Graham Nielsen Award for Best Published Paper at the Prince Charles Hospital's Charlie's Week.

RESEARCH COLLABORATIONS

Essential ongoing collaborators include the Lung Foundation Australia, the University of Queensland, the Queensland University of Technology, QIMR Berghofer, University of Sydney, Latrobe University, RMIT, Monash and all the Australian lung transplant programmes. We also had international support from multiple researchers.



“

Lung transplantation is often the only viable option for patients with lung disease. Improving this procedure and reducing the impact of post-lung transplant rejection and complications is essential to increasing survival rates and improving quality of life.

– Queensland Lung Transplant Service



HEAD OF RESEARCH GROUP

- Dr Deanne Curtin

KEY MEMBERS OF RESEARCH GROUP

- Dr Dan Henderson
- Dr James Douglas
- Dr Peter Robinson
- Dr Irene Szollosi
- Dr George Tay
- Greg Jorgensen
- Nicola Dunn
- Jan Robinson

Sleep Health Research Group

The Sleep Health Research Group is focused on delivering effective care for patients with sleep related breathing disorders, such as sleep apnea, and those with diseases that adversely impact sleep habits. Quality sleep is vital to an individual's good health, wellbeing and quality of life.

THE FOREFRONT OF SLEEP MEDICINE

Unfortunately, those living with sleep disorders will experience many adverse effects, such as depression, poor concentration and memory loss. There is long standing evidence that certain sleep disorders can increase the risk of some serious diseases, such as cardiovascular disease and dementia.

The goal of our group is to ensure those with sleep disorders have access to the best possible treatments, to deliver new models of care and build our understanding of how sleep disorders impact the community. A big part of our research ethos is to make the diagnosis and treatment of these issues more accessible for patients living in regional and remote areas. This is achieved by making sure we are at the forefront of sleep medicine and embrace all the technological advancements available to us in our field.

HIGHLIGHTS

Overall, 2018 was a year of growth for the team who were busy undertaking eight different studies. A big highlight for us in 2018 was receiving an Innovation Grant from The Common Good to support our ongoing research in sleep health and dementia.

We also started new projects looking at sleep disorders in cystic fibrosis and down syndrome, in

addition to our ongoing research in schizophrenia, dementia and neuromuscular diseases. It is exciting to have expanded our research scope in this way, and we look forward to sharing more outcomes in 2019.

PRESENTATIONS AND PUBLICATIONS

We presented numerous abstracts at the Australasian Sleep Association Annual Conference.

RESEARCH COLLABORATIONS

We collaborated internally with other research departments and externally with thanks to Metro North Hospital and Health Service, the Queensland Brain Institute and CSIRO.



HEAD OF RESEARCH GROUP

- Prof Kwun Fong

KEY MEMBERS OF RESEARCH GROUP

- | | |
|-------------------------|--------------------|
| • A/Prof Rayleen Bowman | • Maria Martins |
| • Prof Ian Yang | • Linda Passmore |
| • Dr Felicia Goh | • Elizabeth McCaul |
| • Dr Henry Marshall | • Deborah Courtney |
| • Dr Annette Dent | • Jacqui Brady |
| • Dr Annalicia Vaughan | • Pamela Fung |

University of Queensland Thoracic Research Centre

Our research group undertakes a broad range of research including clinical, translational and scientific, which aims to improve the health of people who are at risk of, or affected by, lung disease. Our objective is to prevent, diagnose and treat lung diseases including lung cancer, mesothelioma and chronic conditions, such as asthma.

RESEARCH INTO PREVENTION AND EARLY DETECTION

Often, lung diseases are hard to treat making research into prevention and early detection critical to improving survival rates. Consequently, most of our research is dedicated to these goals, with early diagnosis giving patients more treatment options, improved prognosis and better overall health outcomes.

Our research is driven by the need to improve lung health for all, but we also want to ensure the healthcare we develop is cost-effective and innovative by using the most advanced technology where possible.

We strive for research that is embedded into the clinical program, ensuring our research questions are highly relevant and we are rapidly translating findings into something that becomes available to more patients. Our ethos is about bringing patients, clinicians and scientists together to benefit everyone, invigorate our practice, and ensure that the lung disease community has access to world-class care.

HIGHLIGHTS

In 2018, our research group was awarded many new grants and contributed to over 50 publications in respiratory medicine. An important highlight continues to be our biomarker research program, which aims to identify biomarkers in the human genome that may lead to new, personalised treatments for lung diseases. Many trials of new diagnostic techniques took place and the prospect that we will be able to replace some procedures or surgery with a simple blood, breath or urine tests is edging closer each year.

Additionally, we have been using a highly specialised centrifuge to identify and analyse biodata, which is considered the most technologically advanced technique in this field. It is exciting to be carrying out such innovative research, knowing it has the potential to improve diagnostic procedures and outcomes for many patients in the years to come.



Left: Eloise Shaw, Hannah O'Farrell, Zoe Frazer, Kelly Chee, Samuel Tait, Maria Martins, Dr Annalicia Vaughan, Brielle Parris, Janet Shaw.

Above: Zoe Frazer.

PRESENTATIONS AND PUBLICATIONS

We contributed to over 50 different publications in 2018. Our PhD, MPhil and honours students were privileged to deliver presentations at national and international meetings, including at the international European Respiratory Society Annual Congress in Paris and the prestigious Asian Pacific Society of Respiratory Congress in Taiwan.

RESEARCH COLLABORATIONS

We are pleased to have continued many productive collaborations state-wide, nationally and internationally and to have welcomed visiting academics and researchers in 2018.



“

We strive for research that is embedded into the clinical program, ensuring our research questions are highly relevant and we are rapidly translating findings into something that becomes available to more patients.

—University of Queensland Thoracic Research Centre



The Prince Charles Hospital Foundation Grants 2018

Grant Type	Recipient	Title	Amount Awarded
Board Project Development	Cardio-Vascular Molecular and Therapeutics Translation Research Group	Cardio-Vascular Molecular and Therapeutics Translation Research Group	\$100,000.00
Board Project Development	Infective Endocarditis Qld Collaborative	Infective Endocarditis Qld Collaborative	\$80,000.00
Caboolture Hospital	Dr Uzo Dibia	The influence of body mass index (BMI) on serum antibiotic concentration of cefazolin and probenecid in hospital in the home patients with cellulitis: a pilot study	\$2,000.00
Caboolture Hospital	Dr Thuy Frakking	Integrated children's care clinic (ICCC) versus a self-directed care pathway for children with a chronic health condition: a multi-centre randomised controlled trial study protocol	\$2,000.00
Caboolture Hospital	Dr Clive Holloway	Tympanometry in the Emergency Management of Children with Acute Otitis Media	\$2,000.00
Caboolture Hospital	Dr Bradley Partridge	Managing, and coping with, acts of verbal abuse and physical assault in the Emergency Department: what is the experience of ED nurses?	\$2,000.00
Emerging Researcher Grant	Alice Boone	Development and evaluation of a portable intra-ventricular balloon pump to improve left ventricular function.	\$24,993.24
Emerging Researcher Grant	Kelly Chee	Clinical Diagnostics of Pleural Effusion Exosomal miRNAs	\$24,684.00
Emerging Researcher Grant	Kristy Garrick	Investigation into the effect of ventricular assist device implantation and support on cardiac tissue	\$24,998.05
Emerging Researcher Grant	Donna Hickling	Use of body composition compared to standard nutritional assessments to improve selection of lung transplant candidates and patient outcomes	\$24,940.47
Emerging Researcher Grant	Hannah O'Farrell	Inflammatory and DNA damage mechanisms in response to e-cigarette aerosols in COPD/ lung cancer primary human bronchial epithelial cells	\$25,000.00
Emerging Researcher Grant	Janice Reid	Profiling cell-free DNA release after acute heart injury and throughout chronic heart failure	\$24,997.00
Equipment Grant	Trent Donnelly	Lafayette Manual Muscle Tester 01165	\$1,732.00
Equipment Grant	Dr Katrina Ki	Sechrist CP-G Series Air/Oxygen Blender, Pole Mount, Dual Flowmeter	\$4,417.29
Equipment Grant	Dr Jo Pauls	Mock Circulation Loop (incl. data acquisition system (DAQ))	\$47,007.00
Equipment Grant	Andrew Stephens	LulzBot TAZ 6 Three-Dimensional Printer with Enclosure and Dual Extruder Attachment.	\$4,175.48

Active Grants 2018 continued...

Grant Type	Recipient	Title	Amount Awarded
Equipment Grant	Dr Jacky Suen	Physiology Monitoring Module	\$12,400.00
Equipment Grant	Prof Geoff Tansley	PIV ancillaries	\$10,793.00
Equipment Grant	Oystein Tronstad	XSensor Pro Software Upgrade	\$4,800.00
Equipment Grant	Dr Yee Weng Wong	IEM Mobil-O-Graph® BP & Pulse Wave Analysis Monitor and Apple iPod for patient reported activity and symptoms.	\$6,950.00
Innovation Grant	A/Prof Rayleen Bowman, Kelly Chee	Novel Exosome Diagnostics for Pleural Effusion	\$49,697.00
Innovation Grant	Dr Wendy Chan, A/Prof Gregory Scalia	Potential of Left Atrial strain obtained during Exercise Stress Echocardiography in the diagnosis of Heart Failure with Preserved Ejection Fraction	\$25,000.00
Innovation Grant	A/Prof Petrea Cornwell, Prof Louise Gustafsson, Prof Suzanne Kuys, A/Prof Tracy Comans, Leah Thompson	Directing stroke rehabilitation research from a consumer perspective: A citizen's jury approach	\$48,412.72
Innovation Grant	Dr Annette Dent Dr Alisha Anderson	Volatile organic compounds in exhaled breath to diagnose lung cancer	\$48,394.50
Innovation Grant	Dr Jonathon Fanning, Dr David Highton, Dr Ivan Rapchuk, Dr Simon Finnegan	Individualised intraoperative haemodynamic optimisation informed by the lower limit of cerebral autoregulation to reduce perioperative morbidity and mortality: development of a novel clinical monitoring parameter	\$97,007.00
Innovation Grant	Dr Jonathon Fanning, Dr Nigel Pinto, Dr Ivan Rapchuk	Optimising intraoperative coagulation management for precision vascular surgery	\$87,604.00
Innovation Grant	Prof Paul Fulbrook, Dr Sandra Miles	Fast screening and assessment in the emergency department: a clinical innovation to prevent falls in older people	\$48,950.00
Innovation Grant	Dr Felicia Goh	Lung Microbiome Variation at Sites of Inflammation in Formalin-Fixed, Paraffin-Embedded Lung Tumours	\$55,583.60
Innovation Grant	Dr Usha Gurunathan	Use of preoperative rotational thromboelastometry (ROTEM) assays to detect postoperative thrombotic complications following total hip and knee arthroplasty in overweight and obese patients(RETHInK-O study)	\$57,126.00
Innovation Grant	Dr Peter Lazzarini, A/ Prof Jaap van Netten, Dr Malindu Fernando, Jason Warnock, Prof Scott Wearing, Prof Bijan Najafi	Towards an Objective Plantar Stress threshold to heal Diabetic Foot Ulcers: A TOPS threshold to heal DFUs	\$73,540.00
Innovation Grant	A/Prof Gianluigi Li Bassi	Pulmonary biofluids-associated lung injury in acute respiratory distress syndrome	\$49,890.00
Innovation Grant	Dr Margaret McElrea, Prof Kwun Fong, Prof Anne Chang, Tamara Blake	Spirometry and fractional exhaled nitric oxide (FeNO) reference values for Indigenous Australians: Phase II - adult Aboriginal and Torres Strait Islanders	\$84,125.67
Innovation Grant	Prof Norman Morris, Dr James Walsh, Dr Nicole Bellet, Menaka Sabaratnam	Small muscle training for big gains: Using high intensity single muscle group training in heart failure	\$48,318.00
Innovation Grant	Dr Bernd Ploderer, Dr Peter Lazzarini, A/ Prof Jaap van Netten, Dr Ross Brown, Damien Clark, Jason Warnock	MyFootCare: A Mobile App to Engage Patients with Diabetic Foot Ulcers in Self-Care	\$55,756.64

Grant Type	Recipient	Title	Amount Awarded
Innovation Grant	Eloise Shaw, Rhys Heffernan, Dr James Lyons, Prof Kwun Fong	Support Vector Machine Based Techniques for Automation of Methylation High Resolution Melt Analysis for Use in Early Detection of Lung Cancer	\$39,587.65
Innovation Grant	A/Prof Kiran Shekar, Prof Bala Venkatesh, Dr Marc Ziegenfuss, Dr Jayesh Dhanani, Dr James Walsham, Dr Dinesh Parmar	High flow Oxygen and Nitric Oxide inhalation to prevent intubation in hypoxic Respiratory failure (HONOR study)	\$58,390.27
Innovation Grant	Dr Irene Szollosi, Dr Eamonn Eeles, Dr Deanne Curtin, Dr Jurgen Fripp, Prof Elizabeth Coulson	Obstructive Sleep Apnoea in Mild Cognitive Impairment: an opportunity to preserve brain health.	\$79,300.00
Innovation Grant	Dr Karin Wildi	STARDUST: The significance of different endotypes in Adult Respiratory Distress Syndrome (ARDS) for effective treatment	\$49,794.20
Innovation Grant	Prof Ian Yang, Dr Peter Collins, Annalicia Vaughan	Dietary fibre and short chain fatty acids as immune regulators in COPD: a potential novel therapy	\$49,575.80
Innovation Grant	Prof Ian Yang, Hannah O'Farrell	Extracellular vesicles as a novel biomarker for chronic obstructive pulmonary disease (COPD) exacerbation detection	\$40,000.00
New Investigator Grant	Sally Barrimore	A quasi-experimental pre- and post- study to evaluate the impact of implementing an enteral tube feeding decision support tool on hip fracture inpatient healthcare outcomes	\$7,001.67
New Investigator Grant	Dr Douglas Bell	Outcomes for mitral valve repair and replacement for rheumatic heart disease in children	\$7,586.40
New Investigator Grant	Alanna Bodger	Permanent Pacemaker Response and The Role of Exercise Modality on Maximum Oxygen Consumption During Cardio-Pulmonary Exercise Testing for Heart Transplant Assessment	\$8,840.00
New Investigator Grant	Leigh Couch	A profile of characteristics and outcomes of alcohol and other drug clients undertaking withdrawal management: A retrospective cohort study to inform best practice service delivery	\$9,813.32
New Investigator Grant	Braden Cupitt	Disruption of Endothelial Junctions and the Glycocalyx as Possible Mechanisms for Altered Vascular Permeability in ECMO Patients	\$9,993.00
New Investigator Grant	Alessandro Ferraioli	Better understanding the energy crisis of the acutely stressed heart	\$8,677.80
New Investigator Grant	Ashlen Garette	Pre-clinical characterisation of leukocyte-specific inflammatory response to extracorporeal membrane oxygenation	\$9,504.37
New Investigator Grant	Dr Daniel Henderson	Sleep quality in acute exacerbations of cystic fibrosis	\$10,000.00
New Investigator Grant	Andrew Hislop	Hip Muscle Structure and Function in People with Knee Osteoarthritis Compared to Healthy Controls	\$10,000.00
New Investigator Grant	Raymond Ho	Numerical evaluation of adult aortic cannulation during cardiopulmonary bypass: a neurological implication	\$9,985.04
New Investigator Grant	India Lye	Cannula-related infection and colonisation during extracorporeal membrane oxygenation	\$9,121.12

Active Grants 2018 continued...

Grant Type	Recipient	Title	Amount Awarded
New Investigator Grant	Dr Felicity McIvor	A pilot study on the association of frailty and adverse outcomes in elective cardiac surgery patients	\$8,635.25
New Investigator Grant	Amanda Petrie	Impact of legislation changes to involuntary orders on emergency department presentations: a retrospective chart audit	\$9,330.91
New Investigator Grant	Jan Robinson	RAPID-OSA Study: Remote ApneaLink Providing Immediate Diagnosis of Obstructive Sleep Apnoea	\$9,349.73
New Investigator Grant	Tristan Shuker	Characterisation of cardiac neurohormonal and inflammatory patterns in a novel 24-hour ovine heart transplant model.	\$9,968.00
New Investigator Grant	Taryn Smith	Facilitating endothelial cell growth and proliferation at the interface between heart wall and VAD inflow cannula	\$9,993.00
New Investigator Grant	Ashleigh Stevenson	Tezosentan, an endothelin-1 antagonist protects against inflammation and protein oxidation in an ovine model of endothelin-1 induced inflammatory cells	\$9,673.10
New Investigator Grant	Fergal Temple	Do microparticles generated following transfusion of stored packed red blood cells modulate recipient neutrophil microbicidal arsenal function?	\$9,997.00
New Investigator Grant	Sheena Tom	AMD Disc infectiOn PReventioN in central venous catheters	\$9,910.62
New Investigator Grant	Ritu Trivedi	Biometric properties of donor tissue allograft pulmonary heart valves: relationship with processing variables	\$9,965.19
New Investigator Grant	Lisa Wright	Investigating the factors affecting implementation of sensory modulation in inpatient mental health units	\$9,983.48
PhD scholarships	Craig Aitken	Towards Individualising Rehabilitation: Identifying factors which limit exercise tolerance in chronic heart and lung disease	\$81,246.00
PhD scholarships	Tharushi de Silva	Alveolar macrophage and regulatory T cell changes in the lung of transplant patients undergoing rejection	\$81,246.00
PhD scholarships	Natalie Edwards	Myocardial work assessment provides incremental information on left ventricular function across multiple pathological states.	\$54,164.00
PhD scholarships	Vainess Mbuzi	PhD research program: Indigenous peoples' experiences of health care	\$27,082.00
Research Fellowships	Dr Simon Apte	Improving the Rate of Lung Transplant Survival by Specifically Regulating the Anti-Graft Immune Response	\$300,000
Research Fellowships	Dr Jo Philipp Pauls	Development of a Right Ventricular Assist Device	\$300,000
Team Grant	Critical Care Research Group	Bench, bedside, and beyond: a translational research programme to improve outcomes for patients suffering critical illness	\$200,000
Team Grant	IHBI Cartilage and Skeletal Biology Research Group	Development of effective prevention and treatments for metabolic osteoarthritis	\$100,000

Grant Type	Recipient	Title	Amount Awarded
Team Grant	Innovative Cardiovascular Engineering and Technology Laboratory (ICETLAB)	Using engineering, biology and medicine to develop the next generation of mechanical circulatory support	\$200,000
Team Grant	Qld Lung Transplant Research Program	Prevention and treatment of idiopathic and post-transplant pulmonary fibrosis	\$200,000
Team Grant	The Adult Cystic Fibrosis Centre Multi-disciplinary Research Team	A multi-modality, multi-disciplinary program of research to improve disease outcomes in cystic fibrosis	\$200,000
Team Grant	The Prince Charles Hospital Community Gut and Liver Research Group	Improving Gastroenterology Outcomes Through Clinical Research.	\$100,000





Active Grants 2018

Chief Investigators	Granting Agency	Project Title	Years of Funding	Total Funding Awarded	Funding received for 2018	Grant Type
Aitken	TPCH Foundation	Towards Individualising Rehabilitation: Identifying factors which limit exercise tolerance in chronic heart and lung disease	2018-2020	\$81,246.00	\$27,082.00	PhD Scholarship
Apte	TPCH Foundation	Improving the Rate of Lung Transplant Survival by Specifically Regulating the Anti-Graft Immune Response	2018-2020	\$300,000.00	\$100,000.00	Fellowship
Barrimore	TPCH Foundation	A quasi-experimental pre- and post- study to evaluate the impact of implementing an enteral tube feeding decision support tool on hip fracture inpatient healthcare outcomes	2018	\$7,001.67	\$7,001.67	New Investigator Grant
Bell	TPCH Foundation	Evaluating the impact of oral pre-operative carbohydrate supplementation in acute hip fracture inpatients: a randomised controlled trial feasibility study	2016-2018	\$24,193.00	\$10 000	Emerging Researcher Grant
Bell	TPCH Foundation	Outcomes for mitral valve repair and replacement for rheumatic heart disease in children	2018	\$7,586.40	\$7,586.40	New Investigator Grant
Bell, Thomson, Rogers, Wainwright, Floto, Clements	NHMRC	The emerging problem of non-tuberculous mycobacteria infection: understanding aetiology, geospatial epidemiology and developing interventions	2016-2020	\$988,791.00	\$197,758.20	Project Grant
Bell, Young, Hill, Banks, Comans, Barnes, Keller	AHPOQ	SIMPLE Phase II: Scale, Scope and Spread	2018-2020	\$101,000.00	\$30,000.00	Project Grant
Bodger	TPCH Foundation	Permanent Pacemaker Response and The Role of Exercise Modality on Maximum Oxygen Consumption During Cardio-Pulmonary Exercise Testing for Heart Transplant Assessment	2018	\$8,840.00	\$8,840.00	New Investigator Grant
Bolle	TPCH Foundation	"Improving the Skin-Driveline Interface to Reduce Ventricular Assist Device Driveline Infections"	2017-2018	\$24,212.00	\$24,212.00	Emerging Researcher Grant
Boone	TPCH Foundation	Development and evaluation of a portable intra-ventricular balloon pump to improve left ventricular function.	2018	\$24,993.24	\$24,993.24	Emerging Researcher Grant
Bowman, Chee	TPCH Foundation	Novel Exosome Diagnostics for Pleural Effusion	2018	\$49,697.00	\$49,697.00	Project Grant
Bowman, Fong	TPCH Foundation	Detection of microbial pathogens using quantitative polymerase chain reaction (qPCR) in patients with acute exacerbations of COPD	2017-2018	\$99,958.40	\$99,958.40	Project Grant
Chambers	IMPACT Philanthropy Application Program	Single-cell RNA-sequencing in idiopathic pulmonary fibrosis; pathogenic and diagnostic insights from the transcriptome	2018-2019	\$30,000.00	\$0.00	Project Grant

Active Grants 2018 continued...

Chief Investigators	Granting Agency	Project Title	Years of Funding	Total Funding Awarded	Funding received for 2018	Grant Type
Chambers	NHMRC	Ambulatory oxygen for interstitial lung disease	2018-2021	\$60,000.00	\$8,265.36	Project Grant
Chambers	The University of Queensland	MBF Cell Therapy	2017-2020	\$150,000.00	\$30,000.00	Project Grant
Chambers	TPCH Foundation	Taking stem cell therapy to the clinic – is reprogramming alveolar macrophages the key?	2016-2020	\$99,832.26	\$87,569.68	Project Grant
Chambers, Hopkins, Lim, Wallace	TPCH Foundation	First-in-man study of amniotic epithelial stem cell therapy for idiopathic pulmonary fibrosis	2016-2020	\$98,980.00	\$0.00	Project Grant
Chambers, Hopkins, O'Sullivan, Sinclair	TPCH Foundation	Prevention and treatment of idiopathic and post-transplant pulmonary fibrosis	2019-2021	\$600,000.00	\$200,000.00	Project Grant
Chambers, Hopkins, Westall, Holmes, Glanville	NHMRC	Conquering the final frontier in lung transplantation – Mesenchymal stromal cell therapy for chronic lung allograft dysfunction	2016-2020	\$1,200,140.00	\$462,830.00	Project Grant
Chambers, Hopkins, Yerkovich, Sladden	NHMRC	Protecting the endothelial glycocalyx to improve transplant rates and outcomes	2016-2019	\$725,179.60	\$305,890.00	Project Grant
Chan, Scalia	TPCH Foundation	Potential of Left Atrial stain obtained during Exercise Stress Echocardiography in the diagnosis of Heart Failure with Preserved Ejection Fraction	2018	\$25,000.00	\$25,000.00	Project Grant
Charania	TPCH Foundation	Living with the effects of MND (Motor Neurone Disease): The impacts of communication disorders on the person with MND and their carers	2017-2018	\$53,368.00	\$53,368.00	PhD Scholarship
Chee	TPCH Foundation	Clinical Diagnostics of Pleural Effusion Exosomal miRNAs	2018	\$24,684.00	\$24,684.00	Emerging Researcher Grant
Coin, Bell	UQ-QIMR Berghofer	Deep sequencing of microbial communities in cystic fibrosis airways	2017-2018	\$50,000.00		Project Grant
Corley	TPCH Foundation	Determining the prevalence of ECMO-related infections and describing novel ways to reduce it	2017-2019	\$20,000.00	\$20,000.00	Program Grant
Corley, Lye, Marsh, Rickard	ACCCN	AMD Disc infectiOn PREventiOn in central venous catheters (ADORN Trial)	2018-2019	\$4,995.94	\$4,995.94	Project Grant
Cornwell, Gustafsson, Kuys, Comans, Thompson	TPCH Foundation	Directing stroke rehabilitation research from a consumer perspective: A citizen's jury approach	2018	\$48,412.72	\$48,412.72	Project Grant
Couch	TPCH Foundation	A profile of characteristics and outcomes of alcohol and other drug clients undertaking withdrawal management: A retrospective cohort study to inform best practice service delivery	2018	\$9,813.32	\$9,813.32	New Investigator Grant
Crawford	TPCH Foundation	Chair in Orthopaedic Research	Ongoing		\$402,400.00	Fellowship

Chief Investigators	Granting Agency	Project Title	Years of Funding	Total Funding Awarded	Funding received for 2018	Grant Type
Crawford	Development Office General Public Donations	Medical and Healthcare Robotics	2018	\$49,764.00	\$49,764.00	Project Grant
Crawford	Osteoarthritis Research Fund	Osteoarthritis Research Fund	2018	\$6,455.00	\$6,455.00	Project Grant
Crawford	Smith & Nephew 2019	Fellowship funding agreement with Smith&Nephew 2019	2018	\$90,000.00	\$90,000.00	Project Grant
Crawford	Stryker South Pacific - Australia	Stryker Fellowship Program Grant	2018	\$75,000.00	\$75,000.00	Project Grant
Crawford	Stryker South Pacific - Australia	Stryker Fellowship Program Grant	2018	\$75,000.00	\$75,000.00	Project Grant
Crawford, Pandey, Roberts	Australia-India Strategic Research Fund	New Class of Intelligent Robotic Imaging System for Keyhole Surgeries			\$327,558.00	Project Grant
Cupitt	TPCH Foundation	Disruption of Endothelial Junctions and the Glycocalyx as Possible Mechanisms for Altered Vascular Permeability in ECMO Patients	2018	\$9,993.00	\$9,993.00	New Investigator Grant
de Silva	TPCH Foundation	Alveolar macrophage and regulatory T cell changes in the lung of transplant patients undergoing rejection	2018-2020	\$81,246.00	\$27,082.00	PhD scholarship
Dent, Anderson	TPCH Foundation	Volatile organic compounds in exhaled breath to diagnose lung cancer	2018	\$48,394.50	\$48,394.50	Project Grant
Dibia	TPCH Foundation	The influence of body mass index (BMI) on serum antibiotic concentration of cefazolin and probenecid in hospital in the home patients with cellulitis: a pilot study	2018	\$2,000.00	\$2,000.00	Project Grant
Donnelly	TPCH Foundation	Lafayette Manual Muscle Tester 01165	2018	\$1,732.00	\$1,732.00	Equipment Grant
d'Udekem, Radford	NHMRC	Giving an adult life after Fontan surgery to those with the most severe congenital heart conditions	2013-2018	\$1,250,181.00	\$250,000.00	Partnership Grant
Edwards	TPCH Foundation	Myocardial work assessment provides incremental information on left ventricular function across multiple pathological states.	2018-2019	\$54,164.00	\$27,082.00	PhD Scholarship
Edwards, Kerr, Finlayson, Lazzarini	QUT IHBI	Medoc TSA-II NeuroSensory Analyzer and VSA accessory	2018-2019	\$50,293.00	\$50,293.00	Equipment Grant
Essilfie, Reid, Lamont	CF Australia	"Novel multiomic insight into evolution of antibiotic resistance in Pseudomonas aeruginosa in cystic fibrosis and relationship to clinical outcomes"	2018-2019	\$80,000.00	\$40,000.00	Project Grant

Active Grants 2018 continued...

Chief Investigators	Granting Agency	Project Title	Years of Funding	Total Funding Awarded	Funding received for 2018	Grant Type
Fanning, Highton, Rapchuk, Finnegan	TPCH Foundation	Individualised intraoperative haemodynamic optimisation informed by the lower limit of cerebral autoregulation to reduce perioperative morbidity and mortality: development of a novel clinical monitoring parameter	2018	\$97,007.00	\$97,007.00	Project Grant
Fanning, Pinto, Rapchuk	TPCH Foundation	Optimising intraoperative coagulation management for precision vascular surgery	2018	\$87,604.00	\$87,604.00	Project Grant
Ferraioli	TPCH Foundation	Better understanding the energy crisis of the acutely stressed heart	2018-2019	\$8,677.80	\$6,796.50	New Investigator Grant
Fong, Bowman, Marshall	NHMRC	Project - Optimising Screening for lung cancer	2016-2021	\$3,032,884.00	\$600,000.00	Project Grant
Frakking	TPCH Foundation	Integrated children's care clinic (ICCC) versus a self-directed care pathway for children with a chronic health condition: a multi-centre randomised controlled trial study protocol	2018	\$2,000.00	\$2,000.00	Project Grant
Fraser	TPCH foundation	A quasi-experimental pre- and post- study to evaluate the impact of implementing an enteral tube feeding decision support tool on hip fracture inpatient healthcare outcomes	2018-2019	\$7,001.00	\$3,500.00	New Investigator Grant
Fraser	NHMRC	ACTIONS	2014-2018	\$2,487,452.00	\$445,697.00	Centre for Research Excellence
Fraser, Macdonald, McGiffin, Chong, Dobson	NHMRC	The Dead Heart Project: when is a heart truly dead?	2018-2020	\$1,672,052.50	\$557,350.83	Project Grant
Fraser, McGiffin, Macdonald, Suen, Corley, Jarrett, Ghassabian, Cullen, See Hoe, McDonald, Tronstad, Palpant, Barnett, Marasco, Flaws	TPCH Foundation	Bench, bedside and beyond: a translational research programme to improve outcomes for patients suffering critical illness	2018-2020	\$600,000.00	\$200,000.00	Project Grant
Fraser, Li Bassi, Amato, McAuley, Suen, Millar, Schmidt, Shekar	NHMRC	New frontiers in Acute Respiratory Distress Syndrome: Development of novel imaging technology to appraise inflammatory biofluids-associated lung injury and ground-breaking treatments	2018-2021	\$1,154,108.00	\$453,320.00	Project Grant
Fulbrook, Miles	TPCH Foundation	Fast screening and assessment in the emergency department: A clinical innovation to prevent falls in older people	2018-2019	\$48,950.00	\$48,950.00	Project Grant
Fulbrook, Williams	Smith & Nephew	Pilot study: Evaluation of a silicone gel adhesive hydrocellular foam dressing for the prevention of sacral pressure injuries in hospitalised elderly patients	2014-2019	\$12,141.00		Project Grant
Garette	TPCH Foundation	Pre-clinical characterisation of leukocyte-specific inflammatory response to extracorporeal membrane oxygenation	2018-2019	\$9,504.37	\$9,504.37	New Investigator Grant

Chief Investigators	Granting Agency	Project Title	Years of Funding	Total Funding Awarded	Funding received for 2018	Grant Type
Garrick	TPCH Foundation	Investigation into the effect of ventricular assist device implantation and support on cardiac tissue	2018	\$24,998.05	\$24,998.05	Emerging Researcher Grant
Garrick	TPCH Foundation	Optimisation and adaptation of a suture-less cannula for rapid implantation of biventricular assist devices	2017-2018	\$9,998.83	\$9,998.83	New Investigator Grant
Garrick	TPCH Foundation	Suture-less cannula design for rapid implantation of rotary blood pumps	2017-2020	\$80,052.00	\$26,684.00	PhD Scholarship
Goh	TPCH Foundation	Lung Microbiome Variation at Sites of Inflammation in Formalin-Fixed, Paraffin-Embedded Lung Tumours	2018	\$55,583.60	\$55,583.60	Project Grant
Goh, Yang	TPCH Foundation	Lung microbiome variation at sites of inflammation in formalin-fixed, paraffin-embedded lung tumours	2018-2019	\$55,583.60	\$55,583.60	Project Grant
Golledge, Daly, Jacob, Krishna, Loukas, Moxon, Mulvey, Smout, Lazzarini, Fernando, Bansal, Day, Doherty, Eisen, Jaeggi, Malabu, Pinchbeck, Sangla, Sinha, Upton, Yip	James Cook University	Ulcer and wound HEALing consortium	2018-2020	\$794,500.00	\$100,000.00	Program Grant
Gregory, Tansley, Platts, Thomson, Chan, Pauls, Munoz, Bartnikowski, Strugnell, Mullany	TPCH Foundation	Using engineering, biology and medicine to develop the next generation of mechanical circulatory support	2018-2020	\$600,000.00	\$200,000.00	Project Grant
Gurunathan	TPCH Foundation	Use of preoperative ROTEM assays to predict postoperative thrombotic complications following total hip and knee arthroplasty in overweight and obese patients (ReTHiNK-O study)	2018-2019	\$57,126.00	\$57,126.00	Project Grant
Henderson	TPCH Foundation	Sleep quality in acute exacerbations of cystic fibrosis	2018	\$10,000.00	\$10,000.00	New Investigator Grant
Herd	Metro North App Challenge	E.A.T; Enzyme absorption tool, an APP for assessing fat intake and the amount of pancreatic enzymes to take.	2018-2019			Project Grant
Hickling	TPCH Foundation	Use of body composition compared to standard nutritional assessments to improve selection of lung transplant candidates and patient outcomes	2018	\$24,940.47	\$24,940.47	Emerging Researcher Grant
Hickling, Hopkins, Trotter, Chambers, Bell, Walsh	CAHLRI	Use of body composition compared to standard nutritional assessments to inform lung transplant decisions and patient outcomes	2018	\$9,054.00	\$9,054.00	PrePhD scholarship
Hickling, Hopkins, Trotter, Chambers, Bell, Walsh	CAHLRI	Use of body composition compared to standard nutritional assessments to inform lung transplant decisions and patient outcomes	2018	\$9,054.00	\$9,054.00	PhD Scholarship
Hislop	TPCH Foundation	Hip Muscle Structure and Function in People with Knee Osteoarthritis Compared to Healthy Controls	2018	\$10,000.00	\$10,000.00	New Investigator Grant

Active Grants 2018 continued...

Chief Investigators	Granting Agency	Project Title	Years of Funding	Total Funding Awarded	Funding received for 2018	Grant Type
Ho	TPCH Foundation	Numerical evaluation of adult aortic cannulation during cardiopulmonary bypass: a neurological implication	2018	\$9,985.04	\$9,985.04	New Investigator Grant
Hollis, Bell, Franz	Metro North	Impact of a pre-operative VLCD weight loss program on unfavourable surgical outcomes in general surgical patients: a feasibility study	2017-2018	\$29,989.00	\$12,000.00	Project Grant
Holloway	TPCH Foundation	Tympanometry in the Emergency Management of Children with Acute Otitis Media	2018	\$2,000.00	\$2,000.00	Project Grant
Infective Endocarditis Qld Collaborative	TPCH Foundation	Infective Endocarditis Qld Collaborative	2018	\$80,000.00	\$80,000.00	Project Grant
Internal Medicine Services including Internal Medicine and Dementia Research Unit	MNHHS	develop an App for the Development on an IT Solution (App) to record and measure subspecialty consultation for inpatients at TPCH	2018-2019	\$54,000.00	\$54,000.00	Project Grant
Kappler, McEwan, Essilfie	NHMRC	Extracellular stress defence mechanisms in non-typeable Haemophilus influenzae	2018-2021	\$622,634.00	\$207,544.67	Project Grant
Keller, Laur, McNicholl, Valaitis, Basualdo-Hammond, Bell, Bernier, Curtis, Douglas, Dubin, Duerksen, Gramlich, Laporte, Ray	Canadian Frailty Network	More-2-Eat Implementation Phase II grant KT2017-01	2018-2019	\$142,000.00	\$70,000.00	Project Grant
Ki	TPCH Foundation	Sechrist CP-G Series Air/Oxygen Blender, Pole Mount, Dual Flowmeter	2018	\$4,417.29	\$4,417.29	Equipment Grant
Kidd, Bell	UQ-QIMR Berghofer	Dynamics and clinical implications of outer membrane remodelling among multidrug resistant (MDR) Klebsiella pneumoniae and Pseudomonas aeruginosa	2018-2019	\$50,000.00	\$50,000.00	Project Grant
Lazzarini	NHMRC	The incidence and predictors of foot disease hospitalisation	2018-2022	\$322,952.00	\$322,952.00	Fellowship
Lazzarini, van Netten, Fernando, Warnock, Wearing, Najafi	TPCH Foundation	Towards an Objective Plantar Stress threshold to heal Diabetic Foot Ulcers: A TOPS threshold to heal DFUs	2018	\$73,540.00	\$73,540.00	Project Grant
Li Bassi	TPCH Foundation	Pulmonary biofluids-associated lung injury in acute respiratory distress syndrome	2018	\$49,890.00	\$49,890.00	Project Grant
Liao	TPCH Foundation	Refinement of bilayered scaffolds for a novel suture-less inflow cannula for left ventricular assist devices	2017-2018	\$24,679.46	\$24,679.46	Emerging researcher grant
Lord, Williams, Fulbrook, Miles	Wounds Australia	A double-blind trial of the application of 0.2% glyceryl trinitrate (GTN) for the healing of chronic venous leg ulcers	2018-2019	\$5,000.00	\$5,000.00	Project Grant

Chief Investigators	Granting Agency	Project Title	Years of Funding	Total Funding Awarded	Funding received for 2018	Grant Type
Lovegrove	TPCH Foundation	Assessment of pressure injury risk and intervention planning for hospitalised patients: a comparison of nurses' clinical judgement with and without the use of a standardised pressure injury risk assessment tool	2017-2019	\$9,796.18	\$9,796.18	New Investigator Grant
Lye	TPCH Foundation	Cannula-related infection and colonisation during extracorporeal membrane oxygenation	2018	\$9,121.12	\$9,121.12	New Investigator Grant
Mapley	TPCH Foundation	A low cost bearingless drive for the OpenHeart rotary ventricular assist device	2017-2018	\$9,875.79	\$9,875.79	New Investigator Grant
Marshall	HIRO	Academic Lung Cancer Physician - research fellowship	2014-2019	\$375,000.00	\$75,000.00	Fellowship
Mbuzi	TPCH Foundation	Indigenous peoples' experiences of health care	2018-2019	\$27,082.00	\$27,082.00	PhD Scholarship
McElrea, Fong, Chang, Blake	TPCH Foundation	Spirometry and fractional exhaled nitric oxide (FeNO) reference values for Indigenous Australians: Phase II - adult Aboriginal and Torres Strait Islanders	2018	\$84,125.67	\$84,125.67	Project Grant
McIvor	TPCH Foundation	A pilot study on the association of frailty and adverse outcomes in elective cardiac surgery patients	2018	\$8,635.25	\$8,635.25	New Investigator Grant
McQualter, Anthony, Chambers, Carraro	NHMRC	Modulation of lung regeneration and remodeling by the innate immune system	2018-2020	\$40,000.00	\$7,500.00	Project Grant
Miles	TPCH Foundation	Fast screening of patients that present to the emergency department following a fall: a feasibility and prevalence study	2016-2019	\$9,762.39	\$9,762.39	New Investigator Grant
Molenaar	University of Queensland	Electrophysiology Equipment	2018	\$105,000.00	\$105,000.00	Equipment Grant
Molenaar, Haqqani, Wong	TPCH Foundation	Cardio-Vascular Molecular and Therapeutics Translational Research Group	2018-2019	\$100,000.00	\$100,000.00	Project Grant
Morris	Health and Research Office of Queensland	Exercise Training in Pulmonary Hypertension (ExTra_PH): A Randomised Controlled Trial of Exercise Training in Pulmonary Hypertension.	2015-2019	\$247,000.00	\$55,000.00	Project Grant
Morris, Kermeen, Strugnell	Actelion Pharmaceuticals	Exercise in pulmonary hypertension.	2015-2018	\$43,750.00	\$14,500.00	PhD stipend top up
Morris, Kermeen, Strugnell	Actelion Pharmaceuticals	Defining Right Ventricular during exercise in pulmonary hypertension.	2015-2018	\$75,500.00	\$25,000.00	PhD stipend top up
Morris, Walsh	TPCH Foundation	Equipment Grant: Purchase of PhysioFlow Equipment for measuring cardiac output	2018	\$28,000.00	\$28,000.00	Equipment Grant
Morris, Walsh, Bellet, Sabaratnam	TPCH Foundation	Small muscle training for big gains: Using high intensity single muscle group training in heart failure	2018	\$48,318.00	\$48,318.00	Project Grant

Active Grants 2018 continued...

Chief Investigators	Granting Agency	Project Title	Years of Funding	Total Funding Awarded	Funding received for 2018	Grant Type
O'Farrell	TPCH Foundation	Inflammatory and DNA damage mechanisms in response to e-cigarette aerosols in COPD/ lung cancer primary human bronchial epithelial cells	2018	\$25,000.00	\$25,000.00	Emerging Researcher Grant
O'Sullivan	TPCH Foundation	Nanoparticles to induce tolerance in human lung transplantation	2018-2020	\$300,000.00	\$50,000.00	Fellowship
Partridge	TPCH Foundation	Managing, and coping with, acts of verbal abuse and physical assault in the Emergency Department: what is the experience of ED nurses?	2018	\$2,000.00	\$2,000.00	Project Grant
Pauls	TPCH Foundation	Mock Circulation Loop (incl. data acquisition system (DAQ))	2018	\$47,007.00	\$47,007.00	Equipment Grant
Pauls	TPCH Foundation	Development of a Right Ventricular Assist Device	2018	\$300,000.00	\$300,000.00	Fellowship
Petrie	TPCH Foundation	Impact of legislation changes to involuntary orders on emergency department presentations: a retrospective chart audit	2018	\$9,330.91	\$9,330.91	New Investigator Grant
Ploderer, Lazzarini, van Netten, Brown, Clark, Warnock	TPCH Foundation	MyFootCare: A Mobile App to Engage Patients with Diabetic Foot Ulcers in Self-Care	2018-2019	\$55,756.00	\$20,000.00	Project Grant
Prasadarn, Bell, Crawford, Xiao	TPCH Foundation	Development of effective prevention and treatments for metabolic osteoarthritis	2017-2020	\$300,000.00	\$100,000.00	Project Grant
Probyn	TPCH Foundation	Implementation and evaluation of new method of obtaining a urine specimen in non toilet-trained children in the emergency department.	2015-2019	\$3,189.53	\$3,189.53	New Investigator Grant
Rahman	GESA	Non Alcoholic Liver Disease	2017-2019	\$35,000.00	\$35,000.00	Project Grant
Rahman	GISAG-CED	CURE-IT	2017-2019	\$150,000.00	\$150,000.00	Project Grant
Rahman	QIs Health	Futures Fund	2017-2019	\$250,000.00	\$250,000.00	Project Grant
Raymond Ho, Jo Pauls	TPCH Foundation	Numerical Investigation of Aortic Cannula During Cardiopulmonary Bypass: A Neurological Implication	2018-2019	\$9,985.04	\$9,985.04	New Investigator Grant
Reid	TPCH Foundation	Profiling cell-free DNA release after acute heart injury and throughout chronic heart failure	2018	\$24,997.00	\$24,997.00	Emerging Researcher Grant
Reid	QIMR-Berghofer Institute of Medical Research	Near-miss NHMRC application funding	2018-2019	\$70,000.00	\$35,000.00	Project Grant
Reid, Anderson, Lamont, Bell, Frazer, Wainwright	NHMRC	Abnormal lung iron homeostasis in Cystic Fibrosis	2014-2018	\$629,661.00	\$125,932.20	Project Grant
Reid, Bell, Smith	TPCH Foundation	A Multi-modality, multi-disciplinary program of research to improve disease outcomes in cystic fibrosis	2018-2020	\$600,000.00	\$200,000.00	Project Grant

Chief Investigators	Granting Agency	Project Title	Years of Funding	Total Funding Awarded	Funding received for 2018	Grant Type
Robinson	TPCH Foundation	RAPID–OSA Study: Remote ApneaLink Providing Immediate Diagnosis of Obstructive Sleep Apnoea	2018	\$9,349.73	\$9,349.73	New Investigator Grant
Sabaratnam, Morris, Sabapathy	GCUH Foundation	Does the addition of high intensity single muscle group training improve exercise training efficiency in heart failure?	2018-2019	\$20,000.00	\$10,000.00	Project Grant
Scalia	TPCH Foundation	CATHARSIS Study - Comparative echocardiography catheterization	2017-2019	\$83,000.00	\$83,000.00	Project Grant
See Hoe	TPCH Foundation	The Dead Heart Project: When is a 'dead heart' truly dead?	2017-2020	\$300,000.00	\$100,000.00	Fellowship
Semenzin	TPCH Foundation	Design and Validation of a Predictive Computational Fluid Dynamics Model of the OpenHeart Ventricular Assist Device	2017-2018	\$9,999.62	\$9,999.62	New Investigator Grant
Shaw, Heffernan, Lyons, Fong	TPCH Foundation	Support Vector Machine Based Techniques for Automation of Methylation High Resolution Melt Analysis for Use in Early Detection of Lung Cancer	2018-2019	\$39,587.65	\$39,587.65	Project Grant
Shekar, Venkatesh, Ziegenfuss, Dhanani, Walsham, Parmar	TPCH Foundation	High flow Oxygen and Nitric Oxide inhalation to prevent intubation in hypoxic Respiratory failure (HONOR study)	2018	\$58,390.27	\$58,390.27	Project Grant
Shuker	TPCH Foundation	Characterisation of cardiac neurohormonal and inflammatory patterns in a novel 24-hour ovine heart transplant model.	2018	\$9,968.00	\$9,968.00	New Investigator Grant
Sly, Bell, Wainwright, Fantino, Tarique, Bosco, Ware, Holt	CF Foundation (USA) Therapeutics Inc	Macrophages: the forgotten cells in CF lung disease	2016-2019	\$350,000.00	\$87,500.00	Project Grant
Sly, Wainwright, Bell, Reid, Smith, Fantino, Tarique, Tawiah-Essilife, Kettle, Dickerhof, Dowling, Paproki, Rosenow, Butler, Ware	CFF Foundation (USA) Therapeutics	Early life origins of CF lung disease	2018-2020	\$1,648,854.00	\$549,618.00	Project Grant
Smith	TPCH Foundation	Facilitating endothelial cell growth and proliferation at the interface between heart wall and VAD inflow cannula	2018	\$9,993.00	\$9,993.00	New Investigator Grant
Smith	MNHHS CAHRLI	Determining patient and service needs for participatory co-design of a mobile technology enabled mental health Model of Care in the acute cardiac surgical setting.	2018	\$9,033.00	\$9,033.00	PhD Sscholarship
Smith, Edirippulige	Vertex Pharmaceuticals, Circle Of Care Grant	MOBILE Device Utilisation Lifting Adherence and Treatment Engagement in Cystic Fibrosis (MODULATE–CF)	2017-2019	\$80,000.00	\$40,000.00	Project Grant
Stephens	TPCH Foundation	LulzBot TAZ 6 Three-Dimensional Printer with Enclosure and Dual Extruder Attachment.	2018	\$4,175.48	\$4,175.48	Equipment Grant

Active Grants 2018 continued...

Chief Investigators	Granting Agency	Project Title	Years of Funding	Total Funding Awarded	Funding received for 2018	Grant Type
Stephens	TPCH Foundation	Development of a Novel Fibre Optic Pressure Transducer	2015-2018	\$9,951.00	\$3,317.00	New Investigator Grant
Stephens	Griffith University	Griffith University Conference Travel Grant	2018	\$1,000.00	\$1,000.00	Travel Scholarship
Stevenson	TPCH Foundation	Tezosentan, an endothelin-1 antagonist protects against inflammation and protein oxidation in an ovine model of endothelin-1 induced inflammatory cells	2018	\$9,673.10	\$9,673.10	New Investigator Grant
Suen	TPCH Foundation	Physiology Monitoring Module	2018	\$12,400.00	\$12,400.00	Equipment Grant
Szollasi, Eeles, Curtin, Fripp, Coulson	TPCH Foundation	Obstructive Sleep Apnoea in Mild Cognitive Impairment: an opportunity to preserve brain health.	2018	\$79,300.00	\$79,300.00	Project Grant
Tansley	TPCH Foundation	Upgrade to PIV system	2018	\$14,072.00	\$14,072.00	Equipment Grant
Temple	TPCH Foundation	Do microparticles generated following transfusion of stored packed red blood cells modulate recipient neutrophil microbicidal arsenal function?	2018	\$9,997.00	\$9,997.00	New Investigator Grant
The Prince Charles Hospital Community Gut and Liver Research Group	TPCH Foundation	Improving Gastroenterology Outcomes Through Clinical Research.	2017-2020	\$300,000.00	\$100,000.00	Project Grant
Thomas	GESA	Fatty Liver	2018-2019	\$25,000.00	\$25,000.00	Project Grant
Tom	TPCH Foundation	AMD Disc infectiOn PReventiOn in central venous catheters	2018	\$9,910.62	\$9,910.62	New Investigator Grant
Trivedi	TPCH Foundation	Biometric properties of donor tissue allograft pulmonary heart valves: relationship with processing variables	2018	\$9,965.19	\$9,965.19	New Investigator Grant
Tronstad	TPCH Foundation	XSensor Pro Software Upgrade	2018	\$4,800.00	\$4,800.00	Equipment Grant
Upham, Simpson, Baines, Cao, Yang, Gibson, Rogers	NHMRC	Understanding how azithromycin prevents exacerbations in severe asthma	2018-2020	\$697,273.20	\$0.00	Project Grant
Upham, Simpson, Grainge, Gibson, Yang, Boscoe, Radford	NHMRC	Anti-viral immune dysfunction in severe asthma varies across inflammatory phenotypes	2017-2019	\$997,153.40	\$0.00	Project Grant
van Netten, van Baal, Bus, van Gemert, Lazzarini, Najafi	Academic Medical Centre, Amsterdam, The Netherlands	Improving patients' understanding of offloading: an exploration towards better communication and diabetic foot ulcer healing prediction using objective biomechanical and log-data measurements	2018-2019	\$80,088.00	\$0.00	Project Grant
Vaughan	TPCH Foundation	High-fibre diet and short chain fatty acids as immune regulators in COPD: a potential novel therapy	2017-2020	\$300,000.00	\$100,000.00	Fellowship

Chief Investigators	Granting Agency	Project Title	Years of Funding	Total Funding Awarded	Funding received for 2018	Grant Type
Wainwright, Bell, Wason, Thomson, Roberts, Coin, Byrnes, Tiddens, Grimwood, Ahern	MRFF	A platform clinical trial approach to the management of Mycobacterium abscessus complex (MABSC)	2018-2022	\$2,000,000.00	\$400,000.00	Project Grant
Wells, Smith	NHMRC	Paradoxical antibody: the role of antibody in exacerbating Pseudomonas lung infection	2018-2021	\$662,389.00	\$220,796.33	Project Grant
Weng Wong	TPCH Foundation	IEM Mobil-O-Graph® BP & Pulse Wave Analysis Monitor and Apple iPod for patient reported activity and symptoms.	2018	\$6,950.00	\$6,950.00	Equipment Grant
Whiley, Coulter, Clark, Pandey, Wainwright, Jennison, Nimmo, Bell	QCH Foundation	Enhancing detection and management of Mycobacterium abscessus complex (MABSC) infection in children with cystic fibrosis	2017-2019	\$296,244.00	\$98,748.00	Project Grant
Wildi	TPCH Foundation	STARDUST: The significance of different endotypes in Adult Respiratory Distress Syndrome (ARDS) for effective treatment	2018-2020	\$49,794.20	\$1,940.80	Project Grant
Wright	TPCH Foundation	Investigating the factors affecting implementation of sensory modulation in inpatient mental health units	2018	\$9,983.48	\$9,983.48	New Investigator Grant
Wu	TPCH Foundation	Talking heart to bionic heart: Towards an intelligent rotary blood pump to improve left ventricular function	2017-2018	\$24,973.76	\$24,973.76	Emerging Researcher Grant
Wu	Advance QLD	Smart' Heart Assist Device	2016-2019	\$45,000.00	\$15,000.00	PhD stipend top up
Yang, O'Farrell	TPCH Foundation	Extracellular vesicles as a novel biomarker for chronic obstructive pulmonary disease (COPD) exacerbation detection	2018	\$40,000.00	\$40,000.00	Project Grant
Yang, Collins, Vaughan	TPCH Foundation	Dietary fibre and short chain fatty acids as immune regulators in COPD: a potential novel therapy	2018	\$49,575.80	\$49,575.80	Project Grant
Yang, Reid, Simpson	NHMRC	Testing the lung microbiome to predict risk of frequent exacerbations in COPD	2017-2020	\$666,052.00	\$166,513.00	Project Grant
Yang, Reid, Simpson, Krause	NHMRC	Testing the lung microbiome to predict risk of frequent exacerbations in COPD	2017-2019	\$666,052.40	\$222,000.00	Project Grant
Young, Banks, Comans, Hill, Barnes, Keller, Bell	AusHSI	The SIMPLE Approach: realigning resources to reduce low value services to improve nutritional care of acute hospital patients	2016-2018	\$34,000.00	\$9,000.00	Project Grant
Young, Bell, Mahero, McDermid, Leeson-Smith	AHPOQ	Implementation and evaluation of a Multi-site Acute Stroke Nutrition Care Pathway	2018 - 2019	\$26,059.00	\$10,000.00	New Investigator Grant
Young, Traini, Bell	NHMRC	Targeting Cystic Fibrosis Using a Novel Inhalation Therapy	2016-2019	\$421,545.00	\$105,386.25	Project Grant



Higher Degree Students Supervised During 2018

Full Name	Postgraduate Course	Research Project Title	University affiliation	Supervisors
Anas Ababneh	PhD	The effect of an educational program and self-monitoring on improving adherence for Removable Cast Walkers (RCWs) and wound healing in patients with Diabetic Foot Ulcers (DFUs)	Queensland University of Technology	Edwards H, Finlayson K, Lazzarini PA
D.S. Abdullah Al-Maruf	PhD	Role of angiogenic factors in osteoarthritis	Queensland University of Technology	Travis Klein, Ross Crawford
Julie Adsett	PhD	Aquatic exercise for patients with stable heart failure	Griffith University	Norman Morris, Alison Mudge, Suzanne Kuys, Jenny Paratz
Annalicia Alverado	MRes	Biofilm in diabetic foot ulcers study	Queensland University of Technology	Huygens F, Lazzarini PA, Malone M
Amanda Baker	MPhil	Patient centered principals in goal setting practices in rehabilitation.	Griffith University	Petrea Cornwell, Norman Morris
Bryce Balmain	PhD	Thermoregulatory responses to exercise in the heat in heart failure	Griffith University	N.R. Morris, S. Sabapathy
Bardril	PhD	Building sentences: The effects of mapping therapy on sentence production and comprehension in nonfluent aphasia and fluent aphasia	Griffith University	Libby Cardell, Petrea Cornwell
Madison Beare	Hons	Optimisation of mechanical device	Queensland University of Technology	Alice Boone
Judith Bellapart-Rubio	PhD	Assessment of Cerebral Microcirculation after Severe Head Injury in Experimental Ovine Models and the Effects of Normovolemic Anemia	The University of Queensland	John Fraser
Eleonore Bolle	PhD	An infection-resistant driveline for ventricular assist devices	Queensland University of Technology	Tim Dargaville, Shaun Gregory
Alice Boone	PhD	Development and evaluation of a balloon-pump to assist patients with left ventricular heart failure	Griffith University	Geoff Tansley, Shaun Gregory
Jemima Boyd	MRes	Haemodynamic tolerance of cardiac surgical patients with inotropic dependence in upright positioning	Griffith University	James Walsh, Jenny Paratz
Kate Burton	MPhil	Physical activity levels and inflammatory amongst adults with cystic fibrosis.	Griffith University	Norman Morris, Suzanne Kuys, Daniel Smith
Rob Chamberlain	MPhil	Myocardial work assessment provides incremental information on left ventricular function across multiple pathological states	Griffith University	Greg Scalia
Kelly Chee	PhD	Next generation sequencing analysis of thoracic malignancies - optimisation of bioinformatics for somatic variant identification and validation strategies towards personalised therapy	The University of Queensland	Rayleen Bowman, Kwun Fong, Ian Yang

Higher Degree Students supervised during 2018 continued...

Full Name	Postgraduate Course	Research Project Title	University affiliation	Supervisors
Cochrane	PhD	Speech pathology services for Aboriginal and Torres Strait Islander adults with acquired neurogenic communication disorders: Perspectives from key stakeholders.	Griffith University	Samantha Siyambalapitiya, Petrea Cornwell
Jim Crowhurst	PhD	Cardiac Angiography	The University of Queensland	Chris Raffel
Marissa Daniels	PhD	Molecular diagnosis and characterisation of lung cancer	The University of Queensland	Kwun Fong, Rayleen Bowman, Ian Yang
Ainslie Davies	PhD	Risk factors for diabetic peripheral neuropathy study	Queensland University of Technology	Bennett P, Pritchard N, Lazzarini PA, Edwards H
Tharushi De Silva	PhD	Dynamics of regulatory T lymphocytes in lung transplant patients	Queensland University of Technology	Brendan O'Sullivan, Daniel Chambers, Simon Apte, Voisey J, Kirsten Spann
Natalie Edwards	PhD	Application of left atrial strain assessment by 2D echocardiography in cardiac conditions involving the left atrium	Griffith University	Greg Scalia
Saba Farnaghi	PhD	Role of lipids in Osteoarthritis	Queensland University of Technology	Indira Prasadam, Yin Xiao, Ross Crawford
Dilan Fernando	Hons	Test-rig design for RVAD prototypes	Queensland University of Technology	Jo Pauls
Alessandro Ferrioli	Hons	Better understanding the energy crisis of the acutely stressed donor heart	The University of Queensland	Jacky Suen
Francia	Hons	Relationship between exercise capacity and quadriceps strength in pre heart transplant	The University of Queensland	James Walsh, Norman Morris
Donna Franklin	PhD	High flow nasal cannula respiratory support in infants	The University of Queensland	John Fraser
Lisa Franks	PhD	Comparing the physical characteristics of positive expiratory pressure devices	Griffith University	James Walsh, Kathleen Hall, Norman Morris
Kristy Garrick	PhD	Optimisation and Adaptation of a Suture-Less Cannula for Rapid Implantation of BiVADs	Griffith University	Geoff Tansley, Shaun Gregory, Nicole Bartnikowski
Kurt Glover	Hons	An automated micropositioning system	The University of Queensland	Fredy Munoz
Adam Gluchowski	Hons	Hydraulic Design of an RVAD	The University of Queensland	Jo Pauls
Hamish Harvey	Hons	Evaluating the efficacy and reliability of an in-device plantar pressure measurement protocol in people with diabetes-related foot ulcers attending a high-risk foot clinic	Queensland University of Technology	Fernando M, Wearing S, Lazzarini PA
Katharine Heathcoate	PhD	Surviving traumatic physical injury: quantifying the socio-ecological factors related to health, and well-being and recovery	Griffith University	J. Sung, N.R. Morris
Ronelle Hewetson	PhD	Social participation after right hemisphere stroke: Exploring facilitators and barriers to communication-based participation	Griffith University	Petrea Cornwell

Full Name	Postgraduate Course	Research Project Title	University affiliation	Supervisors
Raymond Ho	PhD	Numerical evaluation of cardiopulmonary bypass adult aorta cannulation: A neurological implication	Queensland University of Technology	Zhiyong Li, Shaun Gregory
Hodson	PhD	Investigating the transition to home experience for people with mild stroke: A comparison of standard care vs. MiStrEnGTH (Mild Stroke: Enhancing and Guiding Transition Home)	The University of Queensland	Louise Gustafsson, Petrea Cornwell
Hogan	PhD	Determining the Nature and Extent of Prospective Memory Impairment After Stroke	Griffith University	Petrea Cornwell
Greta Hollis	MPhil	Investigating the feasibility of implementing a preoperative VLCD program into the general surgery model of care	The University of Queensland	J. Bauer, J.Bell
Howells	PhD	Exploring the experiences of adults with dysphagia living at home and their caregivers	Griffith University	Petrea Cornwell
Huang	PhD	Inter-professional practice between speech pathologists and interpreters: A mixed methods evaluation of current practice needs	Griffith University	Samantha Siyambalapitiya, Petrea Cornwell
Rong Huang	PhD	The role of MSCs in immunoregulation of macrophages during osteogenesis	Queensland University of Technology	Yin Xiao, Ross Crawford
Samuel Huth	MPhil	Cardiac MRI for assessing heart function and transplant viability in the brain-dead donor introduction	The University of Queensland	John Fraser
Lenore Irvine	BSc Hons	Exhaled Breath Methods for Analysis of Volatile Organic Compounds in Lung Cancer and COPD	The University of Queensland	Annette Dent, Ian Yang, Kwun Fong, Rayleen Bowman
Saveen Jawhar Oghana	MHealthAdmin	A descriptive, exploratory study of mucosal pressure injury incidence, prevalence and characteristics using a retrospective quality audit	Australian Catholic University	Paul Fulbrook, Sandra Miles
Tracey Kaczmarek	MRes	Effects of Training Podiatrists in Motivational Interviewing	Queensland University of Technology	Lazzarini PA, Kavanagh D, van Netten J, Warnock J
Kelly	PhD	Management of Cognitive-Communication Disorders Following Traumatic Brain Injury: Exploring Clinical Frameworks for Speech Pathologists' Working in Community Settings	Griffith University	Petrea Cornwell
Daniel Kilburn	MPhil	An investigation into kidney injury induced by extracorporeal membrane oxygenation	The University of Queensland	John Fraser
Vivian Koh	PhD	Model Predictive Control of a BiVAD	University of Malaya & University of New South Wales	Jo Pauls, Michael Stevens, Einly Lim
Sharon Kwiaktowski	PhD	Investigation of home-based exercise for severe COPD	Griffith University	N.R. Morris, S. Kuys, L Laakso
Vasu Lakkoju	Hons	Development of a new cardiovascular simulator	Queensland University of Technology	Shaun Gregory
Petra Lawrence	PhD	Pilot study to determine the feasibility of early interventions for emergency department attendees who present with moderate and high levels of psychological distress	Australian Catholic University	Paul Fulbrook, Paula Schulz, Shawn Somerset
Celine Leung	Hons	Improving haemodynamic estimators	The University of Queensland	Eric Wu

Higher Degree Students supervised during 2018 continued...

Full Name	Postgraduate Course	Research Project Title	University affiliation	Supervisors
Sam Liao	PhD	The interaction between left ventricular assist devices and intraventricular flow: an in silico evaluation	Queensland University of Technology	Mia Woodruff, Shaun Gregory
Dylan Lightbody	Hons	Development of a Vascular Access Phantom	The University of Queensland	Jo Pauls
Aaron Lin	PhD	Evaluation of Right Ventricular Contractile Reserve and the Impact of Exercise Training in Pulmonary Arterial Hypertension using Novel Ultra-fast Cardiac Magnetic Resonance Imaging Acquisition	Griffith University	Norman Morris, Wendy Strugnell, Christian Hamilton-Craig
Jian Lin	PhD	Hepatic Encephalopathy	The University of Queensland	Tony Rahman
Samantha Livingstone	MPhil		The University of Queensland	John Fraser
Amanda Love	PhD	Developing a valid and reliable screening tool 'app' to identify cognitive-communication disorders following a right hemisphere stroke	Griffith University	A/Prof Petrea Cornwell
Josephine Lovegrove	BN (Hons)	Nurses' prescription of pressure injury preventative interventions relative to assessed risk level: A systematic review and exploratory, descriptive study	Australian Catholic University	Paul Fulbrook, Sandra Miles
India Lye	MNursing (CriticalCare)	Vascular access device-associated infections in intensive care units across Australia	Griffith University	Nicole Marsh, Claire Rickard, Amanda Corley
Juliette Mahero	MPhil	Are stroke inpatients engaged in their nutrition care	The University of Queensland	Jack Bell, J.Bauer
Muhammed Mahfuzur Rahman	PhD	Insights into the cellular and molecular processes that predispose to COPD onset, progression and exacerbations	The University of Queensland	Simon Phipps, David Reid
Patricia Mair	MClinEd	Appraising undergraduate nursing clinical placement evaluation tools for use in a collaborative university/hospital clinical setting: A systematic review	Australian Catholic University	Sandra Miles
Martin Mapley	PhD	A low cost magnetic drive system for rotary blood pumps	Griffith University	Junwei Lu, Andrew Busch
Kylie Marr	BSc Hons	Investigating the role of lipid peroxidation and oxidative stress in cystic fibrosis.	The University of Queensland	David Reid, Ama-Tawiah Essilfie
Vainess Mbuzi	PhD	Indigenous peoples' experiences of hospitalisation	Australian Catholic University	Paul Fulbrook, Sandra Miles, Melanie Jessup
Bridie McCann	MHealthAd-min	Fast screening of patients that present to the emergency department following a fall: A feasibility and prevalence study (phase 1 of a 3-phase study)	Australian Catholic University	Paul Fulbrook, Sandra Miles
Anthony McNamee	PhD	Modelling haemolysis: haemorheological studies into erythrocyte damage and device haemopatibility.	Griffith University	Michael Simmonds, Geoff Tansley
Sandra Miles	PhD	Sensory and motor interventions for very early school-age children: A cluster pragmatic randomised controlled trial examining effect on development, behaviour and academic learning outcomes	Australian Catholic University	Paul Fulbrook, George Mhatzaganian, Debra Mainwaring
Jonathan Millar	PhD	The role of mesenchymal stromal cells in the treatment of acute respiratory distress syndrome managed with extracorporeal membrane oxygenation	The University of Queensland	John Fraser

Full Name	Postgraduate Course	Research Project Title	University affiliation	Supervisors
Weilan Mo	PhD	Human heart b-adrenoceptors, arrhythmias and control by phosphodiesterases	Queensland University of Technology	Peter Molenaar
Michael Neep	PhD	The delivery of image interpretation education for radiographers	Queensland University of Technology	McPhail S, Lazzarini PA
Monica Ng	PhD	Blood product storage duration: a translational approach	The University of Queensland	John Fraser
Ban Nuri Bapir	MHealthAdmin	A systematic review of the prevalence, incidence and characteristics of mucosal pressure injuries in hospitalised adults	Australian Catholic University	Paul Fulbrook, Sandra Miles
Lauren O'Connor	MPhil	Use of Passy-Muir Valves as an adjunct to physiotherapy in ICU.	Griffith University	Norman Morris, Jenny Paratz
Hannah O'Farrell	PhD	COPD and lung cancer pathogenesis	The University of Queensland	Ian Yang, Kwun Fong, Rayleen Bowman
Katrina O'Keefe	Mphil	Evaluation of Radiographer Decision-making in Rejecting Plain X-Ray Images	Queensland University of Technology	Pamela Rowntree, Deborah Starkey
Jeffery Overington	MPhil	Electronic snapshot for COPD	The University of Queensland	Ian Yang, Kwun Fong, Rayleen Bowman
Barbara Page	PhD	Telehealth in the paradigm of lung cancer multidisciplinary care	The University of Queensland	Kwun Fong, Rayleen Bowman, Ian Yang
Brielle Parris	PhD	Lung cancer genomics	The University of Queensland	Kwun Fong, Rayleen Bowman, Ian Yang
Maureen Peasey	MPhil	Pulmonary Rehabilitation and Physical Activity in COPD	Griffith University	Norman Morris, James Walsh.
Alison Peeler	PhD	Provision of a new paediatric service: An investigation of staff and emergency department attendees perceptions and experience of the transition from an adult emergency department	Australian Catholic University	Paul Fulbrook, Sandra Miles, Karen-Leigh Edward, Frances Kinnear
David Platt	PhD	Expansion of the application of perflutren microsphere contrast echocardiography: novel clinical indications and the interaction with mechanical cardiac circulatory support devices	The University of Queensland	John Fraser
davoud Pourmazi	PhD	Barriers to treatment in Hepatitis C	Queensland University of Technology	Tony Rahman
Marsus Pumar	MPhil	"Cognitive behavioural therapy (CBT) for patients with chronic lung disease and psychological comorbidities undergoing pulmonary rehabilitation"	The University of Queensland	Ian Yang, Kwun Fong, Rayleen Bowman
Champa Ratnatunga	PhD	Deconstructing the immunopathogenesis of lung infections	Griffith University	John Miles, Scott Bell, David Reid, Rachel Thomson, Denise Doolan
Karen Rausch	MPhil		Griffith University	Greg Scalia
Joshua Rolls	Hons	Development of an improved RVAD banding device	The University of Queensland	Chris Chan

Higher Degree Students supervised during 2018 continued...

Full Name	Postgraduate Course	Research Project Title	University affiliation	Supervisors
Antonia Rujia Sun	PhD	Is synovial inflammation a link between obesity and osteoarthritis?	Queensland University of Technology	Indira Prasadam, Yin Xiao, Ross Crawford
Alita Rushton	MPhil	Full scope nutrition assistants	The University of Queensland	Jack Bell, J. Bauer
Jan Schlapbach	PhD	Sever infections in critically ill children	The University of Queensland	John Fraser
Sebastien Schott	Hons	PIV of an Intra-Ventricular Balloon Pump	The University of Queensland	Jo Pauls, Alice Boone
Laura Schrijver	Hons	Validation of in-shoe gait measurements during different daily activities in people with diabetes and peripheral neuropathy	Queensland University of Technology	Gerrits H, van Netten J, Lazzarini PA, Fernando M
Claudia Schrijver	Hons	Validation of in-shoe plantar pressure measurements during different daily activities in people with diabetes and peripheral neuropathy	Queensland University of Technology	Gerrits H, van Netten J, Lazzarini PA, Fernando M
Schwarz	PhD	Towards an evidence base for Allied Health Assistants working in adult hospital environments	The University of Queensland	Liz Ward, Petrea Cornwell
Sunderajhan Sekar	PhD	Effects of dietary saturated fatty acids on the onset and progression of osteoarthritis in rat knee joints	Queensland University of Technology	Indira Prasadam, Yin Xiao, Ross Crawford
Clayton Semezin	PhD	Determination of Centrifugal Blood Pump Characteristics using CFD and Experimental Analysis	Griffith University	Geoff Tansley, Ben Simpson
Shafullah Shajib	PhD	Insights into the mechanisms by which RSV-induced PGD2 predisposes to bronchiolitis and asthma.	Queensland University of Technology	Simon Phipps, David Reid, Kristen Spann
Jin Shao	PhD	Notch signalling pathway regulates the terminal differentiation of osteoblasts	Queensland University of Technology	Indira Prasadam, Yin Xiao, Ross Crawford
Eloise Shaw	PhD	Tissue microarrays and methylation in lung cancer	The University of Queensland	Kwun Fong, Rayleen Bowman, Ian Yang, Sunil Lakhani
Janet Shaw	PhD	Lung microbiome in COPD	The University of Queensland	Ian Yang, Kwun Fong, Rayleen Bowman
Tristan Shuker	Hons	Characterisation of cardiac neurohormonal and inflammatory patterns in a novel 24-hour ovine heart transplant model	The University of Queensland	Louise See Hoe
Beatrice Sim	MPhil	Risk of Nosocomial infections with age of blood: A retrospective study	The University of Queensland	John Fraser
Adrian Singh	MRes	Social determinants of diabetic foot disease study	Queensland University of Technology	Turrell G, Lazzarini PA, Reed L
Timothy Sladden	PhD	The role of endothelial glycocalyx breakdown in human lung transplantation and the establishment of a porcine model to study mechanisms and evaluate therapeutic interventions	The University of Queensland	Daniel Chambers , Stephanie Yerkovich
Emily Sneath	MPhil	COPD emergency department presentations	The University of Queensland	Ian Yang, Vivienne Tippet, Wayne Hazell, Phil Masel, Kwun Fong, Rayleen Bowman

Full Name	Postgraduate Course	Research Project Title	University affiliation	Supervisors
Andrew Stephens	PhD	A Starling-like physiological control system for ventricular assist devices	Griffith University	Andrew Busch, Geoff Tansley, Shaun Gregory
Dante Stephens	Hons	Construction of a low-cost field-oriented control system for ventricular assist devices	Queensland University of Technology	Martin Mapley, Andrew Stephens, Jo Pauls
Rebecca Stockwell	PhD	Impact of built environment, personal protective devices and ventilation on dispersion of respiratory pathogens	The University of Queensland	Scott Bell, Lidia Morawska, Luke Knibbs, Laura Sherrard
Samuel Tait	BSc Hons	Linking airway gene expression with the lung microbiome in chronic obstructive pulmonary disease	The University of Queensland	Ian Yang, Kwun Fong, Rayleen Bowman
George Tay	MPhil	Risk and mitigation of cough aerosols for people with cystic fibrosis	The University of Queensland	Scott Bell, Rachel Thomson, David Reid
Bryce Thompson	Hons	Development of a Suction Simulator	The University of Queensland	Jo Pauls
Heidi Ting	Hons	CAD design of 3D positioning system	Queensland University of Technology	
Ritu Trivedi	BBiomed Sci Honours	Biometric properties of donor tissue allograft pulmonary heart valves: relationship with processing variables	The University of Queensland	Peter Pohlner, Wally Thomas
Oystein Tronstad	PhD	ICU of the Future	The University of Queensland	John Fraser
Matthew Tunbridge	PhD	A retrospective analysis of packed red blood cell transfusions in Queensland 2007–2013	The University of Queensland	John Fraser
Annalicia Vaughan	PhD	The response of human bronchial epithelial cells to outdoor air pollution: Interventions to protect the diseased lung against diesel emission exposure	The University of Queensland	Ian Yang, Kwun Fong, Rayleen Bowman
Oscar Vossage	Hons	Mathematical Model of Oxygenated Blood Transfusion	The University of Queensland	Eric Wu
Matt Wells	PhD	Peri-transplant Cardiovascular Dynamics in Ovine Models of Donor Brain Stem Death	Griffith University	John Fraser, Jason Peart, Louise See Hoe, Peter Molenaar
James Winearls	PhD	Fibrinogen Replacement in Traumatic Haemorrhage	The University of Queensland	John Fraser
Michelle Wood	MPhil	Infectious airborne transport in individuals with cystic fibrosis and mitigation strategies	The University of Queensland	Scott Bell, Luke Knibbs
Eric Wu	PhD	Physiological control of rotary blood pumps to encourage myocardial recovery	The University of Queensland	Shaun Gregory, John Fraser, Geoff Tansley
Mengyao Yang	Hons		The University of Queensland	Johnny Millar
Olivia Zeckovic	Hons	Characterisation of inflammatory factors within cardiac tissue in a novel heart transplant ovine model	The University of Queensland	Louise See Hoe
Yuqi Zhan	PhD	Burden of diabetic foot disease and cost-effectiveness of optimal care	Queensland University of Technology	Lazzarini PA, McPhail S, Pacella R



TPCH Publications

Adsett, J. A., Morris, N. R., Kuys, S. S., Paratz, J. D. and Mudge, A. M. (2018). Motivators and barriers for participation in aquatic and land-based exercise training programs for people with stable heart failure: A mixed methods approach. *Heart Lung*. 10.1016/j.hrtlng.2018.11.004

Ahern, S., Sims, G., Earnest, A. and S, C. B. (2018). Optimism, opportunities, outcomes: the Australian Cystic Fibrosis Data Registry. *Intern Med J* 48(6): 721-723.

Ali, T. S., Prasad, I., Xiao, Y. and Momot, K. I. (2018). Progression of Post-Traumatic Osteoarthritis in rat meniscectomy models: Comprehensive monitoring using MRI. *Sci Rep* 8(1): 6861.

Anderson, J., Curtin, D., Higgins, N., Mead, L., Robinson, G. and Burke, A. (2018). Screening for obstructive sleep apnoea in inpatients with schizophrenia: A feasibility study. *Aust N Z J Psychiatry* 52(9): 898-899.

Anderson, J., Tay, G., Denby, G., Robinson, J., Douglas, J., Robinson, P. and Curtin, D. (2018). Improving service delivery for neuromuscular diseases: a survey of consumers at a tertiary Australian hospital. *Intern Med J* 48(12): 1520-1524.

Aroney, N., Putrino, A., Scalia, G. and Walters, D. (2018). 3D printed cardiac fistula: Guiding percutaneous structural intervention. *Catheter Cardiovasc Interv* 92(7): E478-E480.

Babu, A. S., Morris, N. R., Arena, R. and Myers, J. (2018). Exercise-based evaluations and interventions for pulmonary hypertension with connective tissue disorders. *Expert Rev Respir Med* 12(7): 615-622.

Bai, A., Lan, L., Poon, K., Pynadath Joseph, V., O'Rourke, R. and Aftab, K. (2018). Pulmonary Artery Pseudoaneurysms in the Setting of Gout Polyarthropathy: A Case Report. *J Clin Med Res* 10(10): 781-785.

Bai, L., Du, Z., Du, J., Yao, W., Zhang, J., Weng, Z., Liu, S., Zhao, Y., Liu, Y., Zhang, X., Huang, X., Yao, X., Crawford, R., Hang, R., Huang, D., Tang, B. and Xiao, Y. (2018). A multifaceted coating on titanium dictates osteoimmunomodulation and osteo/angio-genesis towards ameliorative osseointegration. *Biomaterials* 162: 154-169.

Bai, L., Liu, Y., Du, Z., Weng, Z., Yao, W., Zhang, X., Huang, X., Yao, X., Crawford, R., Hang, R., Huang, D., Tang, B. and Xiao, Y. (2018). Differential effect of hydroxyapatite nano-particle versus nano-rod decorated titanium micro-surface on osseointegration. *Acta Biomater* 76: 344-358.

Balmain, B. N., Jay, O., Morris, N. R., Shiino, K., Stewart, G. M., Jayasinghe, R., Chan, J. and Sabapathy, S. (2018). Thermoeffector Responses at a Fixed Rate of Heat Production in Heart Failure Patients. *Med Sci Sports Exerc* 50(3): 417-426.

Balmain, B. N., Jay, O., Morris, N. R., Stewart, G. M., Shiino, K., McFarland, A. J., Jayasinghe, R., Chan, J. and Sabapathy, S. (2018). Folic acid supplementation improves vascular endothelial function, yet not skin blood flow during exercise in the heat, in patients with heart failure. *Am J Physiol Regul Integr Comp Physiol* 315(4): R810-R819.

Balmain, B. N., Sabapathy, S., Louis, M. and Morris, N. R. (2018). Aging and Thermoregulatory Control: The Clinical Implications of Exercising under Heat Stress in Older Individuals. *Biomed Res Int* 2018: 8306154.

Barwick, A. L., van Netten, J. J., Reed, L. F. and Lazzarini, P. A. (2018). Independent factors associated with wearing different types of outdoor footwear in a representative inpatient population: a cross-sectional study. *J Foot Ankle Res* 11: 19.

Beck, L., Mohamed, A. A., Strugnelli, W. E., Bartlett, H., Rodriguez, V., Hamilton-Craig, C. and Slaughter, R. E. (2018). MRI measurements of the thoracic aorta and pulmonary artery. *J Med Imaging Radiat Oncol* 62(1): 64-71.

Bell, D., Gluer, R. and Murdoch, D. (2018). Factors Promoting Survival After Prolonged Resuscitation Attempts: A Case of Survival With Good Neurological Outcome Following 60 Minutes of Downtime After Out-of-Hospital Cardiac Arrest. *Heart Lung Circ* 27(3): e1-e3.

Bell, D., Prabhu, S., Betts, K. S., Chen, Y., Radford, D., Whight, C., Ward, C., Jalali, H., Venugopal, P. and Alphonso, N. (2018). Long-term performance of homografts versus stented bioprosthetic valves in the pulmonary position in patients aged 10-20 years. *Eur J Cardiothorac Surg* 54(5): 946-952.

Bell, D. J., He, C., Pauli, J. L. and Naidoo, R. (2018). Maroteaux-Lamy syndrome: a rare and challenging case of mitral valve replacement. *Asian Cardiovasc Thorac Ann* 26(7): 560-562.

Bell, J. J. (2018). Nutrition Screening and Assessment in "Hip Fracture. *Handbook of Famine, Starvation, and Nutrient Deprivation: From Biology to Policy*" V, P. and V, P: 1-22.

Bell, J. J. (2018). Nutrition Support in Orthopaedics in "Advanced Nutrition and Dietetics in Nutrition Support". *Eds Hickson, S., Smith, S. and Whelan, K. Pages* 358-366.

TPCH Publications continued...

Bell, J. J., Young, A., Hill, J., Banks, M., Comans, T., Barnes, R. and Keller, H. H. (2018). Rationale and developmental methodology for the SIMPLE approach: A Systematised, Interdisciplinary Malnutrition Pathway for implementation and Evaluation in hospitals. *Nutr Diet* 75(2): 226-234.

Bell, S. C., Armstrong, D., Harrington, G., Jardine, L., Divakaran, R., Loff, B., Middleton, P. G., McDonald, T., Rowland, K., Wishart, M., Wood, M. E. and Stuart, R. L. (2018). Work environment risks for health care workers with cystic fibrosis. *Respirology* 23(12): 1190-1197.

Bell, S. C., Elborn, J. S. and Byrnes, C. A. (2018). Bronchiectasis: Treatment decisions for pulmonary exacerbations and their prevention. *Respirology* 23(11): 1006-1022.

Bell, S. C. and Wood, M. E. (2018). Biomarkers: Their Role in CFTR Modulator Therapies from Early Development to the Clinic. *Am J Respir Crit Care Med* 197(11): 1375-1376.

Bellapart, J., Cuthbertson, K., Dunster, K., Diab, S., Platts, D. G., Raffel, C., Gabrielian, L., Barnett, A., Paratz, J., Boots, R. and Fraser, J. F. (2018). The effects of normovolemic anemia and blood transfusion on cerebral microcirculation after severe head injury. *Intensive Care Med* Exp 6(1): 46.

Bellapart, J., Cuthbertson, K., Dunster, K., Diab, S., Platts, D. G., Raffel, O. C., Gabrielian, L., Barnett, A., Paratz, J., Boots, R. and Fraser, J. F. (2018). Cerebral Microcirculation and Histological Mapping After Severe Head Injury: A Contusion and Acceleration Experimental Model. *Front Neurol* 9: 277.

Boyd, J., Paratz, J., Tronstad, O., Caruana, L., McCormack, P. and Walsh, J. (2018). When is it safe to exercise mechanically ventilated patients in the intensive care unit? An evaluation of consensus recommendations in a cardiothoracic setting. *Heart Lung* 47(2): 81-86.

Brieger, D., Amerena, J., Attia, J. R., Bajorek, B., Chan, K. H., Connell, C., Freedman, B., Ferguson, C., Hall, T., Haqqani, H. M., Hendriks, J., Hespe, C. M., Hung, J., Kalman, J. M., Sanders, P., Worthington, J., Yan, T. and Zwar, N. A. (2018). National Heart Foundation of Australia and Cardiac Society of Australia and New Zealand: Australian clinical guidelines for the diagnosis and management of atrial fibrillation 2018. *Med J Aust* 209(8): 356-362.

Broom, A., Kenny, K., Kirby, E. and Lwin, Z. (2018). The collective/affective practice of cancer survivorship. *Br J Sociol.*

Brown, T. E., Banks, M. D., Hughes, B. G. M., Lin, C. Y., Kenny, L. M. and Bauer, J. D. (2018). Comparison of Nutritional and Clinical Outcomes in Patients with Head and Neck Cancer Undergoing Chemoradiotherapy Utilizing Prophylactic versus Reactive Nutrition Support Approaches. *J Acad Nutr Diet* 118(4): 627-636.

Bull, T., Corley, A., Smyth, D. J., McMillan, D. J., Dunster, K. R. and Fraser, J. F. (2018). Extracorporeal membrane oxygenation line-associated complications: in vitro testing of cyanoacrylate tissue adhesive and securement devices to prevent infection and dislodgement. *Intensive Care Med* Exp 6(1): 6.

Burge, M., Semira, C., Lee, B., Lee, M., Kosmider, S., Wong, R., Shapiro, J., Ma, B., Dean, A. P., Zimet, A. S., Steel, S. A., Lok, S. W., Torres, J., Eastgate, M., Wong, H. L. and Gibbs, P. (2018). Previous Bevacizumab and Efficacy of Later Anti-Epidermal Growth Factor Receptor Antibodies in Metastatic Colorectal Cancer: Results From a Large International Registry. *Clin Colorectal Cancer* 17(3): e593-e599.

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. F. (2018). An Ovine Model of Hyperdynamic Endotoxemia and Vital Organ Metabolism. *Shock* 49(1): 99-107.

Byrne, L., Obonyo, N. G., Diab, S. D., Dunster, K. R., Passmore, M. R., Boon, A. C., Hoe, L. S., Pedersen, S., Fauzi, M. H., Pimenta, L. P., Van Haren, F., Anstey, C. M., Cullen, L., Tung, J. P., Shekar, K., Maitland, K. and Fraser, J. F. (2018). Unintended Consequences: Fluid Resuscitation Worsens Shock in an Ovine Model of Endotoxemia. *Am J Respir Crit Care Med* 198(8): 1043-1054.

Castellani, C., Duff, A. J. A., Bell, S. C., Heijerman, H. G. M., Munck, A., Ratjen, F., Sermet-Gaudelus, I., Southern, K. W., Barben, J., Flume, P. A., Hodkova, P., Kashirskaya, N., Kirszenbaum, M. N., Madge, S., Oxley, H., Plant, B., Schwarzenberg, S. J., Smyth, A. R., Taccetti, G., Wagner, T. O. F., Wolfe, S. P. and Drevinek, P. (2018). ECFS best practice guidelines: the 2018 revision. *J Cyst Fibros* 17(2): 153-178.

Chamberlain, D., Pollock, W., Fulbrook, P. and Group, A. W. S. D. (2018). ACCCN Workforce Standards for Intensive Care Nursing: Systematic and evidence review, development, and appraisal. *Aust Crit Care* 31(5): 292-302.

Chambers, D. C., Cherikh, W. S., Goldfarb, S. B., Hayes, D., Jr., Kucheryavaya, A. Y., Toll, A. E., Khush, K. K., Levvey, B. J., Meiser, B., Rossano, J. W., Stehlik, J., International Society for, H. and Lung, T. (2018). The International Thoracic Organ Transplant Registry of the International Society for Heart and Lung Transplantation: Thirty-fifth adult lung and heart-lung transplant report-2018; Focus theme: Multiorgan Transplantation. *J Heart Lung Transplant* 37(10): 1169-1183.

Chaudhuri, A. and Wade, S. L. (2018). Flucloxacillin-warfarin interaction: an under-appreciated phenomenon. *Intern Med J* 48(7): 860-863.

Chu, K. H., Keijzers, G., Furyk, J. S., Eley, R. M., Kinnear, F. B., Thom, O. N., Howell, T. E., Mahmoud, I., Ting, J. Y. S. and Brown, A. F. T. (2018). Applying the Ottawa subarachnoid haemorrhage rule on a cohort of emergency department patients with headache. *Eur J Emerg Med* 25(6): e29-e32.

Chua, H. S., Whitehouse, S. L., Lorimer, M., De Steiger, R., Guo, L. and Crawford, R. W. (2018). Mortality and Implant Survival With Simultaneous and Staged Bilateral Total Knee Arthroplasty Experience From the Australian Orthopaedic Association National Joint Replacement Registry. *J Arthroplasty* 33(10): 3167-3173.

Cochrane, F., Siyambalapitiya, S. and Cornwell, P. (2018). Speech-language pathology services for Indigenous Australian adults with acquired communication disorders: a systematic quantitative literature review. *Speech, Language and Hearing: 1-12.*

Commons, R. J., Raby, E., Athan, E., Bhally, H., Chen, S., Guy, S., Ingram, P. R., Lai, K., Lemoh, C., Lim, L. L., Manning, L., Miyakis, S., O'Reilly, M., Roberts, A., Sehu, M., Torda, A., Vicaretti, M. and Lazzarini, P. A. (2018). Managing diabetic foot infections: a survey of Australasian infectious diseases clinicians. *J Foot Ankle Res 11: 13.*

Crespo, M. M., McCarthy, D. P., Hopkins, P. M., Clark, S. C., Budev, M., Bermudez, C. A., Benden, C., Eghtesady, P., Lease, E. D., Leard, L., D'Cunha, J., Wigfield, C. H., Cypel, M., Diamond, J. M., Yun, J. J., Yarmus, L., Machuzak, M., Klepetko, W., Verleden, G., Hoetzenecker, K., Dellgren, G. and Mulligan, M. (2018). ISHLT Consensus Statement on adult and pediatric airway complications after lung transplantation: Definitions, grading system, and therapeutics. *J Heart Lung Transplant 37(5): 548-563.*

Crock, C., Hansen, K., Fogg, T., Cahill, A., Deakin, A. and Runciman, W. B. (2018). Lessons learnt from incidents involving the airway and breathing reported from Australasian emergency departments. *Emerg Med Australas 30(1): 55-60.*

Cross, T. J., Wheatley, C., Stewart, G. M., Coffman, K., Carlson, A., Stepanek, J., Morris, N. R. and Johnson, B. D. (2018). The influence of thoracic gas compression and airflow density dependence on the assessment of pulmonary function at high altitude. *Physiol Rep 6(6): e13576.*

Crowhurst, J. and Whitby, M. (2018). Lowering fluoroscopy pulse rates to reduce radiation dose during cardiac procedures. *J Med Radiat Sci 65(4): 247-249.*

Crowhurst, J. A., Scalia, G. M., Whitby, M., Murdoch, D., Robinson, B. J., Turner, A., Johnston, L., Margale, S., Natani, S., Clarke, A., Burstow, D. J., Raffel, O. C. and Walters, D. L. (2018). Radiation Exposure of Operators Performing Transesophageal Echocardiography During Percutaneous Structural Cardiac Interventions. *J Am Coll Cardiol 71(11): 1246-1254.*

Delaney, F. T., Fong, K. M. and Lee, J. C. (2018). Incidental Pulmonary Malignancies on CTAC in MPS. *Clin Lung Cancer 19(5): e801-e802.*

Delaney, F. T., Fong, K. M. and Lee, J. C. (2018). Primary Thoracic Cancers Incidentally Detected on CT Attenuation Correction Images During Myocardial Perfusion Scintigraphy. *Clin Lung Cancer 19(5): e575-e579.*

Denman, R. A., Lee, A. C., Mengel, C., Townsend, S., Betts, J., Bovey, N., Wright, D., Davison, O. and Haqqani, H. M. (2018). Leadless Permanent Pacing: A Single Centre Australian Experience. *Heart Lung Circ. 10.1016/j.hlc.2018.09.014*

Dhanani, J. A., Cohen, J., Parker, S. L., Chan, H. K., Tang, P., Ahern, B. J., Khan, A., Bhatt, M., Goodman, S., Diab, S., Chaudhary, J., Lipman, J., Wallis, S. C., Barnett, A., Chew, M., Fraser, J. F. and Roberts, J. A. (2018). A research pathway for the study of the delivery and disposition of nebulised antibiotics: an incremental approach from in vitro to large animal models. *Intensive Care Med Exp 6(1): 17.*

Dhanani, J. A., Tang, P., Wallis, S. C., Parker, S. L., Pandey, P., Fraser, J. F., Cohen, J., Barnett, A., Roberts, J. R. and Chan, H. K. (2018). Characterisation of 40mg/ml and 100mg/ml tobramycin formulations for aerosol therapy with adult mechanical ventilation. *Pulm Pharmacol Ther 50: 93-99.*

Diaz, M. E., Debowski, M., Hukins, C., Fielding, D., Fong, K. M. and Bettington, C. S. (2018). Non-small cell lung cancer brain metastasis screening in the era of positron emission tomography-CT staging: Current practice and outcomes. *J Med Imaging Radiat Oncol 62(3): 383-388.*

Edwards, N. F. A., Wijesekera, V. A., Anderson, B. A., Habibian, M., Burstow, D. J., Walters, D. L. and Scalia, G. M. (2018). A Rare Case of a Giant Coronary Sinus with Focal Aneurysm Secondary to Multiple Fistulous Connections Arising from a Dilated, Tortuous Left Circumflex Coronary Artery. *CASE (Phila) 2(3): 99-102.*

Eeles, E., Gunn, H., Sutt, A. L., Pinsker, D., Flaws, D., Jarrett, P., Lye, I. and Fraser, J. F. (2018). e-Screening revolution: A novel approach to developing a delirium screening tool in the intensive care unit. *Australas J Ageing 37(2): 147-150.*

Eeles, E., Teodorczuk, A. and Mitleton-Kelly, E. (2018). Reconceptualizing delirium as a disorder of complex system failure. *Med Hypotheses 118: 121-126.*

Eeles, E. M., England, R., Armstrong, A., Pinsker, D., Pandey, S. and Teodorczuk, A. (2018). Understanding our patients better will lead to better recognition of delirium: An opinion piece. *Australas J Ageing 37(4): 241-242.*

Ekanayake, S., Yang, I. A., Godbolt, D. B., Windsor, M. N., Henderson, D., Kyle, S., Sterling, D. and Lee, J. C. (2018). Prostate-specific membrane antigen avidity on positron emission tomography scan in malignant pleural mesothelioma. *ANZ J Surg. 24(39): 9892-9902.*

Eric Wu, L., Tansley, G., John Fraser, F. and Shaun Gregory, D. (2018). In-Vitro Evaluation of Cardiac Energetics and Coronary Flow with Volume Displacement and Rotary Blood Pumps. *Conf Proc IEEE Eng Med Biol Soc 2018: 5277-5281.*

Eskandari, S., Pattinson, D. J., Stephenson, R. J., Groves, P. L., Apte, S. H., Sedaghat, B., Chandurudu, S., Doolan, D. L. and Toth, I. (2018). Influence of Physicochemical Properties of Lipopeptide Adjuvants on the Immune Response: A Rationale for Engineering a Potent Vaccine. *Chemistry 24(39): 9892-9902.*

Fanning, J. P., See Hoe, L. E., Passmore, M. R., Barnett, A. G., Rolfe, B. E., Millar, J. E., Wesley, A. J., Suen, J. and Fraser, J. F. (2018). Differential immunological profiles herald magnetic resonance imaging-defined perioperative cerebral infarction. *Ther Adv Neurol Disord 11: 1756286418759493.*

TPCH Publications continued...

Fanning, J. P., Wesley, A. J., Walters, D. L., Wong, A. A., Barnett, A. G., Strugnelli, W. E., Platts, D. G. and Fraser, J. F. (2018). Topographical distribution of perioperative cerebral infarction associated with transcatheter aortic valve implantation. *Am Heart J* 197: 113-123.

Fletcher, M. P., O'Rourke, R., Gaikwad, N., Walters, D. L. and Hamilton-Craig, C. (2018). Coronary CT in Australia has high positive predictive value unaffected by site volume: An analysis of 510 positive CTCA scans with invasive angiographic correlation. *Int J Cardiol Heart Vasc* 20: 46-49.

Flume, P. A., Waters, V. J., Bell, S. C., Van Devanter, D. R., Stuart Elborn, J. and Antimicrobial Resistance in Cystic Fibrosis International Working, G. (2018). Antimicrobial resistance in cystic fibrosis: Does it matter? *J Cyst Fibros* 17(6): 687-689.

Franklin, D., Babl, F. E., Schlapbach, L. J., Oakley, E., Craig, S., Neutze, J., Furyk, J., Fraser, J. F., Jones, M., Whitty, J. A., Dalziel, S. R. and Schibler, A. (2018). A Randomized Trial of High-Flow Oxygen Therapy in Infants with Bronchiolitis. *N Engl J Med* 378(12): 1121-1131.

Frith, P. A., Yang, I. A. and Hancock, K. (2018). Inhaled corticosteroids in COPD: When are they needed, when not needed and when harmful? *Respiratory Medicine Today* 3(2): 35-38.

Fulbrook, P., Miles, S. and Coyer, F. (2018). Prevalence of pressure injury in adults presenting to the emergency department by ambulance. *Aust Crit Care*. 10.1016/j.aucc.2018.10.002

Fulton, R., Millar, J. E., Merza, M., Johnston, H., Corley, A., Faulke, D., Rapchuk, I., Tarpey, J., Lockie, P., Lockie, S. and Fraser, J. F. (2018). High flow nasal oxygen after bariatric surgery (OXYBAR), prophylactic post-operative high flow nasal oxygen versus conventional oxygen therapy in obese patients undergoing bariatric surgery: study protocol for a randomised controlled pilot trial. *Trials* 19(1): 402.

Geake, J. and Bell, S. C. (2018). Bronchiectasis: Yet another systemic disease? *Respirology*. 10.1111/resp.13322

Gettens, S., Fulbrook, P., Jessup, M. and Low Choy, N. (2018). The patients' perspective of sustaining a fall in hospital: A qualitative study. *J Clin Nurs* 27(3-4): 743-752.

Goh, F., Yang, I. A., Bowman, R. V. and Fong, K. M. (2018). Subtype variation and actionability of telomere length abnormality in lung cancer. *Transl Lung Cancer Res* 7(Suppl 3): S251-S253.

Goldfarb, S. B., Hayes, D., Jr., Levvey, B. J., Cherikh, W. S., Chambers, D. C., Khush, K. K., Kucheryavaya, A. Y., Meiser, B., Rossano, J. W., Stehlik, J., International Society for, H. and Lung Transplantation (2018). The International Thoracic Organ Transplant Registry of the International Society for Heart and Lung Transplantation: Twenty-first Pediatric Lung and HeartLung Transplantation Report-2018; Focus Theme: Multiorgan Transplantation. *J Heart Lung Transplant* 37(10): 1196-1206.

Gurunathan, U. (2018). Takotsubo Cardiomyopathy and Intraoperative Cardiac Arrest: Is Desvenlafaxine a Contributing Factor? *J Cardiothorac Vasc Anesth* 32(1): e16-e18.

Gurunathan, U., Anderson, C., Berry, K. E., Whitehouse, S. L. and Crawford, R. W. (2018). Body mass index and in-hospital postoperative complications following primary total hip arthroplasty. *Hip Int* 28(6): 613-621.

Gurunathan, U., Kunju, S. M., Hay, K. E. and van Alphen, S. (2018). Usefulness of a visual aid in achieving optimal positioning for spinal anesthesia: a randomized trial. *BMC Anesthesiol* 18(1): 11.

Gurunathan, U., Parker, S. L., Maguire, R., Ramdath, D., Bijoor, M., Wallis, S. C. and Roberts, J. A. (2018). Population Pharmacokinetics of Periarticular Ketorolac in Adult Patients Undergoing Total Hip or Total Knee Replacement Surgery. *Anesth Analg*. 10.1213/ANE.0000000000003377

Gurunathan, U., Pym, A., Anderson, C., Marshall, A., Whitehouse, S. L. and Crawford, R. W. (2018). Higher body mass index is not a risk factor for in-hospital adverse outcomes following total knee arthroplasty. *J Orthop Surg (Hong Kong)* 26(3): 2309499018802429.

Haqqani, H. M. (2018). Substrate ablation for post-infarct and Brugada storm: Triggering the calm. *Indian Heart J* 70(2): 204-205.

Hiles, S. A., Harvey, E. S., McDonald, V. M., Peters, M., Bardin, P., Reynolds, P. N., Upham, J. W., Baraket, M., Bhikoo, Z., Bowden, J., Brockway, B., Chung, L. P., Cochrane, B., Foxley, G., Garrett, J., Hew, M., Jayaram, L., Jenkins, C., Katelaris, C., Katsoulotos, G., Koh, M. S., Kritikos, V., Lambert, M., Langton, D., Lara Rivero, A., Marks, G. B., Middleton, P. G., Nanguzgambo, A., Radhakrishna, N., Reddel, H., Rimmer, J., Southcott, A. M., Sutherland, M., Thien, F., Wark, P. A. B., Yang, I. A., Yap, E. and Gibson, P. G. (2018). Working while unwell: Workplace impairment in people with severe asthma. *Clin Exp Allergy* 48(6): 650-662.

Hill, A. G., Findlay, M. P., Burge, M. E., Jackson, C., Alfonso, P. G., Samuel, L., Ganju, V., Karthaus, M., Amatu, A., Jeffery, M., Bartolomeo, M. D., Bridgewater, J., Coveler, A. L., Hidalgo, M., Kapp, A. V., Sufan, R. I., McCall, B. B., Hanley, W. D., Penuel, E. M., Pirzkall, A. and Tabernero, J. (2018). Phase II Study of the Dual EGFR/HER3 Inhibitor Duligotuzumab (MEHD7945A) versus Cetuximab in Combination with FOLFIRI in Second-Line RAS Wild-Type Metastatic Colorectal Cancer. *Clin Cancer Res* 24(10): 2276-2284.

Hodges, A., Harmer, A. R., Dennis, S., Nairn, L., March, L., Crawford, R., Parker, D. and Fransen, M. (2018). Prevalence and determinants of physical activity and sedentary behaviour before and up to 12 months after total knee replacement: a longitudinal cohort study. *Clin Rehabil* 32(9): 1271-1283.

Hopkins, P. M. A. (2018). The trials and tribulations of urgent lung allocation. *J Heart Lung Transplant* 37(12): 1394-1396.

- Horobin, J. T., Simmonds, M. J., Nandakumar, D., Gregory, S. D., Tansley, G., Pauls, J. P., Girnghuber, A., Balletti, N. and Fraser, J. F. (2018). Speed Modulation of the HeartWare HVAD to Assess In Vitro Hemocompatibility of Pulsatile and Continuous Flow Regimes in a Rotary Blood Pump. *Artif Organs* 42(9): 879–890.
- Huang, Y. C., Ferry, O. R., McKenzie, S. C., Bowman, R. V., Hamilton, M., Masel, P. J., Fong, K. M. and Yang, I. A. (2018). Diagnosis of the cause of chronic dyspnoea in primary and tertiary care: characterizing diagnostic confidence. *J Thorac Dis* 10(6): 3745–3756.
- Hwang, R., Morris, N. R., Mandrusiak, A., Bruning, J., Peters, R., Korczyk, D. and Russell, T. (2018). Cost-Utility Analysis of Home-based Telerehabilitation Compared with Centre-based Rehabilitation in Patients with Heart Failure. *Heart Lung Circ.* 10.1016/j.hlc.2018.11.010
- Jessup, M., Fulbrook, P. and Kinnear, F. B. (2018). Multidisciplinary evaluation of an emergency department nurse navigator role: A mixed methods study. *Aust Crit Care* 31(5): 303–310.
- Jessup, M., Li, A., Fulbrook, P. and Bell, S. C. (2018). The experience of men and women with cystic fibrosis who have become a parent: A qualitative study. *J Clin Nurs* 27(7–8): 1702–1712.
- Jo, H. E., Glaspole, I., Moodley, Y., Chapman, S., Ellis, S., Goh, N., Hopkins, P., Keir, G., Mahar, A., Cooper, W., Reynolds, P., Haydn Walters, E., Zappala, C., Grainge, C., Allan, H., Macanish, S. and Corte, T. J. (2018). Disease progression in idiopathic pulmonary fibrosis with mild physiological impairment: analysis from the Australian IPF registry. *BMC Pulm Med* 18(1): 19.
- Jo, H. E., Prasad, J. D., Troy, L. K., Mahar, A., Bleasel, J., Ellis, S. J., Chambers, D. C., Holland, A. E., Lake, F. R., Keir, G., Goh, N. S., Wilsher, M., de Boer, S., Moodley, Y., Grainge, C., Whitford, H. M., Chapman, S. A., Reynolds, P. N., Beatson, D., Jones, L. J., Hopkins, P., Allan, H. M., Glaspole, I. and Corte, T. J. (2018). Diagnosis and management of idiopathic pulmonary fibrosis: Thoracic Society of Australia and New Zealand and Lung Foundation Australia position statements summary. *Med J Aust* 208(2): 82–88.
- Kapur, N., Petsky, H. L., Bell, S., Kolbe, J. and Chang, A. B. (2018). Inhaled corticosteroids for bronchiectasis. *Cochrane Database Syst Rev* 5: CD000996.
- Kawamata, F., Patch, A. M., Nones, K., Bond, C., McKeone, D., Pearson, S. A., Homma, S., Liu, C., Fennell, L., Dumenil, T., Hartel, G., Kobayashi, N., Yokoo, H., Fukai, M., Nishihara, H., Kamiyama, T., Burge, M. E., Karapetis, C. S., Taketomi, A., Leggett, B., Waddell, N. and Whitehall, V. (2018). Copy number profiles of paired primary and metastatic colorectal cancers. *Oncotarget* 9(3): 3394–3405.
- Keller, H., Laur, C., Atkins, M., Bernier, P., Butterworth, D., Davidson, B., Hotson, B., Nasser, R., Laporte, M., Marcell, C., Ray, S. and Bell, J. (2018). Update on the Integrated Nutrition Pathway for Acute Care (INPAC): post implementation tailoring and toolkit to support practice improvements. *Nutr J* 17(1): 2.
- Keller, H. H., Xu, Y., Dubin, J. A., Curtis, L., Laur, C. V., Bell, J. and More-2-Eat, T. (2018). Improving the standard of nutrition care in hospital: Mealtime barriers reduced with implementation of the Integrated Nutrition Pathway for Acute Care. *Clin Nutr ESPEN* 28: 74–79.
- Kelly, R. L., Walsh, J. R., Paratz, J. D., Yerkovich, S. T., McKenzie, S. C. and Morris, N. R. (2018). Quadriceps Muscle Strength and Body Mass Index are Associated with Estimates of Physical Activity Postheart Transplantation. *Transplantation*. 10.1097/TP.0000000000002488
- Khush, K. K., Cherikh, W. S., Chambers, D. C., Goldfarb, S., Hayes, D., Jr., Kucheryavaya, A. Y., Levvey, B. J., Meiser, B., Rossano, J. W., Stehlik, J., International Society for, H. and Lung, T. (2018). The International Thoracic Organ Transplant Registry of the International Society for Heart and Lung Transplantation: Thirty-fifth Adult Heart Transplantation Report-2018; Focus Theme: Multiorgan Transplantation. *J Heart Lung Transplant* 37(10): 1155–1168.
- Kidd, T. J., Canton, R., Ekkelenkamp, M., Johansen, H. K., Gilligan, P., LiPuma, J. J., Bell, S. C., Elborn, J. S., Flume, P. A., VanDevanter, D. R., Waters, V. J. and Antimicrobial Resistance in Cystic Fibrosis International Working, G. (2018). Defining antimicrobial resistance in cystic fibrosis. *J Cyst Fibros* 17(6): 696–704.
- Kirby, E., Lwin, Z., Kenny, K., Broom, A., Birman, H. and Good, P. (2018). It doesn't exist...: negotiating palliative care from a culturally and linguistically diverse patient and caregiver perspective. *BMC Palliat Care* 17(1): 90.
- Kyranis, S. J., Latona, J., Platts, D., Kelly, N., Savage, M., Brown, M., Hamilton-Craig, C., Scalia, G. M. and Burstow, D. (2018). Improving the echocardiographic assessment of pulmonary pressure using the tricuspid regurgitant signal-The chin vs the beard. *Echocardiography* 35(8): 1085–1096.
- Ladwa, R., Wen Hong, H., Wyld, D., Pattison, D. A. and Burge, M. (2018). Tumor Cystic Necrosis Following Peptide Receptor Radionuclide Therapy in Neuroendocrine Tumors. *Clin Nucl Med* 43(3): 186–187.
- Laur, C., Bell, J., Valaitis, R., Ray, S. and Keller, H. (2018). The Sustain and Spread Framework: strategies for sustaining and spreading nutrition care improvements in acute care based on thematic analysis from the More-2-Eat study. *BMC Health Serv Res* 18(1): 930.
- Laur, C., Curtis, L., Dubin, J., McNicholl, T., Valaitis, R., Douglas, P., Bell, J., Bernier, P. and Keller, H. (2018). Nutrition Care after Discharge from Hospital: An Exploratory Analysis from the More-2-Eat Study. *Healthcare (Basel)* 6(1).
- Lawrence, P., Jarugula, R., Hazelwood, S., Fincher, G. and Hay, K. (2018). Wait times are not the problem! Detailed analysis of unsolicited patient complaints from a metropolitan Australian emergency department. *Emerg Med Australas* 30(5): 672–677.

TPCH Publications continued...

Lazzarini, P. A., Pacella, R. E., Armstrong, D. G. and van Netten, J. J. (2018). Diabetes-related lower-extremity complications are a leading cause of the global burden of disability. *Diabet Med.* 10.1111/dme.13680

Lazzarini, P. A., van Netten, J. J., Fitridge, R. A., Griffiths, I., Kinnear, E. M., Malone, M., Perrin, B. M., Prentice, J. and Wraight, P. R. (2018). Pathway to ending avoidable diabetes-related amputations in Australia. *Med J Aust* 209(7): 288–290.

Lazzarini, PA (2018). The Diabetic Foot Worldwide: Australasia. *Foot in Diabetes*.

Lee, A., Hamilton-Craig, C., Denman, R. and Haqqani, H. M. (2018). Catheter ablation of papillary muscle arrhythmias: Implications of mitral valve prolapse and systolic dysfunction. *Pacing Clin Electrophysiol.* 10.1111/pace.13363

Liao, S., Neidlin, M., Li, Z., Simpson, B. and Gregory, S. D. (2018). Ventricular flow dynamics with varying LVAD inflow cannula lengths: In-silico evaluation in a multiscale model. *J Biomech* 72: 106–115.

Liao, S., Theodoropoulos, C., Blackwood, K. A., Woodruff, M. A. and Gregory, S. D. (2018). Melt Electrospun Bilayered Scaffolds for Tissue Integration of a Suture-Less Inflow Cannula for Rotary Blood Pumps. *Artif Organs* 42(5): E43–E54.

Liao, S., Wu, E. L., Neidlin, M., Li, Z., Simpson, B. and Gregory, S. D. (2018). The Influence of Rotary Blood Pump Speed Modulation on the Risk of Intraventricular Thrombosis. *Artif Organs* 42(10): 943–953.

Liu, J., Gupta, R., Hay, K., Pule, C., Rahman, T. and Pandey, S. (2018). Upper gastrointestinal bleeding in neck of femur fracture patients: a single tertiary centre experience. *Intern Med J* 48(6): 731–735.

Lovegrove, J., Fulbrook, P. and Miles, S. (2018). Prescription of pressure injury preventative interventions following risk assessment: An exploratory, descriptive study. *Int Wound J* 15(6): 985–992.

Lovegrove, J., Miles, S. and Fulbrook, P. (2018). The relationship between pressure ulcer risk assessment and preventative interventions: a systematic review. *J Wound Care* 27(12): 862–875.

Lutzky, V. P., Ratnatunga, C. N., Smith, D. J., Kupz, A., Doolan, D. L., Reid, D. W., Thomson, R. M., Bell, S. C. and Miles, J. J. (2018). Anomalies in T Cell Function Are Associated With Individuals at Risk of Mycobacterium abscessus Complex Infection. *Front Immunol* 9: 1319.

Lwin, Z., Broom, A., Sibbritt, D., Francis, K., Karapetis, C. S., Karikios, D. and Harrup, R. (2018). The Australian Medical Oncologist Workforce Survey: The profile and challenges of medical oncology. *Semin Oncol* 45(5–6): 284–290.

Macdonald, S. P. J., Keijzers, G., Taylor, D. M., Kinnear, F., Arendts, G., Fatovich, D. M., Bellomo, R., McCutcheon, D., Fraser, J. F., Ascencio-Lane, J.-C., Burrows, S., Litton, E., Harley, A., Anstey, M., Mukherjee, A. and Investigators, R. t. i. J. I. C. (2018). Restricted fluid resuscitation in suspected sepsis associated hypotension (REFRESH): a pilot randomised controlled trial. 44(12): 2070–2078.

Macdonald, S. P. J., Keijzers, G., Taylor, D. M., Kinnear, F., Arendts, G., Fatovich, D. M., Bellomo, R., McCutcheon, D., Fraser, J. F., Ascencio-Lane, J. C., Burrows, S., Litton, E., Harley, A., Anstey, M., Mukherjee, A. and Investigators, R. t. i. J. I. C. (2018). Restricted fluid resuscitation in suspected sepsis associated hypotension (REFRESH): a pilot randomised controlled trial. *Intensive Care Med* 44(12): 2070–2078.

Mackintosh, J. A., Marshall, H. M., Slaughter, R., Reddy, T., Yang, I. A., Bowman, R. V. and Fong, K. M. (2018). Interstitial Lung Abnormalities in the Queensland Lung Cancer Screening Study: Prevalence and Progression Over Two Years of Surveillance. *Intern Med J.* 10.1111/imj.14148

Mai, R., Zhou, S., Zhou, S., Zhong, W., Hong, L., Wang, Y., Lu, S., Pan, J., Huang, Y., Su, M., Crawford, R., Zhou, Y. and Zhang, G. (2018). Transcriptome analyses reveal FOXA1 dysregulation in mammary and extramammary Paget's disease. *Hum Pathol* 77: 152–158.

Maradana, M. R., Yekollu, S. K., Zeng, B., Ellis, J., Clouston, A., Miller, G., Talekar, M., Bhuyan, Z. A., Mahadevaiah, S., Powell, E. E., Irvine, K. M., Thomas, R. and O'Sullivan, B. J. (2018). Immunomodulatory liposomes targeting liver macrophages arrest progression of nonalcoholic steatohepatitis. *Metabolism* 78: 80–94.

Marchlinski, F. E., Garcia, F. C., Almendral, J. and Haqqani, H. M. (2018). Catheter Ablation of Ventricular Tachycardia: Are We Underestimating the Benefit? *JACC Clin Electrophysiol* 4(3): 383–385.

Markham, R., Kyranis, S., Aroney, N., Lau, K., Poon, K., Scalia, G. and Walters, D. (2018). Transcatheter mitral valve intervention: an emerging treatment for mitral regurgitation. *Intern Med J* 48(4): 382–390.

Maroules, C. D., Hamilton-Craig, C., Branch, K., Lee, J., Cury, R. C., Maurovich-Horvat, P., Rubinshtein, R., Thomas, D., Williams, M., Guo, Y. and Cury, R. C. (2018). Coronary artery disease reporting and data system (CAD-RADS(TM)): Inter-observer agreement for assessment categories and modifiers. *J Cardiovasc Comput Tomogr* 12(2): 125–130.

Marshall, H. M., Yang, I. A., Bowman, R. V. and Fong, K. M. (2018). Editorial on PanCan study. *Transl Lung Cancer Res* 7(Suppl 1): S57–S59.

Martin, L. W., Robson, C. L., Watts, A. M., Gray, A. R., Wainwright, C. E., Bell, S. C., Ramsay, K. A., Kidd, T. J., Reid, D. W., Brockway, B. and Lamont, I. L. (2018). Expression of *Pseudomonas aeruginosa* Antibiotic Resistance Genes Varies Greatly during Infections in Cystic Fibrosis Patients. *Antimicrob Agents Chemother* 62(11).

Masel, P., Doring, A., Muggeridge, N. and Roll, M. (2018). Complexities in managing obesity and COPD. *Respiratory Medicine Today* 3(2): 15–20.

- Mastropasqua, M. C., Lamont, I., Martin, L. W., Reid, D. W., D'Orazio, M. and Battistoni, A. (2018).** Efficient zinc uptake is critical for the ability of *Pseudomonas aeruginosa* to express virulence traits and colonize the human lung. *J Trace Elem Med Biol* 48: 74–80.
- Mbuzi, V., Fulbrook, P. and Jessup, M. (2018).** Effectiveness of programs to promote cardiovascular health of Indigenous Australians: a systematic review. *Int J Equity Health* 17(1): 153.
- McDonald, C., Dallimore, D., Oates, M., Shekar, K. and Thomson, B. (2018).** Unplanned Autotransplantation for Complex Multi-Valve Replacement in a Super Morbid Obese Female: The Challenge of Intraoperative Decision Making. *J Extra Corpor Technol* 50(4): 248–251.
- McKeage, M. J., Kotasek, D., Markman, B., Hidalgo, M., Millward, M. J., Jameson, M. B., Harris, D. L., Stagg, R. J., Kapoun, A. M., Xu, L. and Hughes, B. G. M. (2018).** Phase IB Trial of the Anti-Cancer Stem Cell DLL4-Binding Agent Demcizumab with Pemetrexed and Carboplatin as First-Line Treatment of Metastatic Non-Squamous NSCLC. *Target Oncol* 13(1): 89–98.
- McKeough, Z., Leung, R., Neo, J. H., Jenkins, S., Holland, A., Hill, K., Morris, N., Spencer, L., Hill, C., Lee, A., Seale, H., Cecins, N., McDonald, C. and Alison, J. (2018).** Shuttle walk tests in people with COPD who demonstrate exercise-induced oxygen desaturation: An analysis of test repeatability and cardiorespiratory responses. *Chron Respir Dis* 15(2): 131–137.
- McNamee, A. P., Horobin, J. T., Tansley, G. D. and Simmonds, M. J. (2018).** Oxidative Stress Increases Erythrocyte Sensitivity to Shear-Mediated Damage. *Artif Organs* 42(2): 184–192.
- McNamee, A. P., Tansley, G. D. and Simmonds, M. J. (2018).** Sublethal mechanical trauma alters the electrochemical properties and increases aggregation of erythrocytes. *Microvasc Res* 120: 1–7.
- Metaxas, Y., Rivalland, G., Mauti, L. A., Klingbiel, D., Kao, S., Schmid, S., Nowak, A. K., Gautschi, O., Bartnick, T., Hughes, B. G., Bouchaab, H., Rothschild, S. I., Pavlakis, N., Wolleb, S., Petrusch, U., O'Byrne, K., Froesch, P., Löffler-Baumann, M., Pratsch-Peter, S., Russell, P., Mingrone, W., Savic, S., Thapa, B., Fruh, M., Pless, M., von Moos, R. and John, T. (2018).** Pembrolizumab as Palliative Immunotherapy in Malignant Pleural Mesothelioma. *J Thorac Oncol* 13(11): 1784–1791.
- Migden, M. R., Rischin, D., Schmults, C. D., Guminski, A., Hauschild, A., Lewis, K. D., Chung, C. H., Hernandez-Aya, L., Lim, A. M., Chang, A. L. S., Rabinowitz, G., Thai, A. A., Dunn, L. A., Hughes, B. G. M., Khushalani, N. I., Modi, B., Schadendorf, D., Gao, B., Seebach, F., Li, S., Li, J., Mathias, M., Booth, J., Mohan, K., Stankevich, E., Babiker, H. M., Brana, I., Gil-Martin, M., Homsí, J., Johnson, M. L., Moreno, V., Niu, J., Owonikoko, T. K., Papadopoulos, K. P., Yancopoulos, G. D., Lowy, I. and Fury, M. G. (2018).** PD-1 Blockade with Cemiplimab in Advanced Cutaneous Squamous-Cell Carcinoma. *N Engl J Med* 379(4): 341–351.
- Mon, A. S., Pülle, C. and Bell, J. (2018).** Development of an 'Enteral tube feeding decision support tool' for hip fracture patients: A modified Delphi approach. *Aust J Ageing* 37(3): 217–223.
- Moore, J. P. R., Anstey, C., Murray, L., Fraser, J. F. and Singer, M. (2018).** Allostasis and sedation practices in intensive care evaluation: an observational pilot study. *Intensive Care Med* 6(1): 13.
- Moosavi, S. M., Shekar, K., Fraser, J. F., Smith, M. T. and Ghassabian, S. (2018).** An improved liquid chromatography tandem mass spectrometry (LC-MS/MS) method for quantification of dexmedetomidine concentrations in samples of human plasma. *J Chromatogr B Analyt Technol Biomed Life Sci* 1073: 118–122.
- Moroney, L. B., Helios, J., Ward, E. C., Crombie, J., Pelecanos, A., Burns, C. L., Spurgin, A. L., Blake, C., Kenny, L., Chua, B. and Hughes, B. G. M. (2018).** Helical intensity-modulated radiotherapy with concurrent chemotherapy for oropharyngeal squamous cell carcinoma: A prospective investigation of acute swallowing and toxicity patterns. *Head Neck* 40(9): 1955–1966.
- Morris, N. R., Louis, M., Strugnell, W., Harris, J., Lin, A., Feenstra, J. and Seale, H. J. (2018).** Study protocol for a randomised controlled trial of exercise training in pulmonary hypertension (ExTra_PH). *BMC Pulm Med* 18(1): 40.
- Nair, P. M., Starkey, M. R., Haw, T. J., Ruscher, R., Liu, G., Maradana, M. R., Thomas, R., O'Sullivan, B. J. and Hansbro, P. M. (2018).** RelB-Deficient Dendritic Cells Promote the Development of Spontaneous Allergic Airway Inflammation. *Am J Respir Cell Mol Biol* 58(3): 352–365.
- Newman, C. S., Cornwell, P. L., Young, A. M., Ward, E. C. and McErlain, A. L. (2018).** Accuracy and confidence of allied health assistants administering the subjective global assessment on inpatients in a rural setting: a preliminary feasibility study. *Nutr Diet* 75(1): 129–136.
- Ng, M. S. Y., David, M., Middelburg, R. A., Ng, A. S. Y., Suen, J. Y., Tung, J. P. and Fraser, J. F. (2018).** Transfusion of packed red blood cells at the end of shelf life is associated with increased risk of mortality – a pooled patient data analysis of 16 observational trials. *Haematologica* 103(9): 1542–1548.
- Ng, M. S. Y., Tung, J. P. and Fraser, J. F. (2018).** Platelet Storage Lesions: What More Do We Know Now? *Transfus Med Rev*. 10.1016/j.tmr.2018.04.001
- Nowicki, J. L., Mullany, D., Spooner, A., Nowicki, T. A., McKay, P. M., Corley, A., Fulbrook, P. and Fraser, J. F. (2018).** Are pressure injuries related to skin failure in critically ill patients? *Aust Crit Care* 31(5): 257–263.
- O'Connor, L. R., Morris, N. R. and Paratz, J. (2018).** Physiological and clinical outcomes associated with use of one-way speaking valves on tracheostomised patients: A systematic review. *Heart Lung*. 10.1016/j.hrtlng.2018.11.006
- O'Sullivan, B. J., Yekollu, S., Ruscher, R., Mehdi, A. M., Maradana, M. R., Chidgey, A. P. and Thomas, R. (2018).** Autoimmune-Mediated Thymic Atrophy Is Accelerated but Reversible in RelB-Deficient Mice. *Front Immunol* 9: 1092.

TPCH Publications continued...

- Obonyo, N. G., Schlapbach, L. J. and Fraser, J. F. (2018).** Sepsis: Changing Definitions, Unchanging Treatment. *Front Pediatr* 6: 425.
- Occhipinti, S., Dunn, J., O'Connell, D. L., Garvey, G., Valery, P. C., Ball, D., Fong, K. M., Vinod, S. and Chambers, S. (2018).** Lung Cancer Stigma across the Social Network: Patient and Caregiver Perspectives. *J Thorac Oncol* 13(10): 1443–1453.
- Page, B. J., Bowman, R. V., Yang, I. A. and Fong, K. M. (2018).** RE: Proportion of Never-Smoker Non-Small Cell Lung Cancer Patients at Three Diverse Institutions. *J Natl Cancer Inst* 110(4): 432.
- Palmer, D. W., Coppin, T., Rana, K., Dansereau, D. G., Suheimat, M., Maynard, M., Atchison, D. A., Roberts, J., Crawford, R. and Jaiprakash, A. (2018).** Glare-free retinal imaging using a portable light field fundus camera. *Biomed Opt Express* 9(7): 3178–3192.
- Passmore, M. R., Byrne, L., Obonyo, N. G., See Hoe, L. E., Boon, A. C., Diab, S. D., Dunster, K. R., Bisht, K., Tung, J. P., Fauzi, M. H., Narula, M., Pedersen, S. E., Esquerro-Lallen, A., Simonova, G., Sultana, A., Anstey, C. M., Shekar, K., Maitland, K., Suen, J. Y. and Fraser, J. F. (2018).** Inflammation and lung injury in an ovine model of fluid resuscitated endotoxemic shock. *Respir Res* 19(1): 231.
- Pauls, J. P., Miotto, A., Stephens, A., Gregory, S. D. and Tansley, G. (2018).** OpenHeart Project-An Open-Source Research Community in the Field of Mechanical Circulatory Support. *Artif Organs* 42(10): 939–942.
- Pauls, J. P., Roberts, L. A., Burgess, T., Fraser, J. F., Gregory, S. D. and Tansley, G. (2018).** Time Course Response of the Heart and Circulatory System to Active Postural Changes. *J Biomech Eng* 140(3).
- Phonpruk, K., Flowers, K., Fulbrook, P. and Naughton, G. (2018).** Paediatric emergency nurses' perceptions of parents' understanding of discharge information: A qualitative study. *Australas Emerg Care* 21(2): 56–63.
- Pinsker, D., Lo, A. H. Y., Haslam, C., Pachana, N. A. and Pinsker, H. (2018).** Hit or Miss? Diagnostic contributions of neuropsychological assessment in patients with suspected dementia. *International Journal of Clinical Neurosciences and Mental Health* 2018(5).
- Ploderer, B., Brown, R., Seng, L. S. D., Lazzarini, P. A. and van Netten, J. J. (2018).** Promoting Self-Care of Diabetic Foot Ulcers Through a Mobile Phone App: User-Centered Design and Evaluation. *JMIR Diabetes* 3(4): e10105.
- Prasadam, I., Akuien, A., Friis, T. E., Fang, W., Mao, X., Crawford, R. W. and Xiao, Y. (2018).** Mixed cell therapy of bone marrow-derived mesenchymal stem cells and articular cartilage chondrocytes ameliorates osteoarthritis development. *Lab Invest* 98(1): 106–116.
- Price, E. P., Viberg, L. T., Kidd, T. J., Bell, S. C., Currie, B. J. and Sarovich, D. S. (2018).** Transcriptomic analysis of longitudinal Burkholderia pseudomallei infecting the cystic fibrosis lung. *Microb Genom* 4(8). 10.1099/mgen.0.000194
- Price, T. J., Tang, M., Gibbs, P., Haller, D. G., Peeters, M., Arnold, D., Segelov, E., Roy, A., Tebbutt, N., Pavlakakis, N., Karapetis, C., Burge, M. and Shapiro, J. (2018).** Targeted therapy for metastatic colorectal cancer. *Expert Rev Anticancer Ther* 18(10): 991–1006.
- Putrino, A., Scalia, G., Natani, S., Margale, S., Rapchuk, I., Binny, S., Lau, C., Lwin, M., Clarke, A., Raffel, C. and Walters, D. L. (2018).** Percutaneous Transvenous Mitral Valve-in-Valve Implantation Using Commercially Available Transcatheter Valve. *First Australian Experience. Heart Lung Circ* 27(4): e42–e45.
- Putrino, A. L., Roper, D., Raffel, C. O. and Walters, D. L. (2018).** Deformation of Stabilization Arch Following Post-Dilatation of Symetis ACURATE Neo Aortic Bioprosthesis. *JACC Cardiovasc Interv* 11(6): 605–606.
- Rickard, C. M., Marsh, N., Webster, J., Runnegar, N., Larsen, E., McGrail, M. R., Fullerton, F., Bettington, E., Whitty, J. A., Choudhury, M. A., Tuffaha, H., Corley, A., McMillan, D. J., Fraser, J. F., Marshall, A. P. and Playford, E. G. (2018).** Dressings and securements for the prevention of peripheral intravenous catheter failure in adults (SAVE): a pragmatic, randomised controlled, superiority trial. *Lancet* 392(10145): 419–430.
- Roll, M. A., Kuys, S., Walsh, J. R., Tronstad, O., Ziegenfuss, M. D. and Mullany, D. V. (2018).** Long-Term Survival and Health-Related Quality of Life in Adults After Extra Corporeal Membrane Oxygenation. *Heart Lung Circ.* 10.1016/j.hlc.2018.06.1044
- Rossano, J. W., Cherikh, W. S., Chambers, D. C., Goldfarb, S., Hayes, D., Jr., Khush, K. K., Kucheryavaya, A. Y., Toll, A. E., Levvey, B. J., Meiser, B. and Stehlik, J. (2018).** The International Thoracic Organ Transplant Registry of the International Society for Heart and Lung Transplantation: Twenty-first pediatric heart transplantation report-2018; Focus theme: Multiorgan Transplantation. *J Heart Lung Transplant* 37(10): 1184–1195.
- Sahebian, A., Pandeya, N., Chambers, D. C., Soyer, H. P. and Green, A. C. (2018).** High prevalence of skin cancers and actinic keratoses in lung transplant recipients. *J Heart Lung Transplant* 37(3): 420–422.
- Saxon, C., Fulbrook, P., Fong, K. M. and Ski, C. F. (2018).** High-risk respiratory patients' experiences of bronchoscopy with conscious sedation and analgesia: A qualitative study. *J Clin Nurs* 27(13–14): 2740–2751.
- Schwarz, M., Ward, E. C., Cornwell, P., Coccetti, A. and Kalapac, N. (2018).** Evaluating the Feasibility and Validity of Using Trained Allied Health Assistants to Assist in Mealtime Monitoring of Dysphagic Patients. *Dysphagia*. 10.1007/s00455-018-9947-y
- See Hoe, L. E., McGiffin, D. and Fraser, J. F. (2018).** Untapped potential in Australian Hospitals for organ donation after circulatory death. *Med J Aust* 208(6): 276.

- Sekar, S., Wu, X., Friis, T., Crawford, R., Prasad, I. and Xiao, Y. (2018).** Saturated fatty acids promote chondrocyte matrix remodeling through reprogramming of autophagy pathways. *Nutrition* 54: 144–152.
- Shao, J., Zhou, Y., Lin, J., Nguyen, T. D., Huang, R., Gu, Y., Friis, T., Crawford, R. and Xiao, Y. (2018).** Notch expressed by osteocytes plays a critical role in mineralisation. *J Mol Med (Berl)* 96(3–4): 333–347.
- Sherrard, L. J. and Bell, S. C. (2018).** Lower airway microbiota for ‘biomarker’ measurements of cystic fibrosis disease progression? *Thorax* 73(11): 1001–1003.
- Shetty, A., Macdonald, S. P., Keijzers, G., Williams, J. M., Tang, B., de Groot, B., Thompson, K., Fraser, J. F., Finfer, S., Bellomo, R. and Iredell, J. (2018).** Review article: Sepsis in the emergency department – Part 2: Investigations and monitoring. *Emerg Med Australas* 30(1): 4–12.
- Sim, E. H., Yang, I. A., Wood-Baker, R., Bowman, R. V. and Fong, K. M. (2018).** Gefitinib for advanced non-small cell lung cancer. *Cochrane Database Syst Rev* 1: CD006847.
- Simmonds, N. J., Sherrard, L. J. and Bell, S. C. (2018).** Cystic Fibrosis in "Essentials of Clinical Pulmonology". Eds Shah, P., Herth, J. F., Lee, Y. C. G. and Criner, G. J. Pages 329–351.
- Sladden, T. M., Yerkovich, S., Grant, M., Zhang, F., Liu, X., Trotter, M., Hopkins, P., Linhardt, R. J. and Chambers, D. C. (2018).** Endothelial Glycocalyx Shedding Predicts Donor Organ Acceptability and Is Associated with Primary Graft Dysfunction in Lung Transplant Recipients. *Transplantation*. 10.1097/TP.0000000000002539
- Sreevatsav Adiraju, S. K., Shekar, K., Fraser, J. F., Smith, M. T. and Ghassabian, S. (2018).** An improved LC-MS/MS method for simultaneous evaluation of CYP2C9, CYP2C19, CYP2D6 and CYP3A4 activity. *Bioanalysis* 10(19): 1577–1590.
- Stehlik, J., Chambers, D. C., Zuckermann, A., Mehra, M. R. and Khush, K. K. (2018).** Increasing complexity of thoracic transplantation and the rise of multiorgan transplantation around the world: Insights from the International Society for Heart and Lung Transplantation Registry. *J Heart Lung Transplant* 37(10): 1145–1154.
- Stephens, A. F., Busch, A., Gregory, S. D., Salamonson, R. F. and Tansley, G. (2018).** Temperature Compensated Fibre Bragg Grating Pressure Sensor for Ventricular Assist Devices. *Conf Proc IEEE Eng Med Biol Soc* 2018: 1–4.
- Stockwell, R. E., Wood, M. E., He, C., Sherrard, L. J., Ballard, E. L., Kidd, T. J., Johnson, G. R., Knibbs, L. D., Morawska, L., Bell, S. C. and Group, C. F. C. A. (2018).** Face Masks Reduce the Release of Pseudomonas aeruginosa Cough Aerosols When Worn for Clinically Relevant Periods. *Am J Respir Crit Care Med* 198(10): 1339–1342.
- Sutt, A. L., Anstey, C. M., Caruana, L. R., Cornwell, P. L. and Fraser, J. F. (2018).** Corrigendum to Ventilation distribution and lung recruitment with speaking valve use in tracheostomised patient weaning from mechanical ventilation in intensive care [Journal of Critical Care 40 (2017) 164–170]. *J Crit Care* 48: 481.
- Takashima, M., Schults, J., Mihala, G., Corley, A. and Ullman, A. (2018).** Complication and Failures of Central Vascular Access Device in Adult Critical Care Settings. *Crit Care Med* 46(12): 1998–2009.
- Tang, M., Price, T. J., Shapiro, J., Gibbs, P., Haller, D. G., Arnold, D., Peeters, M., Segelov, E., Roy, A., Tebbutt, N., Pavlakis, N., Karapetis, C. and Burge, M. (2018).** Adjuvant therapy for resected colon cancer 2017, including the IDEA analysis. *Expert Rev Anticancer Ther* 18(4): 339–349.
- Tarique, A. A., Sly, P. D., Cardenas, D. G., Luo, L., Stow, J. L., Bell, S. C., Wainwright, C. E. and Fantino, E. (2018).** Differential expression of genes and receptors in monocytes from patients with cystic fibrosis. *J Cyst Fibros*. 10.1016/j.jcf.2018.07.012
- Taylor, S. L., Leong, L. E. X., Choo, J. M., Wesselingh, S., Yang, I. A., Upham, J. W., Reynolds, P. N., Hodge, S., James, A. L., Jenkins, C., Peters, M. J., Baraket, M., Marks, G. B., Gibson, P. G., Simpson, J. L. and Rogers, G. B. (2018).** Inflammatory phenotypes in patients with severe asthma are associated with distinct airway microbiology. *J Allergy Clin Immunol* 141(1): 94–103 e115.
- Tyack, Z., Kuys, S., Cornwell, P., Frakes, K. A. and McPhail, S. (2018).** Health-related quality of life of people with multimorbidity at a community-based, interprofessional student-assisted clinic: Implications for assessment and intervention. *Chronic Illn* 14(3): 169–181.
- Tyack, Z., Kuys, S., Cornwell, P., Frakes, K. A. and McPhail, S. M. (2018).** Reproducibility, longitudinal validity and interpretability of the Disease Burden Morbidity Assessment in people with chronic disease. *Chronic Illn* 14(4): 310–325.
- van Netten, J. J., Lazzarini, P. A., Armstrong, D. G., Bus, S. A., Fitridge, R., Harding, K., Kinnear, E., Malone, M., Menz, H. B., Perrin, B. M., Postema, K., Prentice, J., Schott, K. H. and Wraight, P. R. (2018).** Diabetic Foot Australia guideline on footwear for people with diabetes. *J Foot Ankle Res* 11: 2.
- Villalba, C., Jaiprakash, A., Donovan, J., Roberts, J. and Crawford, R. (2018).** Unlocking the Value of Literature in Health Co-Design: Transforming Patient Experience Publications into a Creative and Accessible Card Tool. *Patient* 11(6): 637–648.
- Vohra, J. and Haqqani, H. M. (2018).** The epidemiology and costs of implantable cardioverter-defibrillator therapy in Australia. *Med J Aust* 209(3): 116–117.
- Walsh, J. R. and Hopkins, P. M. A. (2018).** Sarcopenia in lung transplant candidates: A novel biomarker to estimate skeletal muscle mass. *Clin Transplant* 32(3): e13200.

TPCH Publications continued...

Wangchuk, P., Apte, S. H., Smout, M. J., Groves, P. L., Loukas, A. and Doolan, D. L. (2018). Defined Small Molecules Produced by Himalayan Medicinal Plants Display Immunomodulatory Properties. *Int J Mol Sci* 19(11). 10.3390/ijms19113490

Wann, A., Tully, P. A., Barnes, E. H., Lwin, Z., Jeffree, R., Drummond, K. J., Gan, H. and Khasraw, M. (2018). Outcomes after second surgery for recurrent glioblastoma: a retrospective case-control study. *J Neurooncol* 137(2): 409-415.

Wee, B. A., Tai, A. S., Sherrard, L. J., Ben Zakour, N. L., Hanks, K. R., Kidd, T. J., Ramsay, K. A., Lamont, I., Whiley, D. M., Bell, S. C. and Beatson, S. A. (2018). Whole genome sequencing reveals the emergence of a *Pseudomonas aeruginosa* shared strain sub-lineage among patients treated within a single cystic fibrosis centre. *BMC Genomics* 19(1): 644.

Wei, F., Liu, G., Guo, Y., Crawford, R., Chen, Z. and Xiao, Y. (2018). Blood prefabricated hydroxyapatite/tricalcium phosphate induces ectopic vascularized bone formation via modulating the osteoimmune environment. *Biomater Sci* 6(8): 2156-2171.

Wiemers, P. D., Marney, L., Yadav, S., Tam, R. and Fraser, J. F. (2018). An Overview of Indigenous Australian Disadvantage in Terms of Ischaemic Heart Disease. *Heart Lung Circ* 27(11): 1274-1284.

Wong, W. K. T., Kirby, E., Broom, A., Sibbritt, D., Francis, K., Karapetis, C. S., Karikios, D., Harrup, R. and Lwin, Z. (2018). A mixed methods analysis of experiences and expectations among early-career medical oncologists in Australia. *Asia Pac J Clin Oncol* 14(5): e521-e527.

Wong, W. T., Broom, A., Kirby, E. and Lwin, Z. (2018). What lies beneath? Experiencing emotions and caring in oncology. *Health (London)*: 1363459318800168.

Wood, M. E., Stockwell, R. E. and Bell, S. C. (2018). Reply to: Use of Masks in Cystic Fibrosis Patients. *Am J Respir Crit Care Med*. 10.1164/rccm.201808-1476LE

Wood, M. E., Stockwell, R. E., Johnson, G. R., Ramsay, K. A., Sherrard, L. J., Jabbour, N., Ballard, E., O'Rourke, P., Kidd, T. J., Wainwright, C. E., Knibbs, L. D., Sly, P. D., Morawska, L. and Bell, S. C. (2018). Face Masks and Cough Etiquette Reduce the Cough Aerosol Concentration of *Pseudomonas aeruginosa* in People with Cystic Fibrosis. *Am J Respir Crit Care Med* 197(3): 348-355.

Worboys, T., Brassington, M., Ward, E. C. and Cornwell, P. L. (2018). Delivering occupational therapy hand assessment and treatment sessions via telehealth. *J Telemed Telecare* 24(3): 185-192.

Wrigley, C., Straker, K., Nusem, E., Fraser, J. F. and Gregory, S. D. (2018). Nursing Challenges in Interactions With Patients Receiving Mechanical Circulatory and Respiratory Support. *J Cardiovasc Nurs* 33(5): E10-E15.

Wu, E. L., Nestler, F., Kleinheyer, M., Stevens, M. C., Pauls, J. P., Fraser, J. F. and Gregory, S. D. (2018). Pulmonary Valve Opening With Two Rotary Left Ventricular Assist Devices for Biventricular Support. *Artif Organs* 42(1): 31-40.

Yang, I. A. and Moodley, Y. (2018). How do new molecular tools apply to my clinical practice? *Respirology* 23(11): 991-992.

Zhang, Y., Shen, J., Simone, C. B., 2nd, Cappuzzo, F., Fong, K. M., Rosell, R., Chang, J. Y., Ampollini, L., Choi, J. I., He, J., Jiang, T. and Written on behalf of, A. M. E. L. C. C. G. (2018). How to optimize the treatment strategy for patients with EGFR-mutant stage IA lung adenocarcinoma: an international multidisciplinary team. *J Thorac Dis* 10(6): 3883-3890.

Zhou, Y., Huang, R., Fan, W., Prasadam, I., Crawford, R. and Xiao, Y. (2018). Mesenchymal stromal cells regulate the cell mobility and the immune response during osteogenesis through secretion of vascular endothelial growth factor A. *J Tissue Eng Regen Med* 12(1): e566-e578.

The background of the entire page is a blurred photograph of laboratory equipment. In the foreground, there are several multi-well plates in red, yellow, and green. Numerous small, clear vials with white caps are arranged in rows on these plates. Some vials have labels with text like '12H', '48', and '6/2019'. The background is out of focus, showing more of the same equipment and a hint of a blue surface at the bottom right.

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