

Royal Brisbane and Women's Hospital

RBWH Research Report 2024

Internal Medicine and Emergency Services

Metro North Health





Metro North Health acknowledges the Traditional Custodians of the Land upon which we live, work and walk, and pay our respects to Elders both past and present.

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Internal Medicine and Emergency Services



Professor Keshwar Baboolal Executive Director Internal Medicine Services

Internal Medicine and Emergency Services (IMES) has continued to support a strong culture of clinician-led, interdisciplinary and collaborative research. As the largest service line within the Royal Brisbane and Women's Hospital, IMES is dedicated to improving health through excellence in research, clinical partnerships and care delivery.

IMES continues to build strong collaborative partnerships with world-leading researchers and research facilities including QIMR Berghofer Medical Research Institute, Conjoint Internal Medicine Laboratory, Metro North Healthcare facilities and universities.

IMES congratulates four candidates who successfully completed their PhD's in 2023 and delivered significant research in the areas of Cardiology, Infectious Diseases and Kidney Health.

In 2023, IMES actively participated in research funded by over 102 financial grants totally in excess of \$144 million dollars. Grants commencing in 2023 included a focus on how the Epstein-Barr virus infection can lead to multiple sclerosis and a new model of care for tackling heart attacks with First Nations Australians.

Over 60 clinician-led research topics, clinical drug trials and device trials were facilitated by lead investigators within IMES in 2023 and included a focus on biomarkers of pulmonary nodules and comparing glycaemic outcomes of digital and non-digital hospitals.

IMES is committed to positively influencing the social, cultural and economic determinants of health through research activities specifically focused on our Aboriginal and/or Torres Strait Islander People. Current projects investigating the prevalence of coronary artery disease in Emergency Department presentations with suspected acute coronary syndrome and stopping acute rheumatic fever infections are aimed at closing the gap on healthcare outcomes.

IMES has received local and international recognition for its significant contributions within research. 2023 RBWH Quality Awards Recognising Remarkable Initiative and Excellence in Service (QuARRIES) Overall Superior Quality Achiever award was presented to the Hepatology team for their work on palliative care in advanced cirrhosis. Additional awards and achievements include Fellowship positions, UQ Faculty of Medicine Award – Collaborator of the Year, and European Society of Cardiology Heart Failure Association Ambassador. We congratulate Professor David Reutens for being named a Stanford/Elsevier Top 2% Scientist in 2023, falling in the top 2% of the most cited scientists across the globe.

IMES has continued to show a strong commitment to improving healthcare outcomes and in 2023 contributed to 278 journal publications both nationally and internationally. The expertise of IMES clinical leads was also showcased as keynote speakers at national and international conferences and symposia.

On behalf of the IMES Executive team, I would like to commend and thank IMES staff for their commitment and continued contributions to research that supports healthcare into the future.

Department of Cardiology

Research Highlights

The cardiology department has a busy clinical trials research programme. This includes Dr Chris Hammett and Professor John Atherton being the national lead investigators for the OCEANIC AF and FINEARTS-HF trials respectively. The RBWH site was the worldwide top recruiting site for the OCEANIC AF trial, and the national top recruiting site for the LIBREXIA ACS (site-PI Chis Hammett), OCEAN(a) (site-PI Chris Hammett) and FINEARTS-HF trials. This is a tribute to the hard-working study coordinators and cardiology registrars, who support these studies.

The cardiology department also has a broad investigator-driven research programme, with two further PhDs awarded in 2024 to candidates supervised by RBWH Cardiology staff.

The **Practical Implementation Of advaNcEd Echocardiography (PIONEER) Research Group** are evaluating how novel echocardiographic technologies can value-add on top of standard echocardiography. Associate Professor Sandhir Prasad was awarded a Metro North Clinician Research Fellowship (2022-2025) to undertake the ongoing Echocardiography Guided Prognosis Following Myocardial Infarction: Redefining Risk Stratification to Improve Patient Outcomes (ECHO Guide Study). This body of work is leading to presentations in international meetings and publications in high-impact journals. This will inform risk stratification following myocardial infarction. Ms Ada Lo is nearing the final stages of her PhD. Ada evaluated novel echocardiographic modalities in the diagnosis and assessment of hypertrophic cardiomyopathy, with her studies providing novel insights into the mechanism of dynamic obstruction in hypertrophic cardiomyopathy and demonstrating the value of multiparametric models to distinguish different causes of left ventricular hypertrophy and distinguish genotype positive and negative hypertrophic cardiomyopathy family members. Dr Daniel Lancini was awarded his PhD in 2024, which identified predictors of new-onset atrial fibrillation in the setting of critical illness and following myocardial infarction, and evaluated the diagnostic accuracy of cardiac biomarkers in patients with atrial fibrillation associated with emergency chest pain presentations. This led to a number of high-impact publications.

The **Cardiovascular Telemedicine Program** continues to deliver high-quality cardiac investigations to rural and regional sites and continues to expand its reach to other centres throughout Queensland. This programme has reduced waiting times, increased access (especially for Indigenous patients), decreased inequity and improved service quality for regional centres. The feasibility of robot-assisted echocardiography is undergoing further evaluation.

We have unique cardiac obstetric (collaboration with Obstetric Medicine/ IMAC) and cardiac genetic (collaboration with GHQ) services receiving statewide referrals and undertaking collaborative research. Other research interests include chest pain evaluation (collaboration with ETC/ IMAC) and using salivary biomarkers to manage heart failure. The *Accelerated Chest pain Risk Evaluation (ACRE)* programme has been actively translated into clinical practice throughout Queensland. We contribute to the Queensland Cardiac Outcomes Registry (QCOR), which evaluates the quality of healthcare in patients receiving interventional, electrophysiology, pacing, heart failure, and cardiac rehabilitation services: 2023 QCOR Annual Report (health.qld.gov.au). The interventional component of QCOR is now contributing to the National Cardiac Registry: NCR-Annual-Report-2023.pdf (nationalcardiacregistry.org.au).

Successful Research Higher Degree candidates in 2024

Name	Title	Month Competed	Affiliated University	Summary
Dr Daniel Lancini (PhD)	Atrial Fibrillation in Critical Care	February 2024	University of Queensland	This programme of research investigated the drivers and clinical impact of atrial fibrillation (AF) in 3 unique critical care settings. Amongst ICU admissions with new onset AF, recurrent AF diagnoses post discharge were seen in nearly 1/3 of patients, and AF burden in ICU was found to be a novel powerful predictor of subsequent AF diagnoses. The role for anticoagulation in patients with critical illness related new-onset AF requires further research. AF burden in ICU was primarily associated with chronic cardiovascular disease rather than acute illness-related factors, informing understanding of the mechanism of this common phenomenon. These findings were published in <i>Europace</i> and

Name	Title	Month Competed	Affiliated University	Summary
				<i>Cardiology</i> journals. Amongst emergency chest pain presentations undergoing workup for myocardial infarction (MI), the concurrent presence of AF was found to significantly reduced the specificity of serial troponin measurement for the diagnosis of Type 1 MI. AF-specific thresholds may improve overall diagnostic accuracy. This research was published in <i>European Heart Journal: Acute Cardiovascular Care.</i> Amongst patients admitted to coronary care with MI, 7% were found to have a new diagnosis AF after median 3.8 years follow up. Furthermore, minimal left atrial (LA) volume was found to be the strongest echocardiographic predictor of AF, outperforming the conventional metric of maximal LA volume. These findings were published in <i>Echocardiography</i> .
Dr Andre Conradie (PhD)	Percutaneous coronary intervention practice in Australia: Assessing predictors of outcome and sex differences in a National Outcomes Registry (GCOR)	November 2024	University of Queensland	This body of work demonstrated that although there were differences between men and women undergoing percutaneous coronary intervention (PCI), the 30-day outcomes were similar for overall mortality and major adverse cardiac events (MACE). There were however higher rates of unplanned cardiac readmissions at 1 year in women. Adherence for statins and antiplatelet therapy at 1-year following PCI was associated with significantly lower rates of events where the percent was percent.
	Tregistry (GCOX)			subsequent MACE and mortality, and women had significantly lower rates of adherence to most classes of drugs compared to men. Finally, health-related quality of life was associated with subsequent mortality and MACE following PCI, and not capturing quality of life measures may represent a missed opportunity to identify high-risk patients who may benefit by targeted interventions to improve clinical outcomes.

Research Awards and Achievements

Recipient (RBWH staff in bold)	Award	Event	
Sandhir Prasad	Metro North Clinician Research Fellowship (2022-2025)		
John Atherton	European Society of Cardiology Heart Failure Association Ambassador (2023-2024)		

Research Grants

Investigator Names (RBWH staff in bold)	RBWH Departments / Research Groups	Research Project Title	Granting Body	Total Awarded (whole all years)	Length of Awards in years and years active
S Prasad, W Parsonage, J Atherton	Cardiology	Machine Learning to Predict Survival Following Myocardial Infarction	NHF Vanguard Grant	\$69,000	1 year, 2024-2025
R Maddison, C Sullivan, B Oldenburg, L Woods, Y Zhang, J Atherton, A Driscoll, J Spinks, R Vasa, G Abbott, J Rawstorn, H Koorts, R Oqueli.	Cardiology	Digital-enabled solutions to improve healthcare delivery: Transforming outcomes for heart failure in Australia (SMART; Self-Management and Remote Technologies)	MRFF 2023 Cardiovascular Health Mission (No. MRF2033478)	\$945,530	2 years, 2024-2026

Investigator Names (RBWH staff in bold)	RBWH Departments / Research Groups	Research Project Title	Granting Body	Total Awarded (whole all years)	Length of Awards in years and years active
C Chow, T Shaw, A Godinho, G Hillis, G Luscombe, S Marschner, L Laranjo, J Verjans, S Jan, A Cass, D Chew, M Makeham, M Sarkies, N Kangaharan, J Atherton (listed as AIA as he was CI on another application in this stream)	Cardiology	CARDIOvascular support for patients after disCHARGE - CardioCHARGE	MRFF 2023 Cardiovascular Health Mission (No. MRF2035227)	\$2,995,587	4 years, 2024-2028
M Barras, N Falconer, W Cottrell, K Robertson, W Wang, A Wilkinson, J Miles, J Atherton, C Snoswell, V Bryce, I Coombes, S Carson, A Jones, L Marshman	Cardiology and Pharmacy	PRECARD: Reducing hospital re-admission for high-risk CARDiology patients	MRFF 2022 Quality, Safety and Effectiveness of Medicine Use and Medicine Intervention by Pharmacists	\$1,499,666	4 years, 2023-2026
J Ingles, D MacArthur, J Skinner, R Weintraub, C Semsarian, J McGaughran, Z Stark, D Zentner, J Atherton, I Konstantinov, O Siggs, I Deveson, R Bagnall, J Vandenberg, B Gray	Genetic Health QLD, Cardiology	The Elusive Hearts Study: Using genomics to diagnose and manage inherited cardiovascular diseases	MRFF 2022 Cardiovascular Health Mission (No. MRF2024269)	\$1,499,286.00	3 years, 2023-2025
A Driscoll, A Hutchinson, L Orellana, J Atherton, R Audehm, A Beauchamp, P Newton, E Zomer, G Lowe, S Cartledge, A Pereira-Salgado, M Pollock	Cardiology	SAFE-HF - tranSlating heArt Failure guidElines into practice: a RCT of a Nurse Practitioner primary care service	MRFF 2022 Clinician Researchers - Nurses Midwives and Allied Health (No. MRF2023188)	\$1,488,730.44	4 years, 2023-2026
A Driscoll, A Hutchinson, L Orellana, J Atherton, D Prior, C Reid, C De Pasquale, P Newton, R Audehm, E Zomer	Cardiology	I-HEART – Implementation of HEArt failure guidelines in Regional AusTralia top up funding	HCF Foundation	\$319,000	3 years, 2022-2025
N Palpant, A Mallett, T Yanes, S Shah, A Hill, J McGaughran , D Fatkin, J Ingles, J Atherton , R Bagnall, R Bryson-Richardson, A Combes, R Harvey, Z Stark, M Boden	Genetic Health QLD, Cardiology	TRIAGE: A disease agnostic computational and modelling platform to accelerate variant classification	MRFF 2021 Genomics Health Futures Mission (No. MRF2016033)	\$2,997,498.50	3 years, 2022-2024
S Shah, T Yanes, J McGaughran , K Wallis, D Bunker, J Atherton , N Wray, H Akbar, A Henders, RM Villani, K Greaves, D Mehta	Genetic Health QLD, Cardiology	Preparing Australia for use of genomics in prevention of heart disease: Focus on South Asian Australians	MRFF 2021 Genomics Health Futures Mission (No. MRF2015961)	\$928,898.92	2 years, 2022-2024

Investigator Names (RBWH staff in bold)	RBWH Departments / Research Groups	Research Project Title	Granting Body	Total Awarded (whole all years)	Length of Awards in years and years active
C Chow, G Hillis, D Brieger, A Sverdlov, J Atherton, L Thomas, R Lindley, C Ferguson, PJ Devereaux, D Conen	Cardiology	Anticoagulation for Stroke Prevention In patients with Recent Episodes of perioperative Atrial Fibrillation after noncardiac surgery - The ASPIRE-AF trial	MRFF 2021 International Clinical Trial Collaborations ICTC 21-1 (No. MRF2015330)	\$1,816,175.10	5 years, 2022-2026
D Ford, A Driscoll, A Hutchinson, L Orellana, J Atherton, D Prior, C Reid, C De Pasquale, P Newton, R Audehm, E Zomer	Cardiology	RURAL-HEART- Implementation of Heart failure guidelines in Rural Australia	Primary care Rural Innovative Multidisciplinary Models (PRIMM) Round 2. (No. GO5102)	\$399,938	5 years, 2022-2026
T Briffa, J Redfern, D Chew, J Atherton , G Hillis, S Nicholls, D Brieger, J Rankin, A Maiorana, C Budgeon	Cardiology	Secondary Prevention for All in Need (SPAN) after Type 1 myocardial infarction: a comparative effectiveness randomised trial	Heart Foundation 2020 Secondary Prevention Strategic Grant (No. 105531)	\$999,034	5 years, 2021-2024
A Driscoll, A Hutchinson, L Orellana, J Atherton , D Prior, C Reid, C De Pasquale, P Newton, R Audehm, E Zomer	Cardiology	I-HEART – Implementation of HEArt failure guidelines in Regional AusTralia	NHMRC 2020 Partnership Projects PRC1 (No. 2005589)	\$1,260,000 from NHMRC \$3,000,000 from partners	5 years, 2021-2025
C Punyadeera, K Alexandrov, J Atherton, A Coats, L Cullen, G Dimeski, X Zhang	Cardiology, Emergency Trauma Centre	Biosensor based clinical- decision support for patients with heart failure	NHMRC 2020 Ideas Grant (No. 2002576)	\$691,933	3 years, 2021-2024 (extended)
R Maddison, R Vasa, J Atherton, B Oldenburg, V Kostakos, T Dingler, J Rawstorn, D Kwasnicka	Cardiology	Harnessing information technology to improve self- management behaviours and health outcome in people with heart failure: A smarthome ecosystem Living Lab Study	NHMRC 2020 Ideas Grant (No. 2004316)	\$1,120,226	4 years, 2021-2024
S McPhail, R Justo, W Parsonage , B Auld, A Barnett, S Kularatna, K Eagleson, N White, B Abell, S Bora	Cardiology	CHD LIFE+ family-centered care models supporting long-term neurodevelopment	Medical Research Future Fund Cardiovascular Mission	\$2,997,258	5 years, 2020-2024
Cullen L, Parsonage W, Stephensen L, Mahoney R, Greenslade J, Ihdayhid A, Chew D, Tyack Z, Goodman A, Cramb S, Starmer G, McKivett A, Figtree G, McCreanor V, Hillis G	Emergency Trauma Centre, Cardiology	Picture This: A new model of care for tackling heart attacks with First Nations Australians (The Powerful Pictures Study)	MRFF 2022 Cardiovascular Health Mission (No. MRF2022811)	\$1,488,717	3 Years, 2022-2025

RBWH Department / Research Group Led Research Activity

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Adam Scott	Alice McDonald, Tiffany Roberts, John Atherton, Kristyan Guppy- Coles, James Armstrong, Matthew Johnstone, Paul Scuffham (Griffith)	Tele-Cardiac Investigations to support rural/regional hospitals		
Ada Lo	John Atherton, Kristyan Guppy- Coles, Arnold Ng (PAH), William Wang (PAH), Sandhir Prasad	Evaluation of novel echocardiographic parameters in hypertrophic cardiomyopathy		
Sandhir Prasad	John Atherton, John Younger, Kristyan Guppy-Coles Liza Thomas (Westmead), Tony Stanton (SCUH), James Anderson, Ada Lo, Joanne Sippel, Kym Smith	Left ventricular diastolic dysfunction following myocardial infarction: prevalence, predictors and prognosis		
Sandhir Prasad	John Atherton, Paul Martin, Kristyan Guppy-Coles	Echocardiography Guided Prognosis Following Myocardial Infarction: Redefining Risk Stratification to Improve Patient Outcomes		
Louise Cullen, William Parsonage	Jaimi Greenslade, Louise McCormack	The impact of ImpACT: A protocol to improve emergency chest pain assessment		
Louise Cullen, William Parsonage	Briffa T, Chew D, Knuiman M, Fatovich D, Hickman P, Nedkoff L, Sanfilippo F, Hillis G, Mitra B, Wilkes G, Schneider H, Rankin J, Karnon J, Scanlan S, Stapleton S, Mather V	Is highly-sensitive troponin testing advancing clinical practice, improving outcomes and cost- effective in the investigation and management of chest pain in the Emergency Department?		
Daniel Lancini	Paul Martin, Sandhir Prasad, Louise Cullen, Jaimi Greenslade	Atrial fibrillation in the emergency chest pain presentation		
John Atherton, Chamindie Punyadeera (QUT)	Benjamin Schulz (QUT), Goce Dimeski (QUT), Karam Kostner (Mater), Wandy Chan (TPCH), Kristyan Guppy-Coles	Salivary biomarkers in heart failure		

Collaborative Research Activity Involving RBWH Department / Research Group

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Joseph Selvanayagam (SAHMRI) John Atherton (Site PI; International Steering Committee Member)	Sanjay Prasad, Andrew McGavigan, Graham Hillis, Werner Jung, Laurent Billot, Suchi Grover, John Atherton, John Younger, Paul Martin	Cardiovascular Magnetic Resonance GUIDEd management of mild-moderate left ventricular systolic Heart Failure (CMR GUIDE HF)		27 recruited 22 in follow- up
Tom Marwick (Baker) John Atherton (Site- PI)	Liza Thomas, Andrew Taylor, Andrew Spencer, Andre La Gerche, Con Tam, Sherene Loi, Peter Mollee, John Atherton, Paul Harnett, Sandhir Prasad	Benefit of 2D-strain surveillance in improving cardiovascular outcomes in cancer patients undergoing cardiotoxic chemotherapy		12 in follow- up

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
John Atherton (Site-PI)	Multi-centre clinical trial	A multicentre, randomised, double-blind, parallel-group, placebo-controlled study to evaluate the efficacy and safety of finerenone on morbidity and mortality in participants with heart failure(NYHAII-IV) and left ventricular fraction >40% (FINEARTS-HF)		10 completed follow-up
John Atherton (Site-PI)	Multi-centre clinical trial	A Pivotal Phase 3 Randomised, Placebo- controlled Clinical Study to Evaluate the Efficacy and Safety of the sGC Stimulator Vericiguant/MK-1242 in Adults With Chronic Heart Failure With Reduced Ejection Fraction (VICTOR)		18 completed follow-up
John Atherton (Site-PI)	Database	National Echo Database Australia		
Christopher Hammett (Site-PI)	Multi-centre clinical trial	A Phase 3, Multicentre, Double-blind, Randomized, Placebo-controlled, Parallel- group Study to Investigate the Efficacy and Safety of CSL112 in Subjects with Acute Coronary Syndrome (AEGIS-II)		40 completed follow-up
Christopher Hammett (Site-PI)	Multi-centre clinical trial	A double-blind, Randomized, Placebo- controlled, Multicentre Study Assessing the impact of Olpasiran on Major Cardiovascular Events in Patients with Atherosclerotic Cardiovascular Disease and Elevated Lipoprotein (a) (OCEAN a)		38 screened 30 recruited, continuing in follow-up
Christopher Hammett (Site-PI)	Multi-centre clinical trial	EMPACT-MI A streamlined, multicentre, randomised, parallel group, double-blind placebo-controlled superiority trial to evaluate the effect of EMPAgliflozin on hospitalisation for heart failure and mortality in patients with aCuTe Myocardial Infarction		6 completed follow-up
Christopher Hammett (Site-PI)	Multi-centre clinical trial	A Multicentre, Cross-sectional Study to Characterize the Distribution of Lipoprotein(a) Levels Among Patients With Documented History of Atherosclerotic Cardiovascular Disease (ASCVD)		232 completed follow-up
Christopher Hammett (Site-PI)	Multi-centre clinical trial	A Phase 3 study to investigate the efficacy and safety of the oral factor FXIa inhibitor asundexian (BAY 2433334) compared with apixaban in participants with atrial fibrillation at risk for stroke (OCEANIC AF)		88 recruited and completed follow-up
John Atherton (Site PI)	Multi-centre clinical trial	HERMES: Effects Of Ziltivekimab Versus Placebo On Morbidity And Mortality In Patients With Heart Failure With Mildly Reduced Or Preserved Ejection Fraction And Systemic Inflammation		7 screened 1 recruited
John Atherton (Site PI)	Multi-centre clinical trial	POSEIDON – Prevalence of systemic inflammation in patients with atherosclerotic cardiovascular disease or heart failure		128 recruited

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Christopher Hammett (Site-PI)	Multi-centre clinical trial	An interventional, randomised, parallel- group, double-blind, placebo-controlled, multi-national cardiovascular outcome trial designed to evaluate the effects of ziltivekimab15mg versus placebo added to standard of care, on CV outcomes in participants with AMI and angiographic evidence of type 1 MI. (ARTEMIS)		5 recruited, continuing in follow-up
Christopher Hammett (Site-PI)	Multi-centre clinical trial	A Phase 3, multicentre, randomised, double-blind, placebo-controlled, parallel group, event-driven, superiority, group sequential study to evaluate the efficacy and safety of milvexian in participants enrolled with 7 days of an ACS. (LIBREXIA ACS)		36 recruited, continuing in follow-up
Christopher Hammett (Site-PI)	Multi-centre clinical trial	A Phase 3, randomised, double-blind, double-dummy, parallel group, active- controlled study to evaluate the efficacy and safety of milvexian, an oral factor Xia Inhibitor, versus apixaban in participants with atrial fibrillation (LIBREXIA AF)		28 recruited, continuing in follow-up
	Multi-centre clinical trial	A Phase 3, Randomized, Double-Blind, Placebo-Controlled Study to Investigate the Effect of Lepodisiran on the Reduction of Major Adverse Cardiovascular Events in Adults with Elevated Lipoprotein(a) who have Established Atherosclerotic Cardiovascular Disease or Are at Risk for a First Cardiovascular Event – ACCLAIM- Lp(a)		16 screened 14 recruited, continuing follow-up

Research Publications

Authors

Investigator	ORCID ID
John Atherton	https://orcid.org/0000-0003-2271-578X
Kristyan Guppy-Coles	https://orcid.org/0000-0002-2928-2983
Christopher Hammett	https://orcid.org/0000-0002-0931-9486
Daniel Lancini	https://orcid.org/0000-0002-2131-0628
Ada Lo	https://orcid.org/0000-0002-4397-7618
Louise McCormack	https://orcid.org/0009-0004-4433-2805
William Parsonage	https://orcid.org/0000-0002-0223-5378
Sandhir Prasad	https://orcid.org/0000-0002-8681-9425

Publications in 2024

Journal Articles (RBWH staff or consumers in bold)

Abell B, Rodwell D, Eagleson KJ, Auld B, Bora S, Kasparian NA, Justo R, **Parsonage W**, McPhail SM. Neurodevelopmental follow-up care pathways and processes for children with congenital heart disease in Australia. *Pediatr Res* 2024 Nov 23. doi: 10.1038/s41390-024-03722-2

Aboud L, Tanner H, Parsonage W, Lust K, Callaway L. Haemorrhagic and thromboembolic outcomes in pregnant patients with mechanical heart valves who undergo interruption of anticoagulation for birth - A case series. *Aust N Z J Obstet Gynaecol* 2024 Nov 4. doi: 10.1111/ajo.13897

Journal Articles (RBWH staff or consumers in bold)

Perera M, Halahakone U, Senanayake S, Kularatna S, **Parsonage W**, Yates P, Singh GK. Components of home-based palliative and supportive care for adults with heart failure: A scoping review. *Palliat Med* 2025 Jan;39(1):86-98. doi: 10.1177/02692163241290350

Xia Q, Senanayake SJ, Kularatna S, Brain D, McPhail SM, **Parsonage W, Eastgate M,** Barnes A, Brown N, Carter HE. Costeffectiveness analysis of microwave ablation versus robot-assisted partial nephrectomy for patients with small renal masses in Australia. *Urol Oncol* 2025 Jan;43(1):62.e15-62.e26. doi: 10.1016/j.urolonc.2024.09.016

Toprak B, Solleder H, Di Carluccio E, **Greenslade JH, Parsonage WA**, Schulz K, **Cullen L**, Apple FS, Ziegler A, Blankenberg S; Artificial Intelligence in Suspected Myocardial Infarction Study (ARTEMIS) group. Diagnostic accuracy of a machine learning algorithm using point-of-care high-sensitivity cardiac troponin I for rapid rule-out of myocardial infarction: a retrospective study. *Lancet Digit Health* 2024 Oct;6(10):e729-e738. doi: 10.1016/S2589-7500(24)00191-2

Dang T, Chan W, Khawaja S, Fryar J, Gannon B, Kularatna S, **Parsonage W**, Ranasinghe I. Hospital costs for unplanned readmissions within 30 days of hospitalisations with heart failure, Australia, 2013-2017: a retrospective cohort study. *Med J Aust* 2024 Sep 16:221(6):317-323. doi: 10.5694/mia2.52424. Epub 2024 Aug 27. PMID: 39188208

Abell B, Rodwell D, Eagleson KJ, **Parsonage W**, Auld B, Bora S, Kasparian NA, Justo R, McPhail SM. "It's more than just a conversation about the heart": exploring barriers, enablers, and opportunities for improving the delivery and uptake of cardiac neurodevelopmental follow-up care. *Front Pediatr* 2024 May 24;12:1364190. doi: 10.3389/fped.2024.1364190

Ramlakhan KP, Roos-Hesselink JW, **Basso T, Greenslade J,** Flint RB, Krieger EV, Shotan A, Budts W, De Backer J, Hall R, Johnson MR, **Parsonage WA**; ROPAC Investigators. Perinatal outcomes after in-utero exposure to beta-blockers in women with heart disease: Data from the ESC EORP registry of pregnancy and cardiac disease (ROPAC). *Int J Cardiol* 2024 Sep 1;410:132234. doi:10.1016/j.ijcard.2024.132234

Cullen L, Greenslade J, Parsonage W, Stephensen L, Smith SW, Sandoval Y, Ranasinghe I, Gaikwad N, Khorramshahi Bayat M, Mahmoodi E, Schulz K, Than M, Apple FS; SAMIE and SEIGE investigators. Point-of-care high-sensitivity cardiac troponin in suspected acute myocardial infarction assessed at baseline and 2 h. *Eur Heart J* 2024 Jul 21;45(28):2508-2515. doi: 10.1093/eurheartj/ehae343

Senanayake S, Uchil R, Sharma P, **Parsonage W**, Kularatna S. Mapping Kansas City cardiomyopathy, Seattle Angina, and Minnesota living with heart failure to the MacNew-7D in patients with heart disease. *Qual Life Res* 2024 Aug;33(8):2151-2163. doi: 10.1007/s11136-024-03676-2

Piccini JP, Patel MR, Steffel J, Ferdinand K, Van Gelder IC, Russo AM, Ma CS, Goodman SG, Oldgren J, **Hammett CJ**, Lopes RD, Akao M, De Caterina R, Kirchhof K, Gorog GA, Hemels M, Rienstra M, Jones WS, Harrington J, Lip G, Ellis SJ, Rockhold FW, Neumann C, Alexander JH, Viethen T, Hung J, Coppolecchia R, Mundl H, Caso C, for the OCEANIC-AF Steering Committee and Investigators Asundexian versus Apixaban in Patients with Atrial Fibrillation *N Engl J Med* 2025; 392(1): 23-32. DOI: 10.1056/NEJMoa2407105

Savage ML, Hay K, Vollbon W, Murdoch DJ, **Hammett CJ**, Crowhurst J, Poon K, Poulter R, Walters DL, Denman R, Ranasinghe I, Raffel OC. Differences between sexes in STEMI treatment and outcomes with contemporary primary PCI. *Catheter Cardiovasc Interv* 2024; 104(5):934-44. DOI: 10.1002/ccd.31206

Prasad SB, Chan NI, Krishnan A, Martin P, Stewart P, Mallouhi M, Vollbon W, **Atherton JJ.** Novel combined echocardiographic score comprising prognostically validated measures of left ventricular size and function to predict long-term survival following myocardial infarction: A proposal to improve risk stratification. *Echocardiography* 2024;41:e15922. doi: 10.1111/echo.15922

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Date	Title	
Feb 2024	Limbic HFpEF National Webinar (Invited Lecture). Topic: Recent clinical guidelines.	
May 2024	Evidence To Practice (E2P) Heart Symposium, Melbourne (Invited Lecture). Topic: Management of chronic CAD – what role for stents?	
May 2024	Evidence To Practice (E2P) Heart Symposium, Melbourne (Invited Workshop Presenter). Topic: Sequencing management in heart failure.	
May 2024	International Clinical Cardiovascular Genetics Conference, Brisbane Convention and Exhibition Centre (Invited Debater). Topic (debate): Patients should be seen in a specialised multidisciplinary clinic- For	
May 2024	Novartis Heart Failure Webinar (Invited Lecture). Topic: Entresto: Evaluating the evidence.	
June 2024	Australian National Cardiovascular Renal Metabolic Conference (CVRM), Sydney (Session Chair).	
June 2024	Australian National Cardiovascular Renal Metabolic Forum (CVRM), Sydney (Invited Plenary Lecture). Topic Heart failure in 2024: What's new? What's next?	
June 2024	HFESA Annual Conference, Brisbane (Keynote Speaker). Topic: Robotic Ultrasound - relieving musculo- skeletal burden in sonography.	
June 2024	2024 Port Douglas Heart Congress, Port Douglas (Invited Lecture). Topic: What Mass is That?	
June 2024	2024 Port Douglas Heart Congress, Port Douglas (Invited Panel Member). Topic: Adult Congenital Heart Disease.	
June 2024	2024 Port Douglas Heart Congress, Port Douglas (Invited Lecture). Topic: Working abroad is not just about travel.	
June 2024	2024 Port Douglas Heart Congress, Port Douglas (Invited Panel Member). Masterclass: Case-base questions and discussion.	
June 2024	2024 Port Douglas Heart Congress, Port Douglas (Invited Lecture). Topic: The evolving interplay between genetics and heart failure.	
June 2024	Cardio-Renal-Metabolic Forum National Webinar, United Clinical (Invited Lecture). Topic: The benefit of SGLT2 inhibitors in patients with heart failure and CKD.	

Keynote or Plenary Lectures given in 2024

June 2024	4th Annual Cardio Summit, W Bangkok Hotel, Bangkok, Thailand (Invited Plenary Lecture). Topic: All set for success? Re-evaluating discharge readiness.		
June 2024	2024 ASKAN Heart Failure Exchange, W Bangkok Hotel, Bangkok, Thailand (Invited Plenary Lecture). Topic: Clarifying considerations in patient management.		
June 2024	Woodland Health Campus (Singapore Government Hospital), Singapore (Invited Lecture). Topic: Illuminating the journey of a HF patient: From admission to post-discharge care.		
June 2024	Khoo Teck Puat Hospital (Singapore Government Hospital), Singapore (Invited Lecture). Topic: Illuminating the journey of a HF patient: From admission to post-discharge care.		
June 2024	Queen Elizabeth II Hospital: HQE II Cardiology Department (Sabah Government Hospital), Kota Kinabalu, Sabah, Malaysia (Invited Lecture). Topic: Early diagnosis for early benefits in HF.		
June 2024	Hilton Hotel, Kota Kinabalu, Sabah, Malaysia (Invited Lecture). Topic: Safeguarding the heart: Comprehensive management of HF with comorbidities.		
June 2024	Pusat Jantung Hospital Umum Sarawak Kota Samarahan (PJHUS) (Sarawak Government Hospital), Kuching, Sarawak, Malaysia (Invited Lecture). Topic: Early diagnosis for early benefits in HF.		
June 2024	Hilton Hotel, Kuching, Sarawak, Malaysia (Invited Lecture). Topic: Safeguarding the heart: Comprehensive management of HF with comorbidities.		
June 2024	Ask the Expert: Pearls and updates in heart failure, Shangri-La at the Fort, Taguig City, Metro Manila, Philippines (Invited Lecture). Topic: Pearls and updates in heart failure management.		
June 2024	Heart Failure Stand Alone Meeting, Shangri-La at the Fort, Taguig City, Metro Manila, Philippines (Invited Plenary Lecture). Topic: Mission: Protection! The empagliflozin value story in heart failure.		
July 2024	National Webinar- Expert Hour: HCM in focus (Meeting Chair and Invited Lecture). Topic: Brief summary of Camzyos data.		
Aug 2024	European Society of Cardiology Congress, Daily Highlights, London, UK (Invited presentation). Topic: Spotlight on Australia and New Zealand Research		
Aug 2024	72nd Annual Scientific Meeting of the Cardiac Society of Australia and New Zealand Heart Failure Satellite Meeting, Perth Convention and Exhibition Centre, Perth (Invited Lecture). Topic: Diastolic stress echocardiography – Where does it sit in 2024?		
Aug 2024	72nd Annual Scientific Meeting of the Cardiac Society of Australia and New Zealand Heart Failure Satellite Meeting, Perth Convention and Exhibition Centre, Perth (Invited Lecture). Topic: DNA and heart failure- Who what and when?		
Sep 2024	GPCE, Brisbane Convention and Exhibition Centre (Invited Lecture). Topic: Obesity: Implications beyond BMI.		
Nov 2024	Massachusetts General Hospital/ Harvard Medical School, Boston, Massachusetts, USA. Cardiology Grand Rounds (Keynote Lecture) Topic: Acute chest pain assessment.		
Nov 2024	2024 Australasian Society for Ultrasound in Medicine Annual Meeting, Brisbane (Invited Lecture). Topic: Approach to Cardiac Masses.		
Nov 2024	2024 Australasian Society for Ultrasound in Medicine Annual Meeting, Brisbane (Invited Lecture). Topic: Sonographer's Approach to Adult Congenital Heart Disease.		
Nov 2024	2024 Australasian Society for Ultrasound in Medicine Annual Meeting, Brisbane (Invited Lecture). Topic: Assessment of diastolic function – Get With The Guidelines		

Department of Clinical Immunology

Research Highlights

We were a founding site for a national study, PROSPECTOR-1, looking at delayed phenotype for penicillin allergy. This trial was named "Prolonged versus single dose in penicillin oral challenge testing: protocols for a pilot and definitive randomised controlled trial (PROSPECTOR-1)", and we recruited 10 patients and recently completed follow up.

The publications associated with this have been completed in January and March 2025.

Going forward, we are actively applying for further research support and hope to participate in multiple trials in 2025.

Collaborative Research Activity Involving RBWH Department / Research Group

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Jason Trubiano	Michael Lane, Luke Droney, Zihao Tan	PROSPECTOR-1 (Prolonged versus single dose in penicillin oral challenge testing: protocols for a pilot and definitive randomised controlled trial)		10

Research Publications

Publications in 2024

Journal Articles (RBWH staff or consumers in bold)

James F, Goh MS, Vogrin S, Ng I, Douglas AP, Holmes NE, et al. (including **Lane MJ**) The Australasian Registry for Severe Cutaneous Adverse Reactions (AUS-SCAR) – Providing a roadmap for closing the diagnostic, patient, and healthcare gaps for a group of rare drug eruptions. World Allergy Organization Journal [Internet]. 2024 [cited 2024 Sep 11];17(8):100936. Available from: https://linkinghub.elsevier.com/retrieve/pii/S193945512400067X.

Department of Clinical Pharmacology

Research Highlights

The Department of Clinical Pharmacology has a number of research focuses, across multiple professional disciplines, reflecting the multidisciplinary makeup of the department. Research staff work collaboratively with the Department of Pharmacy, in areas related to medication safety and the quality use of medicines. Clinical Pharmacology continues to work collaboratively with other hospitals within Metro North Hospital and Health Service (Prince Charles Hospital, Metro North IT) and Brisbane (Princess Alexandra Hospital, University of Queensland and QIMR Berghofer) and nationally, including with NHMRC grants (with multiple universities including University of New South Wales, University of South Australia, Murdoch Children's Research Institute and Curtin University of Technology) and with rural and remote hospitals (Mount Isa and Charleville Hospital).

Research interests continue to include optimising medication use and medication safety, including the impact of digital systems, data linkage and the quality of inpatient diabetes management.

Research Awards and Achievements

Recipient (RBWH staff in bold)	Award	Event
Dr Karen Davies	2024 UQCCR Clinician Researcher of the Year	UQCCR Forum
Dr Karen Davies	Finalist – Professor Joan Webster Nursing and Midwifery Award	2024 Research Excellence Awards (Metro North Health)
Libby McCourt, Sahra Ashley, Anjela Pham-Nguyen, Graeme Best, Emma O'Brien, Kath Losinski, Sian McFarland, Gloria Chui, Rolene Coetzee, Brett Sweeney, Katie Craighead, Nathan McGrath, Steph Hodges, Karen Davies, Ian Coombe	QuARRIE Internal Medicine and Emergency Services	QuARRIE awards

Research Grants

Investigator Names (RBWH staff in bold)	RBWH Departments / Research Groups	Research Project Title	Granting Body	Total Awarded (whole all years)	Length of Awards in years and years active
Assoc Prof Susan Jordan (University of Queensland), Assoc Prof Katrina Spilsbury (Curtin University of Technology), Dr Louise Wilson (University of Queensland), Dr Peter Donovan (RBWH)	Clinical Pharmacology, Internal Medicine and Aged Care	Hysterectomy, Oophorectomy and Long- term chronic Disease - the HOLD study	Australian Government – National Health and Medical Research Council	\$690,005.60	4 years, 2021-2025
Karen Davies	Clinical Pharmacology, Herston Infectious Disease Institute (HeIDI)	Medication Administration Evaluation and Feedback Tool (MAEFT)	MN HeIDI Research Fellowship	\$514,796	4 years, 2022-2025
Karen Davies	Clinical Pharmacology, Herston Infectious Disease Institute (HeIDI)	Implementation of the Medication Administration Evaluation and Feedback Tool (MAEFT): Knowledge Translation	QH Clinician Research Fellowship	\$199,202	3 years, 2023-2025
Karen Davies	Clinical Pharmacology, Herston Infectious Disease Institute (HeIDI)	IMES RBWH Medication Administration Evaluation and Feedback Tool (MAEFT): Implementation	MN SWIFT Grant	\$24,855	6 months, 2024

Investigator Names (RBWH staff in bold)	RBWH Departments / Research Groups	Research Project Title	Granting Body	Total Awarded (whole all years)	Length of Awards in years and years active
Karen Davies	Clinical Pharmacology, Herston Infectious Disease Institute (HeIDI)	IMES RBWH Medication Administration Evaluation and Feedback Tool (MAEFT): Implementation	COH Kick Start Grant	\$11,947	6 months, 2024
Karen Davies	Clinical Pharmacology, Herston Infectious Disease Institute (HeIDI)	Digital Evaluation and Implementation of the Medication Administration Evaluation and Feedback, Tool (MAEFT) at STARS	RBWH Foundation Grant	\$48,198	1 year, 2024-2025
Libby McCourt, Sahra Ashley, Anjela Pham- Nguyen, Graeme Best, Emma O'Brien, Kath Losinski, Sian McFarland, Gloria Chui, Rolene Coetzee, Brett Sweeney, Katie Craighead, Nathan McGrath, Steph Hodges, Karen Davies, Ian Coombes	CAHRLI Innovation Challenge Funding	Better Administration of Medicines for IV use (BAM- IV)	CAHRLI	\$6,800	1 year, 2024

RBWH Department / Research Group Led Research Activity

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Peter Donovan	Clair Sullivan , Jason Pole (University of Queensland), Benjamin Sly (Metro South HHS), Syndia Lazarus , Teyl Engstrom (University of Queensland), Elizabeth McCourt	Comparing Glycaemic Outcomes Of Digital and non-digital hospitals (GOOD)	3	1,942
Karen Davies	Peter Donovan, Ian Coombes, Samantha Keogh, Jed Duff, Karen Hay, Dale Trevor	Medication Administration Evaluation and Feedback Tool (MAEFT): Knowledge Translation	2	7 MN, 1 QH, 7 USA (Facilities)
Karen Davies	Peter Donovan, Ian Coombes, Samantha Keogh, Jed Duff, Karen Hay, Dale Trevor	MN Implementation of the Medication Administration Evaluation and Feedback Tool (MAEFT): Knowledge Translation	2	7 (MN Facilities) 27 CKW, 23 TPCH, 85 Brighton, 229 RBWH (nurses)
Karen Davies	Peter Donovan, Ian Coombes, Samantha Keogh, Jed Duff, Karen Hay, Dale Trevor	Implementation of the Medication Administration Evaluation and Feedback Tool (MAEFT): Knowledge Translation – Internal Medicine Service (IMS)	2	229 (nurses)
Karen Davies	Fanuel Garayi, Shannaen Gilbert, Michelle Crawford	Implementing the Medication Administration Evaluation & Feedback Tool (MAEFT) into Practice - COH	2	85 (nurses)

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Karen Davies	Peter Donovan, Ian Coombes, Samantha Keogh , Jed Duff, Nicola Harper, Natasha Roberts, Melanie Duncan, Dale Trevor	Digital Evaluation and Implementation of the Medication Administration Evaluation and Feedback Tool (MAEFT) at STARS	2	Not yet commenced (nurses)
Elizabeth McCourt	Sidony Miller-Waugh (Mt Isa), Laetitia Hattingh (GCUH), Nadia Zamri (Charleville Hospital), Nazanin Falconer (UQ/PAH), Jacinta Johnson (Uni SA / SA Health), Sally Marotti (Uni SA / SA Health), Megane Lalloo (UQ)	Research Capacity and Culture in Queensland Health Hospitals	2	481
Peter Donovan	Whillier M, Hinton N, Balcerek M, MacLaughlin HL, Jade Eccles- Smith, Emma Whittle (Redcliffe Hospital), Kylie Oliver (Mackay Hospital)	Queensland Inpatient Diabetes Survey	3	172

Collaborative Research Activity Involving RBWH Department / Research Group

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Dr Susan Jordan (University of Queensland)	Prof Sallie-Anne Pearson (University of New South Wales), Dr Nirmala Pandeya (University of Queensland), Assoc Prof Michael Coory (Murdoch Children's Research Institute), Dr Katrina Spilsbury (Curtin University of Technology), Dr Peter Donovan	IMPROVE - Investigating Medication re-Purposing to Reduce risk of OVarian cancer and Extend survival	3	N/A
Benita Suckling	Champika Pattullo, Peter Donovan, Shirley Hu (University of Queensland), Bill Loveday (Medications and Regulations, Queensland Health)	Rates of Opioid Dispensing and Opioid-related Harms 2010- 2018 – The Queensland Experience	3	N/A
	Penny Webb (QIMRB), Dr Katrina Spilsbury (Curtin University of Technology), Martha Hickey (University of Melbourne), Dr Peter Donovan	Hysterectomy, Oophorectomy and Long-term chronic Disease	3	N/A
Benjamin Sly	Clair Sullivan (University of Queensland), Anthony Russell (Princess Alexandra Hospital), Sally Shrapnel (University of Queensland), Peter Donovan	Statewide Inpatient Glycaemic Benchmarking (STING)	3	N/A
Benjamin Sly	Clair Sullivan (University of Queensland), Anthony Russell (Princess Alexandra Hospital), Sally Shrapnel (University of Queensland), Peter Donovan	Statewide Inpatient Glycaemic Dashboard Implementation (STING-DASH)	3	N/A
Elizabeth McCourt	Jacinta Johnson, Libby Roughhead, Michael Barras, Nazanin Falconer, Courtney Hill, Centaine Snoswell, Ian Scott, Hana Amer, Joshua Inglis, Josephine Thomas, Lisa Kalisch, Mirela Prgomet, Sally Marotti, Sharon Goldsworthy, Sven Marxen, Tom Simpson	Evaluating a Collaborative Approach for Reducing harm and optimising Medication outcomes through partnered charting: The CARe- MED study	3	N/A

Research Publications

Authors

Investigator	ORCID ID
Peter Donovan	https://orcid.org/0000-0001-7934-601X
Karen M Davies	https://orcid.org/0000-0003-3510-5227
Elizabeth McCourt	https://orcid.org/0000-0002-9090-3515
Sahra Ashley	https://orcid.org/0000-0002-6629-0157

Publications in 2024

Journal Articles (RBWH staff or consumers in bold)

Ali S, Coory M, **Donovan P** et al. Association between unstable diabetes mellitus and risk of pancreatic cancer. Pancreatology. 2024;24(1). Doi: <u>https://doi.org/10.1016/j.pan.2023.11.009</u>

Karen M Tuesley, Katrina Spilsbury, Penelope M Webb, Sallie-Anne Pearson, **Peter Donovan**, Michael D Coory, Christopher B Steer, Louise M Stewart, Nirmala Pandeya, Melinda M Protani, Suzanne Dixon-Suen, Louise Marquart-Wilson, Susan J Jordan, Use of an emulated trial to investigate the association between use of nitrogen-based bisphosphonates and risk of epithelial ovarian cancer, *International Journal of Epidemiology*, Volume 53, Issue 4, August 2024, dyae108, https://doi.org/10.1093/ije/dyae108

Tuesley, K.M., Webb, P.M., Protani, M.M, **Donovan**, **P** *et al*. Exploring estrogen-related mechanisms in ovarian carcinogenesis: association between bone mineral density and ovarian cancer risk in a multivariable Mendelian randomization study. *Cancer Causes Control* (2024). https://doi.org/10.1007/s10552-024-01926-9

Rachel Hovelroud, Sarah Goh Xiu Ming, Donald S A McLeod, **Peter J Donovan**, Gary Ng, Maree Mungomery, A Case of Enfortumab Vedotin-Associated Diabetic Ketoacidosis With Severe Insulin Resistance in a Nondiabetic Woman, *JCEM Case Reports*, Volume 2, Issue 12, December 2024, Iuae212, <u>https://doi.org/10.1210/jcemcr/luae212</u>

Whillier M, Hinton N, Balcerek M, MacLaughlin HL, **Donovan P**. Queensland Inpatient Diabetes Survey (QuIDS): patient experience survey evaluation. Intern Med J. 2024 Apr;54(4):639-646. doi: 10.1111/imj.16247. Epub 2023 Oct 4. PMID: 37792317.

Keynote or Plenary Lectures given in 2024

Date	Title
November	Dr Elizabeth McCourt Chair for Research Wildcard session at Advanced Pharmacists Australia Medicines
2024	Management Conference 2024. Adelaide, Australia
November	Dr Karen Davies Invited speaker "What Are the Different Central Access Devices in OPAT/HITH
2024	Programs? Pros and Cons" <i>NHMRC Centre of Research Excellence (CRE) RESPOND UQCCR</i>

Department of Endocrinology and Diabetes

Research Highlights

2024 saw the Department of Endocrinology and Diabetes continue to drive clinician-led research, perform clinical trials, and continue collaborations with QIMR Berghofer and the Conjoint Internal Medicine Laboratory.

Clinician-led research continued in fields including diabetes, digital health, thyroid disease and thyroid cancer, vitamin D and calcium metabolism, pituitary disease, adrenal disease, and transgender medicine. Department members collaborated widely with other hospitals, universities, and research institutes within Australia and overseas.

The clinical trials unit has traditional strength in diabetes studies, with ongoing work in large trials for novel agents including the injectables tirzepatide and retatrutide, and the orally administered orforglipron. In addition, the clinical trials unit has expanded into studies for thyroid disease, bone disease, congenital adrenal dysplasia, calcium regulation, and obesity. 2024 saw the continuation of a Clinical Trials fellowship, aiming to deliver clinical trial experience and dedicated research time for recently graduated Endocrinologists, and expansion of our Research Coordinator staffing to accommodate ongoing clinical trials.

The conjoint internal medicine laboratory continued investigating mechanisms of placental thyroid hormone metabolism, making important preliminary discoveries into potential links of thyroid hormone metabolism with diseases of pregnancy including preeclampsia.

Research Awards and Achievements

Recipient (RBWH staff in bold)	Award	Event
Don McLeod	Editorial Board	Thyroid
Don McLeod	Editorial Board	AACE Endocrine Practice
Don McLeod	Editorial Board	JCEM Case Reports
Don McLeod	Member, writing group	American Thyroid Association Treatment Guidelines for Hypothyroidism
Don McLeod	Member, expert group	Therapeutic Guidelines, Bone & Metabolism v3

Research Grants

Investigator Names (RBWH staff in bold)	RBWH Departments / Research Groups	Research Project Title	Granting Body	Total Awarded (whole all years)	Length of Awards in years and years active
Elizabeth Wootton, Don McLeod, Peter Donovan, David Pattison, Roslyn Francis, Muhammed Amjadeen, Louise Campbell, Clement Wong, Louisa Collins, Anita Pelecanos	Endocrinology	F18-choline PET vs conventional imaging for primary hyperparathyroidism: a randomised trial	RACP	\$10,000	2 years, 2024-2025
Elizabeth Wootton, Don McLeod, Peter Donovan, David Pattison, Roslyn Francis, Muhammed Amjadeen, Louise Campbell, Clement Wong, Louisa Collins, Anita Pelecanos	Endocrinology	F18-choline PET vs conventional imaging for primary hyperparathyroidism: a randomised trial	QTFF	\$244,246	3 years, 2024-2026
Elizabeth Wootton	Endocrinology	F18-choline PET vs conventional imaging for primary hyperparathyroidism: a randomised trial	NHMRC	\$140,663	3 years, 2024-2026

Investigator Names (RBWH staff in bold)	RBWH Departments / Research Groups	Research Project Title	Granting Body	Total Awarded (whole all years)	Length of Awards in years and years active
Elizabeth Wootton	Endocrinology	F18-choline PET vs conventional imaging for primary hyperparathyroidism: a randomised trial	RBWH Scholarship	\$120,000	3 years, 2025-2027
Susan Jordan Katrina Spilsbury Peter Donovan	Clinical Pharmacology, Internal Medicine and Aged Care	Hysterectomy, Oophorectomy and Long-term chronic Disease - the HOLD study	NHMRC	\$690,005.60	4 years, 2021-2025
Rachel Neale, David Whiteman, Gunter Hartel, Craig Sinclair, Don McLeod , Mary Waterhouse, Louisa Collins	Endocrinology & Diabetes	Sun-D trial - The effect of high SPF sunscreen application on vitamin D. (APP2006773)	NHMRC	\$1,175,124	4 years, 2021-2024

RBWH Department / Research Group Led Research Activity

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Elizabeth Wootton	Don McLeod, Peter Donovan, David Pattison, Roslyn Francis, Muhammed Amjadeen, Louise Campbell, Clement Wong, Louisa Collins, Anita Pelecanos	F18-choline PET vs conventional imaging for primary hyperparathyroidism: a randomised trial	2	0
Hari Haran	Elizabeth Wootton, Amanda Love, Anna Kuchel	Audit evaluating the management of endocrine health in survivors of adult- onset hormone-sensitive cancers	4	n/a
Peter Donovan	Clair Sullivan, Jason Pole Benjamin Sly, Syndia Lazarus , Teyl Engstrom Elizabeth McCourt	Comparing Glycaemic Outcomes Of Digital and non-digital hospitals (GOOD)	3	1,942
Karen Davies	Peter Donovan, Ian Coombes, Samantha Keogh, Jed Duff, Karen Hay, Dale Trevor	Medication Administration Evaluation and Feedback Tool (MAEFT): Knowledge Translation	2	7 MN, 1 QH, 7 USA (Facilities)
Karen Davies	Peter Donovan, Ian Coombes, Samantha Keogh, Jed Duff, Karen Hay, Dale Trevor	MN Implementation of the Medication Administration Evaluation and Feedback Tool (MAEFT): Knowledge Translation	2	7 (MN Facilities) 27 CKW, 23 TPCH, 85 Brighton, 229 RBWH (nurses)
Karen Davies	Peter Donovan, Ian Coombes, Samantha Keogh, Jed Duff, Karen Hay, Dale Trevor	Implementation of the Medication Administration Evaluation and Feedback Tool (MAEFT): Knowledge Translation – Internal Medicine Service (IMS)	2	229 (nurses)

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Karen Davies	Peter Donovan, Ian Coombes, Samantha Keogh, Jed Duff, Nicola Harper, Natasha Roberts, Melanie Duncan, Dale Trevor	Digital Evaluation and Implementation of the Medication Administration Evaluation and Feedback Tool (MAEFT) at STARS	2	Not yet commenced (nurses)
Peter Donovan	Whillier M, Hinton N, Balcerek M, MacLaughlin HL, Jade Eccles-Smith, Emma Whittle (Redcliffe Hospital), Kylie Oliver (Mackay Hospital)	Queensland Inpatient Diabetes Survey	3	172
Abby Yu	Karen Whitfield, Andrew Hale, Michael D'Emden, Gemma Woodruff, Margaret Whillier, Matthew Seymour	Assessing the impact of preoperative diabetes optimisation on surgical outcomes		90

Collaborative Research Activity Involving RBWH Department / Research Group

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Clare Minahan	Christina Jang	Article title: inHERitABLE TRAITS Performance Potential Profiling: A spotlight on Female Sprint Kayak Athletes	3	0
Susan Jordan	Sallie-Anne Pearson, Nirmala Pandeya, Michael Coory , Katrina Spilsbury, Peter Donovan	IMPROVE - Investigating Medication re-Purposing to Reduce risk of OVarian cancer and Extend survival	3	N/A
Benita Suckling	Champika Pattullo, Peter Donovan, Shirley Hu, Bill Loveday	Rates of Opioid Dispensing and Opioid-related Harms 2010-2018 – The Queensland Experience	3	N/A
Susan Jordan	Penny Webb, Katrina Spilsbury, Martha Hickey, Dr Peter Donovan	Hysterectomy, Oophorectomy and Long-term chronic Disease	3	N/A
Benjamin Sly	Clair Sullivan, Anthony Russell Sally Shrapnel, Peter Donovan	Statewide Inpatient Glycaemic Benchmarking (STING)	3	N/A
Benjamin Sly	Clair Sullivan, Anthony Russell, Sally Shrapnel, Peter Donovan	Statewide Inpatient Glycaemic Dashboard Implementation (STING-DASH)	3	N/A
Sponsor: Eli Lilly	Michael d'Emden, Don McLeod, Peter Donovan, Rachel Johnston	SURPASS-CVOT: The effect of tirzepatide vs dulaglutide on major adverse cardiovascular events in patients with type 2 diabetes	3	48
Sponsor: Eli Lilly	Don McLeod, Peter Donovan, Rachel Johnston	SURMOUNT-MMO: A Phase 3, Randomized, Double-Blind, Placebo-Controlled Study to Investigate the Effect of Tirzepatide on the Reduction of Morbidity and Mortality in Adults with Obesity	3	18
Sponsor: Eli Lilly	Don McLeod, Peter Donovan, Rachel Johnston	ATTAIN-2: orforglipron in patients with type 2 diabetes vs placebo	3	6

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Sponsor: Eli Lilly	Don McLeod, Peter Donovan, Rachel Johnston	TRIUMPH program: retatrutide vs. placebo in patients with overweight/obesity for various sub- indications including type 2 diabetes, obstructive sleep apnoea, and osteoarthritis	3	10
Sponsor: Spruce	Don McLeod, Peter Donovan, Rachel Johnston, Syndia Lazarus	CAHmelia 203 and 204: Tildacerfont for congenital adrenal hyperplasia	3	2
Sponsor: Oliva Newton John Cancer Research Institute	David Pattison, Don McLeod, Lauren Burrage,Rachel Johnston, Peter Donovan	I-FIRST: Redifferentiation for thyroid cancer	3	2
Sponsor: Alexion	Syndia Lazarus	An observational, longitudinal, prospective, long-term registry of patients with hypophosphatasia (HPP)	3	0
Rachel Neale	Waterhouse M, Baxter C, Duarte Romero B, Don McLeod, English DR, Armstrong BK, Ebeling P, Hartel G, Kimlin MG, O'Connell RL, Van Der Pols JC, Venn AJ, Webb PM, Whiteman DC	The D-Health Trial	3	NA
Rachel Neale	David Whiteman, Gunter Hartel, Craig Sinclair, Don McLeod , Mary Waterhouse, Louisa Collins	Sun-D trial	3	NA
Helen Barrett	Jade Eccles-Smith, Susan de Jersey, Marloes Dekker Nitert, David McIntyre, Josefine Laurie	Assessing hyperglycaemia in women pregnant after bariatric surgery	3	2
Helen Barrett	Jade Eccles-Smith, Marloes Dekker Nitert, Alison Griffin	Outcomes of pregnancies delivering 2013-2018, after previous bariatric surgery: A data- linkage study	3	NA
roline Bachmeier	Jacobus Ungerer, Carel Pretorius, Brett McWhinney, Warrick Inder, Michael D'Emden, Karin Lust, Hayden Homer, Akwasi Amoako, Christina Jang	Androgen levels in female participants with polycystic ovarian syndrome – measured by liquid chromatography tandem mass spectrometry versus immunoenzymatic assay	0	
Emily Brooks	Christina Jang, Ann McCormack, Ashish Munsif, Carmela Caputo, Warrick Inder, Viral Chikani	A randomised trial of prophylactic fluid restriction in prevention of delayed hyponatraemia following pituitary surgery	3	

Research Publications

Authors

Investigator	ORCID ID		
Elizabeth Wootton	https://orcid.org/0000-0003-2869-1918	Kerry Richard	http://orcid.org/0000-0002-4241-5250
Christina Jang	https://orcid.org/0000-0003-3086-9818	Don McLeod	https://orcid.org/0000-0003-1131-020X
Peter Donovan	https://orcid.org/0000-0001-7934-601X	Penny Wolski	https://Orcid.org/0000-0002-9127-2049
Jade Eccles-Smith	https://orcid.org/0000-0002-2970-2677	Syndia Lazarus	https://orcid.org/0000-0002-5221-7303
Margaret Whillier		Hye Jeong Kim	
Amanda Love		Michael d'Emden	
Matthew Seymour			

Journal Articles (RBWH staff or consumers in bold)

Wootton E, Wong C, Love A, Pattison DA. Successful Localization of Recurrent MEN-1-Associated Hyperparathyroidism With 18F-Fluorocholine PET/CT. <u>JCEM case reports</u>. 2024; 2: luae222 (PMID: 39659386)

Nicholls T, Hoermann R, **Wootton E**, Mansouri N, Stevens M, Vo H, Grossmann M, Warren AM. Increased ambient temperature and hyponatraemia presentations: A ten-year retrospective study at an Australian hospital. <u>J Clin Endocrinol Metab</u>. 2024 doi: 10.1210/clinem/dgae820 (PMID: 39586313)

Wootton E, Grossmann M, Warren AM. Dysnatremia in a changing climate: A global systematic review of the association between serum sodium and ambient temperature. <u>Clin Endocrinol (Oxf</u>). 2024; 100: 527-541(PMID: 38634410)

Wootton E, Truong Q, Pretorius CJ, Balcerek M, Lazarus S. A retrospective review of the short Synacthen test in Queensland hospitals. Intern Med J. 2024; 54: 1515-1522. doi: (PMID: 38660891)

Luong D, **Hawke K**, De Waal E, **Duke M**, **Wolski P**. Diagnosing Primary Hyperparathyroidism in Pregnancy: A Case of Altered Parathyroid Hormone Degradation in Pregnancy. <u>JCEM case reports.</u> 2024; 2: luae159 (PMID 39238943)

Hawke K, Joshi K, Lau H, Halder A, Duncan P, Wolski P. Anomalous systemic arterial supply to the basal segment of the lung presenting with haemoptysis in the third trimester of pregnancy. <u>Obstet Med</u>. 2024; 17: 53-57

Hudson R, Abeysekera N, **Wolski P**, Simons C, Francis L, Farnsworth E, Bennetts B, Patel C, Spijker S, Mallett A. De novo HNF4A-associated atypical Fanconi renal tubulopathy syndrome. <u>J Nephrol</u>. 2024; 37: 191-197 (PMID: 37308774)

Kiely BE, Liang R, Jang C, Magraith K. Safety of vaginal oestrogens for genitourinary symptoms in women with breast cancer. Aust J Gen Pract. 2024; 53: 305-310

Ali S, Coory M, **Donovan P**, Na R, Pandeya N, Pearson SA, Spilsbury K, Stewart LM, Thompson B, Tuesley K, Waterhouse M, Webb PM, Jordan SJ, Neale RE. Association between unstable diabetes mellitus and risk of pancreatic cancer. <u>Pancreatology</u>. 2024;24; 67-72 (**PMID** 38000983)

Tuesley M K, Spilsbury K, Webb M P, Pearson SA, **Donovan P**, Coory D M, Steer C B, Stewart L M, Pandeya N, Protani M M, Dixon-Suen S, Marquart-Wilson L, Jordan SJ. Use of an emulated trial to investigate the association between use of nitrogenbased bisphosphonates and risk of epithelial ovarian cancer, <u>International Journal of Epidemiology</u>, 2024; 53: dyae108 (PMID 39133937)

Hovelroud R, **Ming SDX**, **McLeod DSA**, **Donovan PJ**, **Ng G**, **Mungomery M**. A case of enfortumab vedotin-associated diabetic ketoacidosis with severe insulin resistance in a nondiabetic woman. <u>JCEM case reports</u>. 2024; 2: luae212 (PMID 39588551)

Whillier M, Hinton N, Balcerek M, MacLaughlin HL, Donovan P. Queensland Inpatient Diabetes Survey (QuIDS): patient experience survey evaluation. Intern Med J. 2024 Apr;54(4):639-646. doi: 10.1111/imj.16247. Epub 2023 Oct 4. PMID: 37792317

Bachmeier C, Ungerer J, Pretorius C, Kassianos, Kostner K M. Universal Paediatric and Newborn Screening for Familial Hypercholesterolaemia – Challenges and Opportunities: An Australian Perspective. <u>Lipidology</u> 2025, 2(1), 4; https://doi.org/10.3390/lipidology2010004

Young M, **McLeod DSA**, Richard K. Nicotine increases hepatocyte transthyretin turnover: a possible mechanism for the protective effect of smoking on preeclampsia? <u>Molecular and Cellular Endocrinology</u>. 2024; 597: 112446 (PMID 39725350)

Duarte Romero B, Waterhouse M, Baxter C, **McLeod DSA**, English DR, Armstrong BK, Chung E, Ebeling PR, Hartel G, van der Pols JC, Roberts M, Venn AJ, Webb PM, Whiteman DC, Neale RE. The effect of three years of vitamin D supplementation on erectile dysfunction: results from the randomized placebo-controlled D-Health Trial. <u>Clinical Nutrition ESPEN</u>. 2024; 60: 109–15 (PMID 38479897)

Kim HJ, McLeod DSA. Subclinical Hyperthyroidism and Cardiovascular Disease. <u>Thyroid</u>. 2024; 34: 1335–45 (PMID 39283826).

Date	Title
Jul 27, 2024	Christina Jang. Australian and New Zealand Pituitary Alliance Meeting: The Case Presentation: the Role of Genetics in Pituitary Disease
Oct 18, 2024	Christina Jang. Session Chair: Australasian Menopause Society- Menopause Essentials Update
Oct 20, 2024	Christina Jang. Session Chair: International Menopause Society (IMS) Plenary Lecture
Oct 21, 2024	Christina Jang. IMS Meet the Expert 'Hot flushes or something sinister?'
Oct 22, 2024	Christina Jang. Session Chair: IMS Late breaking news

Keynote or Plenary Lectures given in 2024

Nov 12, 2024	Don McLeod . THYRO Pilot: lesions from design and completion of a feasibility trial for combination hypothyroidism treatment lesions from design and completion of a feasibility trial for combination hypothyroidism treatment. ESA Annual Scientific Meeting. Adelaide.
Oct 31, 2024	Don McLeod . What is the best way to evaluate thyroid function? 93 rd Annual Meeting of the American Thyroid Association. Chicago, USA
Aug 25, 2024	Don McLeod . Thyroid Cancer – clinical overview & treatment landscape. AANMS Theranostics Course. Brisbane
Aug 25, 2024	Don McLeod. David Pattison. Thyroid cancer cases panel. AANMS Theranostics Course. Brisbane

Department of Gastroenterology and Hepatology

Research Highlights

IBD

Associate Professor Gareth Walker leads the Inflammatory Bowel Disease (IBD) and Research Service at the Royal Brisbane and Women's Hospital. He is also a Conjoint Senior Lecturer at the University of Queensland and a Visiting Scientist at QIMR Berghofer. With qualifications including MBBS (Hons), FRACP, FRCP, and PhD, Dr. Walker is a recognised leader in precision medicine and biomarker-driven referral pathways for IBD. In 2024, he was elected to the Australian and New Zealand IBD Consortium Scientific Committee.A/Prof Walker works alongside RBWH colleagues - A/Prof Radford-Smith and Dr. Croft on numerous commercial and investigator-led research projects across the RBWH-QIMR-UQ campus. Their work targets key challenges in IBD care, including addressing healthcare disparities in remote and regional areas, implementing an anti-inflammatory IBD diet for ulcerative colitis treatment, utilising spatial transcriptomics and AI for personalised advanced therapies, and developing a digital monitoring platform with a smartphone app and point-of-care stool testing. The team leverages large research databases, established by Dr. Croft and A/Prof Radford-Smith, through recruitment of patients with severe IBD phenotypes at Australia's largest IBD unit. In 2024, the IBD Commercial Research team, led by Dr Croft and Allison Brown, actively participated in numerous Phase II-IV pharmaceutical trials, investigator-initiated studies, and Australian IBD Consortium collaborative projects focused on new treatments for medically refractory Crohn's disease (CD) and ulcerative colitis (UC).

The Gut Health Research group at QIMR Berghofer MRI expanded the NUDT15 genetic screening service in 2024 and provided education on the gene's significance in specific ethnic groups. Additionally, Dr. Croft published a highly read paper in AP&T, presenting a novel Acute Severe Ulcerative Colitis (ASUC) score that predicts corticosteroid therapy failure. This breakthrough has the potential to transform ASUC treatment, particularly for regional patients by enabling early transfer of severe cases to RBWH. In 2024, two HDR students, Dr. Jen Phillips (QIMR scholarship) and Dr. George Tambakis (UQ scholarship), joined the IBD research team, fostering collaborations across UQ, QIMR, and private bioscience partners. Their HDR projects have notable collaborations with Dr Mark Hodson (metabolomics, QIMR), Dr Quan Nguyen (spatial transcriptomics and AI, QIMR), Prof. Georgina Hold (Microbiome Research Centre, UNSW), Dr Charles Okafor (Health Economics, UQ), Dr Zeinab Khalil (Soil for Science, UQ), A/Prof Anton Lord (AI, QHealth), Prof. Patricia Valery (Cancer and Chronic Disease, QIMR) and Dr Gunter Hartel (Statistics, QIMR) and Prof. Robert Anderson (Novoviah).

Hepatology

The Hepatology Unit runs a large clinical trial program giving patients access to new therapies for Hepatitis B, autoimmune liver diseases and non-alcoholic steatohepatitis. It is part of a national network to collect data on the rapidly rising incidence of hepatocellular carcinoma and is a major contributor to the multicentre SOCRATES Trial, which aims to examine the efficacy of stereotactic external beam radiotherapy in early HCC. Collaborations with Dr Patricia Valery from QIMR Berghofer, Prof Elizabeth Powell from Princess Alexandra Hospital and Prof James O'Beirne from Sunshine Coast University Hospital have been productive in metabolic dysfunction-associated steatotic liver disease research, which is becoming the most common liver disease in the community. The unit is building on its serum and data bank of patients with chronic liver diseases for collaborative projects while the specialist Liver Nutrition Clinic (LiNC) is accumulating data on dietetics interventions addressing malnutrition and sarcopenia in patients with advanced liver disease.

Endoscopy

The Endoscopy Research Group has a large group of interventional endoscopists with varying research interests. Most interventional research for 2024 was Investigator-led and involved mixed design research that incorporated a range of single and multicentre studies that included multicentre retrospective review of Barrett's cancer and adverse prognostic markers, short term impact of endoscopic treatment on patient QOL, screening for pancreatic cancer in high-risk individuals, power spiral enteroscopy, assessing the degree of hypothermia during prolonged endoscopy, ERCP procedures in older patients. We have lead studies evaluating the impact of coeliac plexus neurolysis in pancreatic cancer patients, an exploratory study to identify novel salivary biomarkers in oesophageal cancer and Barrett's oesophagus.

Successful Research Higher Degree candidates in 2024

Name	Title	Month Competed	Affiliated University	Summary
Dr Timothy O'Sullivan (PhD)	Improving the safety and efficacy of colorectal neoplasia endoscopic resection	December 2024	University of Sydney	Endoscopic mucosal resection (EMR) is standard of care for the management of benign large non-pedunculated colorectal polyps (LNPCPs); however, electrocautery related complications and colonoscopy surveillance remain a burden for patients and health services. This thesis investigated key research gaps within endoscopic resection modalities, surveillance outcomes, optical diagnosis and EMR training pathways. Large prospective single and multicentre trials were conducted to address the aims of this thesis. Cold snare EMR of LNPCPs, whilst safer than conventional hot snare EMR, is at the expense of significantly higher recurrence rates. Early post-resection surveillance remains critical, with synchronous LNPCPs highly prevalent in EMR cohorts and a more frequent finding when index lesions are non-granular. Risk assessment for submucosal invasive cancer is predictable using LNPCP characteristics and can be simplified in a decision tree algorithm to optimise optical diagnosis and resection modality selection.

Research Grants

Investigator Names (RBWH staff in bold)	RBWH Departments / Research Groups	Research Project Title	Granting Body	Total Awarded (whole all years)	Length of Awards in years and years active
Gareth Walker, Graham Radford- Smith, George Tambakis	Gastroenterology & Hepatology	Digital monitoring in remote and regional IBD patients in QLD	Queensland Health	\$100,000	2 years, 2023-2024
Graham Radford- Smith	Gastroenterology (with ANZ IBD Consortium)	Does infliximab dosing to target with therapeutic drug monitoring yield higher rates of healing than standard infliximab dosing in patients with perianal fistulising Crohn's disease? A prospective, randomised, controlled, multi-centre study	MRFF	\$900,000	4 years, 2022-2025
Anna McMcMahon	Gastroenterology & Hepatology	Optimising Inpatient Bowel Preparation	RBWH Foundation	\$34,406	2 years, 2023-2024
Kimberley Ryan	Gastroenterology & Hepatology	The phenomenon of living with pancreatic cancer	RBWH Post- Graduate Scholarship	\$120,000	3 years, 2022-2024
Benedict Devereaux	Gastroenterology & Hepatology	Endoscopic Ultrasound Molecular Evaluation of Pancreatic Cancer Trial 2	PanKind	\$47,135	2 years, 2023-2024

RBWH Department / Research Group Led Research Activity

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Florian Grimpen, Mark Appleyard, Ian Brown	Spiro Raftopolous (Sir Charles Gairdner Hospital, Perth)	Outcomes in patients with high-risk intramucosal cancer and superficial submucosal oesophageal adenocarcinoma managed initially with endoscopic local resection – a multicentre retrospective study		Retrospective

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Jason Huang	Bronte Holt, Jacinta Holmes, Alex Thompson, Sarah Romero, Krish Ragunath	National endoscopic ultrasound portal pressure gradient registry	3	1 / 22
Jason Hwang / Jason Huang	David Cavallucci, Melissa Eastgate, Benedict Devereaux, Saad Khan, Kimberley Ryan	Impact of coeliac plexus neurolysis on pain and quality of life in patients with pancreatic cancer	3	0
Florian Grimpen	David Mitchell, Mark Appleyard, Chamindie Punyadeera (Griffith Uni)	Biomarkers of Barrett's Oesophagus and neoplastic progression: Finding the proteomic spitting image (Pilot clinical trial)	3	2
Anna McMahon	Kimberley Ryan, Katherine Hanigan, Mark Appleyard, Florian Grimpen	Inpatient colonoscopy bowel preparation, a clinical redesign project	3	100
Florian Grimpen	Paris Hoey, Kim Ryan, Mark Appleyard	Risk of missing small bowel neoplasms on small bowel video capsule endoscopy	3	Retrospective
Florian Grimpen	Sanjivan Mudaliar, Jason Hwang, Kim Ryan, Amirah Etchegaray Mark Appleyard, Benedict Devereaux	ERCP in Nonagenarians	3	Retrospective
Mark Appleyard	Yuming Ding, Florian Grimpen, Krish Raganath (RPH), Phil Craig (STGH), Gregor Brown	Outcomes of patients undergoing Power Spiral Enteroscopy: A Retro Australian Multicentre audit	3	Retrospective
Mark Appleyard	Enoka Gonsalkorala, Jihan Starki, Katherine Hanigan , Kim Ryan	Evaluation of artificial intelligence (AI) on polyp detection rates in colonoscopy	3	
Chun Gan	Anna McMahon	The Familial Gastrointestinal Cancer Database	3	34
Mark Appleyard	Anna McMahon, Shweta Sharma	Small bowel findings on video capsule endoscopy and long-term clinical outcomes for patients with Peutz- Jeghers syndrome	3	Retrospective
Shweta Sharma	Barbara Leggett, Patricia Valery (QIMR)	Yield of neoplastic lesions in a prospective Australian cohort undergoing colonoscopic surveillance	3	Retrospective
Florian Grimpen	Mark Appleyard, Kim Ryan, Joshua Satchwell	Barrett's Oesophagus and its progression to OAC – impact of endoscopic therapy on clinical outcomes and quality of life	3	150
Graham-Radford Smith	Gareth Walker	"MetaPanel" Identification of treatable pathogens in patients with severe Inflammatory Bowel Disease, using novel metagenomics technology	3	59
Graham Radford- Smith	Mark Appleyard	"CBS" Optimising the use of colonoscopy in Queensland: the application of clinical and faecal biomarkers to the management of both the symptomatic and screening patient populations	3	0 (recruitment closed, data analysis ongoing)
Gareth Walker	Graham Radford-Smith, Tony Croft, George Tambakis	Remote and regional IBD digital monitoring	3	0
Gareth Walker	Tony Croft, Quan Nguyen, Gabrielle Belz, Ian Brown, Christophe Rosty, Jen Phillips	Spatial Sequencing and AI in predicting response in ASUC	3	0

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Gareth Walker	Graham Radford-Smith, Tony Croft, Robert Anderson, Rina Kumar	Uncovering immunogenic T-cell epitopes to Infliximab	33	0
Gareth Walker	Graham Radford-Smith, Tony Croft, Jen Phillips, Rina Kumar, Abi Marsh, Mark Hodson, Georgina Hold, Zeinab Khalil	Augmenting 5ASA drug response through an anti-inflammatory diet in UC	2	0
Gareth Walker	Graham Radford-Smith, Tony Croft, George Tambakis, Patricia Valery	QLD IBD data linkage study – 15 yrs data hospital admissions, cancer, surgery, complications	2	NA
Richard Skoien	Prof Grant Ramm, Prof Barbara Leggett, Olivia Cullen, Georgina Peacock	Establishment of a clinical and scientific hepatology database to study factors associated with chronic liver disease	2	575
Olivia Cullen Alison Kearney	Richard Skoien, Ismail Arbi, Katherine Hannigan	A multidisciplinary model of palliative and supportive care that addresses patient needs in advanced cirrhosis: The HepatoCare Database	3	10
Marnie Wood	Richard Skoien, Olivia Cullen, Katherine Hannigan	An audit of the management of hepatocellular carcinoma (HCC) at the RBWH	4	
Prof Barbara Leggett	Melanie Halford, Oliva Cullen, Katherine Hannigan, Marnie Wood, Enoka Gonsalkorala, Richard Skoien, Bohdeen Gerritsen	Hepatoma and Compensated Cirrhosis Follow Up Clinic (HACCFOL)	3	877
Enoka Gonsalkorala		Hepatology Outpatients Characteristics Database	4	18

Collaborative Research Activity Involving RBWH Department / Research Group

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Alan Wigg (Flinders University)	Marnie Wood	A randomised controlled trial of Standard of Care versus RadioAblaTion in Early-Stage HCC	3	5
Simone Strasser (RPA, Sydney)	arnie Wood	Outcomes of Atezolizumab plus Bevacizumab for HCC	3	20 (retrospective)
Dr Sood (Royal Melbourne Hospital)	chard Skoien	ASSURE: An Open Label Long-Term Study to Evaluate the Safety and Tolerability of Seladelpar in Subjects with Primary Biliary Cholangitis	3	3
Dr John Bate (Royal Adelaide Hospital)	chard Skoien	Maestro: A Phase 3, Multinational, Double- Blind, Randomized, Placebo-Controlled Study of MGL-3196 (resmetirom) in Patients with Non-Alcoholic Steatohepatitis (NASH) and Fibrosis to Resolve NASH and reduce Progression to Cirrhosis and/or Hepatic Decompensation	3	4

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Prof Alice Lee (Concord Hospital)	chard Skoien	Nativ3: A Randomised, Double-Blind, Placebo-Controlled, Multicentre, Phase 3 Study Evaluating Efficacy And Safety Of Lanifibranor Followed by An Active Treatment Extension In Adult Patients With Non-Cirrhotic Non-Alcoholic Steatohepatitis (Nash) And Fibrosis 2 (F2)/Fibrosis 3 (F3) Stage Of Liver Fibrosis	3	4
A/Prof Jacinta Holmes (St Vincent's Hospital)	chard Skoien	B Well: Phase 3 Study of Bepirovirsen in Nucleos(t)ide Analogue-treated Participants with Chronic Hepatitis B (B-Well 2)	3	6
Gerald Holtmann (Princess Alexandra Hospital)	chard Skoien	Targeting the Gut Microbiome as a Treatment for Primary Sclerosing Cholangitis: The Queensland Clinical Network Study	3	3
Amanda Nicoll (Eastern Health, Victoria) Richard Skoien	Melanie Halford, Georgina Peacock	The Australian Drug-Induced Liver Injury Networj (AusDILIN)	4	9
James O'Beirne (Sunshine Coast University Hospital) Richard Skoien	Melanie Halford, Georgina Peacock	A mixed-methods study to inform health service planning for patients with non- alcoholic fatty liver disease in regional areas in Queensland	3	25
Dr Michael Braude (Monash Health)	chard Skoien	Enlighten: A Phase 3 Study to Evaluate the Efficacy and Safety of Pegozafermin in Subjects with Compensated Cirrhosis due to Metabolic Dysfunction-Associated Steatohepatitis (MASH)	3	0
A/Prof Stephen Pianko (Monash Health)	chard Skoien	Akero: A Phase 3, Randomized, Double- Blind, Placebo-Controlled Study Evaluating the Safety and Efficacy of Efruxifermin in Subjects with Compensated Cirrhosis Due to Nonalcoholic Steatohepatitis (NASH)/Metabolic Dysfunction-Associated Steatohepatitis (MASH)	3	0
Alina Stoita (STV, Sydney)	Benedict Devereaux, Jason Hwang, Saad Khan,	Screening for pancreatic cancer in high-risk individuals (National multicentre study)	3	21 / 51
Dan Croagh, Owen McKay (Monash Health)	Benedict Devereaux	Endoscopic Ultrasound Molecular Evaluation of Pancreatic Cancer Trial 2	3	21
Judy Munday (QUT)	Kimberley Ryan, Sarah Johns, Lucy McKenna	Temperature decline during procedural sedation: an observational study	3	110/170
Tanya Dwarte (StV, Sydney)	Anna McMahon, Benedict Devereaux	Patient-reported barriers to accessing pancreatic cancer screening in a research setting	3	1
Bronte Holt (STV, Melb) Benedict Devereaux	Rajit Gilhotra	Multicentre prospective evaluation of the "Hot spaxus" lumen apposing stent for EUS- guided drainage of pancreatic walled off necrosis	3	3
Prof Finlay Macrae (Royal Melbourne) Anthony Croft	George Tambakis, Gareth Walker	"ABTECT-1" A randomized, double-blind, placebo-controlled, multicenter phase III study to evaluate the efficacy and safety of ABX464 once daily for induction treatment in subjects with moderately to severely active ulcerative colitis	3	0 (Recruitment ongoing)

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Prof Finlay Macrae (Royal Melbourne) Anthony Croft	Anthony Croft, George Tambakis, Gareth Walker	"ABTECT: A randomized, double-blind, multicenter phase III study to evaluate the long-term efficacy and safety of ABX464 25 mg or 50 mg once daily as a maintenance therapy in subjects with moderately to severely active ulcerative colitis	3	0 (1 screen failed, recruitment ongoing)
A/Prof Gregory Moore (Monash Health) Anthony Croft	George Tambakis, Gareth Walker	"EMERALD-2" A Phase 2b, Randomized, Double-blind, Placebo-controlled Study to Evaluate the Safety and Efficacy of 3 Active Dose Regimens of MORF-057 in Adults with Moderately to Severely Active Ulcerative Colitis	3	3 (Recruitment closed)
A/Prof Peter de Cruz (Austin Health), Gareth Walker	Anthony Croft, George Tambakis	"POMEROL" Management of moderate POstoperative recurrence in Crohn's disease: a randoMizEd contROLled trial of therapeutic escalation, the POMEROL trial.	3	0 (recruitment ongoing)
Prof Rupert Leong (Concord Hospital), Anthony Croft	Anthony Croft, George Tambakis	"VIVID-2" A Phase 3, Multicenter, Open- Label, Long-Term Extension Study to Evaluate the Long-Term Efficacy and Safety of Mirikizumab in Patients with Crohn's Disease	3	0 (3 ongoing)
A/Prof Jacob Begun (Mater Brisbane), Anthony Croft	George Tambakis Gareth Walker, Emi Khoo	"STOPit" Study of Tofacitinib for the Treatment of Chronic Pouchitis	3	1 (4 completed; recruitment ongoing)
Prof Britt Christensen (Royal Melbourne), Anthony Croft	Gareth Walker, George Tambakis	"CULTIVATE" A Multicenter, Randomized, Double-Blind, Parallel-Group Study to Assess the Efficacy and Safety of Oral Etrasimod as Induction and Maintenance Therapy for Moderately to Severely Active Crohn's Disease	3	1 (1 ongoing, 1 withdrawn, recruitment closed)
A/Prof Susie Connor (SWSLHD – South Western Sydney Local Health District), Graham Radford- Smith	Gareth Walker	"PROACTIVE" Prospective Randomised Controlled Trial of Adult Patients with Perianal Crohn's Disease and Optimised Therapeutic Infliximab Levels	3	1 (3 completed, recruitment ongoing)
Lisa Lo (RPA / Sydney Local Health District), Graham Radford- Smith		"LEGACY" A Long-Term Non-Interventional Registry to Assess Safety and Effectiveness of HUMIRA® (Adalimumab) in Patients with Moderately to Severely Active Ulcerative Colitis (UC)	3	(1 active – recruitment closed)
Abigail Marsh	PhD UQ/QIMRB Graham Radford- Smith, Veronique Chachay, Merrilyn Banks	The effects of an anti-inflammatory diet on disease activity, symptom severity and microbiota profile in patients with inflammatory bowel disease.	3	il (recruitment closed)
Rina Kumar	PhD UQ/QIMRB Graham Radford- Smith, Severine Navarro, Anton Lord, Martha Zakrzewski	Analysis of the mucosa-associated gut microbiome in metabolic syndrome	3	0 (recruitment closed)
Graham Radford- Smith	Sadia Afrin, Rina Kumar	NUDT15 screening in IBD and other autoinflammatory disorders	3	131

Research Publications

Authors

Investigator	ORCID ID		
Barbara Leggett	https://orcid.org/0000-0003-2062-7380	Marnie Wood	https://orcid.org/0000-0003-3740-9443
Benedict Devereaux	https://orcid.org/0000-0003-1795-5690	Yuming Ding	https://orcid.org/0000-0002-4493-8557
Gareth Walker	https://orcid.org/0000-0002-3883-8816	Rajit Gilhotra	https://orcid.org/0000-0001-8055-6524
Mark Appleyard	https://orcid.org/0000-0003-2714-8657	Anthony Croft	https://orcid.org/0000-0002-0866-9521
Florian Grimpen	https://orcid.org/0000-0002-0375-8381	Richard Skoien	https://orcid.org/0000-0002-3411-9267
Graham Radford-Smith	https://orcid.org/0000-00002-2047-6239	Kimberley Ryan	https://orcid.org/0000-0002-8188-9977
Sanjivan Mudaliar	https://orcid.org/0000-0002-9505-1924		

Publications in 2024

Journal Articles (RBWH staff or consumers in bold)

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Kapizioni C, Desoki R, Lam D, Balendran K, Al-Sulais E, Subramanian S, Rimmer JE, De La Revilla Negro J, Pavey H, Pele L, Brooks J, Moran GW, Irving PM, Limdi JK, Lamb CA; **UK IBD BioResource Investigators**; Parkes M, Raine T. Biologic Therapy for Inflammatory Bowel Disease: Real-World Comparative Effectiveness and Impact of Drug Sequencing in 13 222 Patients within the UK IBD BioResource. J Crohns Colitis. 2024 Jun 3;18(6):790-800. doi: 10.1093/ecco-jcc/jjad203. PMID: 38041850; PMCID: PMC11147798

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Sarraf B, **Skoien R**, Hartel G, O'Beirne J, Clark PJ, Collins L, **Leggett B**, Powell EE Valery PC. Rising hospital admissions for alcohol-related cirrhosis and the impact of sex and comorbidity – a data linkage study. *Public Health* 2024: 232:178-187

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Wang DS, Phu A, MkKee K, Strasser S, Sheils S, Weltman M...**Wood M**, Hajkowicz K, **Skoien R**, Davies J et al. Hepatitis C Virus Antiviral drug resistance and salvage therapy outcomes across Australia. *Open Forum Infectious Diseases* 2024, 11(4). doi:10.1093/ofid/ofae155

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Smith SA, Simpson F, Bell-Allen N, Brown N, **Mudaliar S**, Aftab K, Tam D, Chandradsedaram MD. Percutaneous thrombolysis via cholecystostomy catheter to dissolve biliary clots causing obstructive jaundice. *Journal of Surgical Case Reports* 2024. Feb(2):rjae055.doi:10.1093/jscr/rjae055

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O'Sullivan T, . Bourke MJ; Endoscopic Resection of Neoplasia in the Lower GI Tract: A Clinical Algorithm. Visc Med 2024

Journal Articles (RBWH staff or consumers in bold)

O'Sullivan T, Craciun A, Byth K, Gupta S, Gauci JL, Cronin O, Whitfield A, Abuarisha M, Williams SJ, Lee EYT, Burgess NG, Bourke MJ. A simplified algorithm to evaluate the risk of submucosal invasive cancer in large (≥20 mm) nonpedunculated colonic polyps. *Endoscopy*. 2024 Aug;56(8):596-604. doi: 10.1055/a-2282-4794

Watt A, Kaushik V, Harris C, Yeung C, Lam Y. Nutrition-related predictors of complications and length of hospital stay following total pelvic exenteration surgery. Clin Nutr ESPEN. 2024;62: 88-94.

Keynote or Plenary Lectures given in 2024

Date	Title
Mark Appleyard	Small Bowel Symposium - Live Endoscopy
15-16 April	Royal Melbourne Hospital
Mark Appleyard	ERCP in difficult anatomy
15-16 April	Royal Melbourne Hospital
Mark Appleyard	Train the Colonoscopy Trainer
30-31 May	Royal Brisbane & Women's Hospital
Mark Appleyard	Benchmarking Endoscopy Quality
18 th September	St Paul's Hospital, Vancouver, Canada
Florian Grimpen	Management of Upper GI bleeding
Мау	National GENCA Conference, Brisbane
Florian Grimpen	Post-Endoscopy Cancer
November	Gold Coast Endoscopy Masterclass (Panel member)
Patrick Walsh	Endoscopic MDS
September 3	27 th World congress for the International Federation for the Surgery of Obesity and Metabolic Disorders, Melbourne, Australia
Trina Kellar	Multidisciplinary team management of complex cases
Мау	National conference on incontinence, Brisbane
Trina Kellar	Eating disorders and disorders of gut-brain interaction
August	New Zealand NGMA Motility Summit, Arrowtown
Trina Kellar	Idiopathic gastroparesis the debate: disease or association?
September	Australian Gastroenterology Week 2024, Adelaide
Trina Kellar	Bloating in gastro-gynae cases- Gastroenterologist's approach to the complex patient
September	Urogynaecological society of Australasia annual scientific meeting, Brisbane
Trina Kellar	Australian Keynote Speaker, NZSG annual scientific meeting
November	*Gastroparesis, eating disorders, and disorders of gut-brain interaction
	*Chronic constipation and pelvic floor dysfunction
	*Complex UGI dysmotility MDT panel
Benedict Devereaux	How to manage complications after biliary drainage in MHBO
	Asian Pacific Digestive Week 2024, Indonesia
Benedict Devereaux	State of the Art lecture: Top Five Indications of EUS in the Next 5 Years
	Asian Pacific Digestive Week 2024, Indonesia
Benedict Devereaux	Pancreaticobiliary lesion targeting and Spybite biopsy.
	Pre-Congress Workshop-Simulation-Based Mastery learning of Endoscopy Expert performance- 2024, Indonesia
Benedict Devereaux	Endoscopic Management of chronic pancreatitis
	GESA Regional, Remote and Indigenous, Gut Centre Program- 2024, Alice Springs
Benedict Devereaux	Keynote Lecture: Infection Prevention and control in Endoscopy.
	Official opening of Olympus Australia Sapphire reprocessing facility 2024, Melbourne
Benedict Devereaux	Altered anatomy Conundrum.

	Thani Association for Gastrointestinal Endoscopy (TAGE) 20th Annual Meeting- 2024, Thailand
Rajit Gilhotra	Updates on Biliary Drainage with a focus on LAMS. World Congress of Digestive Diseases 2024, Budapest, Hungary
Rajit Gilhotra	Keynote Lecture – "A difficult pill to swallow – updates in Achalasia management" Pediatric CME event, BC Children's Hospital Research Institute, University of British Columbia, Vancouver, Canada
Rajit Gilhotra December	Endoscopic ultrasound directed angiotherapy for gastric varices Advacned Hepatopancreatobiliary and Transplantation Center, Chandigarh, India
Rajit Gilhotra	Practical endoscopy skills and hands-on colonoscopy training GESA Gut School 2024
Lulu Zhang September	Endoscopic submucosal dissection of granular cell tumour in proximal colon (video) AGW 2024, Adelaide, Australia
Lulu Zhang September	Optical challenges in active collagenous gastrointestinal diseases (video) AGW 2024, Adelaide, Australia

Department of Infectious Diseases

Research Grants

Investigator Names (RBWH staff in bold)	RBWH Departments / Research Groups	Research Project Title	Granting Body	Total Awarded (whole all years)	Length of Awards in years and years active
Jonathon Carapetis, Asha Bowen, Paul Memmott, Nina Lansbury, Anna Ralph, Mark Davies, Andrew Redmond et al	Infectious Diseases	STARFISH (ST opping A cute R heumatic Fever Infections to S trengthen H ealth)	NHMRC	\$5,000,000.00	5 years, 2022-2026

Collaborative Research Activity Involving RBWH Department / Research Group

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Steven Tong	Bridget Barber, Julian Harris, Krispin Hajkowicz, Lawrence Huang, Andrew Redmond	SNAP trial – Staphylococcus aureus Network adaptive platform	65	

Research Publications

Authors

Investigator	ORCID ID		
Krispin Hajkowicz	https://orcid.org/0000-0001-6990-0486	Paul Chapman	
Kate McCarthy	0000-0001-6173-9659 - ORCID	Sarah Boyd	
Andrew Redmond	https://orcid.org/0000-0002-1125-5362	Hugh Wright	
Bridget Barber	https://orcid.org/0000-0003-1066-7960	Anna Hume	
Sumudu Britton	https://orcid.org/0000-0001-6465-3754	Alex Stewart	https://orcid.org/0000-0002-3266-3250

Publications in 2024

Journal Articles (RBWH staff or consumers in bold)

Enkel SL, Barnes S, Daw J, Pearson E, Thomas HMM, Lansbury N, Wyber R, **Redmond AM**, Ralph AP, Carapetis JR, Bowen AC. Systematic review of household transmission of Strep A: a potential site for prevention that has eluded attention. J Infect Dis 2024. 230(4)3798-806

Lansbury N, Memmott PC, Wyber R, Burgen C, Barnes SK, Daw J, Cannon J, Bowen AC, Burgess R, Frank PN, **Redmond AM**. Housing initiatives to address Strep A infections and reducing RHD risks in remote Indigenous communities in Australia. Int J Environ Res Public Health 2024. 21(9):1262,

Memmott PC, Lansbury N, Nash D, Snow S, **Redmond AM**, Burgen C, Matthew P, Quilty S, Frank P, Housing Design for health in a changing climate for remote Indigenous communities in semi-arid Australia. Architecture 2024. 4(3), 778-801

James F, Goh MS, Vogrin S, ... **Redmond AM**, ... Trubiano JA. The Australian Registry for Severe Cutaneous Adverse Reactions (AUS-SCAR) - Providing a roadmap for closing the diagnostic, patient and healthcare gaps for a group of rare drug eruptions. World Allergy Organization Journal 2024;17(8):100936

Sheehy J, Scott A, Henden A, Kennedy G, **Redmond A**, Stewart AG. Low rates of complications and beta-lactam resistance in viridans group streptococci bloodstream infection among cancer patients receiving chemotherapy. Journal of Antimicrobial Chemotherapy 2024;79(8):2040-2047

Avent ML, Franks W, **Redmond A**, Allen MJ, Naicker S. Developing an intervention package to optimize the management of vancomycin therapy using theory-informed co-design. Research in Social and Administrative Pharmacy 2024;20(5):498-505

Valik JK, Giske CG, Hasan B, Gozalo-Margüello M, Martínez-Martínez L, Premru MM, Martinčič Ž, Beović B, Maraki S, Zacharioudaki M, Kofteridis D, **McCarthy K**, Paterson D, Cueto M, Morales I, Leibovici L, Babich T, Granath F, Rodríguez-Baño J, Oliver A, Yahav D, Nauclér P. Genomic virulence markers are associated with severe outcomes in patients with Pseudomonas aeruginosa bloodstream infection. Commun Med 2024;4(1):264

Sarah Hickson; Johannes Hoehensteiger; Johanna Mayer-Coverdale; Von Vergel L. Torres; Wenkang Feng; Joshua N Monteith; Ian R Henderson; **Kate L McCarthy**; Timothy Wells. Antibody-Mediated Serum Resistance Protects Pseudomonas aeruginosa During Bloodstream Infections. J Inf Dis 2024

Anna Louise Watson; John Woodford; **Sumudu Britton**; Rita Gupta; David Whiley; **Kate McCarthy**. Determining Pneumocystis jirovecii Colonisation from Infection Using PCR-Based Diagnostics in HIV-Negative Individuals. Diagnostics, 2024

Moore A, Dean JA, Rowling D, **Britton S**, Fowler JA, Warzywoda S, Safa H, Wu M, Nourse C. Management of detected syphilis in pregnancy adheres to guideline recommendations, but the crisis of congenital syphilis persists. Aust N Z J Obstet Gynaecol 2024

Cameron Holscher 1, Silvia Manzanero 2 3 4, Anna Hume 1 5 6, Andrew L Foster 2 3 7, Kevin Tetsworth 2 7, **Paul R Chapman** 1 2 5. Non-tuberculous mycobacterial bone and joint infections - a case series from a tertiary referral centre in Australia. ANZ J Surg 2024;94(11):1942-1948.

Department of Neurology

Research Highlights

The RBWH Neurology department continues to excel in research across a number of domains.

The neuromuscular research group has expanded to include muscular dystrophy clinical trials, and RBWH is the Asia-Pacific recruitment site for the MLBio study of limb-girdle muscular dystrophy type 2i. RBWH staff were the principal investigators for the recently competed Metflex clinical trial.

The Epilepsy group has continued to be active in 2024. During the year it participated in 13 commercially sponsored drug trials of novel antiseizure medication, 1 NHMRC funded clinical trial of a novel agent for modification of epilepsy, and 1 MRFF clinical trial relating to the management of patients after the first unprovoked seizure. The team has continued to work diligently to provide patients with refractory epilepsy with an opportunity to access emerging therapies that are unavailable outside the research sphere. In 2024, group members supervised / co-supervised 14 PhD students and 2 post-doctoral fellows. Four PhD theses were submitted for examination at the end of 2023 with conferral expected in 2024. Work from the Epilepsy group was presented at the Epilepsy Society of Australia and the American Epilepsy Society (AES) Annual Scientific Meetings. Professor David Reutens was named a Stanford / Elsevier Top 2% Scientist in 2024, falling in the top 2% of the most cited scientists across the globe.

Associate Professor Lata Vadlamudi received a Queensland Health Target Clinician Research Fellowship for 2024-2026 for a project entitled "Women with epilepsy- a life course approach to improving clinical care". Other research topics include an MRFF funded Stem Cell Therapies Mission 2024-2028 looking at Spider venom peptides: precision therapy for genetic epilepsies, which follows on from another MRFF funded Stem Cell Therapies Mission 2021-2024 which looked at transforming the paradigm of epilepsy care with precision medicine.

The RBWH Stroke research group continues to collaborate with colleagues on multisite trials and has moved into the Cerebral Amyloid Angiopathy research space with more details to come in the 2025 report.

Name	Title	Month Competed	Affiliated University	Summary
TX Lim (PhD)	"Development and preclinical evaluation of PET radioligands targeting the aryl hydrocarbon receptor in glioblastoma."	2024	The University of Queensland	Summary: Novel radioligands targeting the aryl hydrocarbon receptor were developed and evaluated in in vitro and animal models of glioblastoma
S Ghosh (PhD)	"Machine learning and deep learning-based approaches in epilepsy."	2024	The University of Queensland	Novel machine learning methods for MRI based lesion detection and first seizure outcome prediction were developed and tested
R Vashistha (PhD)	"Machine learning for positron emission tomography (PET) reconstruction and analysis."	2024	The University of Queensland	New methods for the reconstruction of PET images and estimation of the arterial input function using artificial intelligence were developed and tested
H Moradi (PhD)	"Dynamic PET Using Shortened Acquisition Protocols."	2024	The University of Queensland	A novel quantitative protocol. New methods were developed for quantitative PET imaging including a protocol for rapid acquisition of quantitative brain PET data in short field of view scanners, model selection with motion correction and estimation of the arterial input function

Successful Research Higher Degree candidates in 2024

Research Awards and Achievements

Recipient (RBWH staff in bold)	Award	Event
David Reutens	2024 Stanford-Elsevier list of top 2% most highly cited scientists	

Research Grants

Investigator Names (RBWH staff in bold)	RBWH Departments / Research Groups	Research Project Title	Granting Body	Total Awarded (whole all years)	Length of Awards in years and years active
Nicole Hutchinson, Robert Henderson	Neurology	QLD MND Roadshows	Fight MND	\$100,000	1 year, 2024
DC Reutens and 34 other PIs	Epilepsy	ACRF Facility for Targeted Radiometals in Cancer	Australian Cancer Research Foundation	\$1,200,000	5 years, 2020-2025
DC Reutens , F Nasrallah, B Ziegelaar, M Appleby, M Chen	Epilepsy	Danger signalling, traumatic brain injury and epileptogenesis	United States Department of Defense Congressionally Directed Medical Research Programs	\$995,024	3 years, 2021-2024
D HAYLOCK, T O'Meara, L Cheng, D Reutens , R Natoli	Epilepsy	CRCPXIII - VIVAZOME THERAPEUTICS PTY LTD CRC-Project Grant	Cooperative Research Centres -Program Grant	\$2,997,723	3 years, 2023-2025
L Vivash, T O'Brien, L Churilov, P Perucca, M Cook, D Reutens , C Malpas, P Kwan	Epilepsy	Phase 2, double-blind, placebocontrolled trial of sodium selenate as a disease modifying treatment for chronic drug resistant temporal lobe epilepsy (SELECT Trial)	NHMRC Clinical Trials and Cohort Studies, 2022	\$2,961,326	5 years 2023-2028
DC Reutens , S Chandra, J Bertram, N Kurniawan, H Healy	Epilepsy	Advancing the visualisation and quantification of nephrons with MRI	Australian Research Council	\$485, 575	3 years, 2022-2024
DC Reutens and 12 other PIs ARC Radiopharmaceutils	Epilepsy	Research Hub for Advanced Manufacture of Targeted Radiopharmaceuticals	Australian Research Council	\$4,808,669	5 years, 2023-2027
Lata Vadlamudi	Epilepsy	Women with epilepsy- a life course approach to improving clinical care	Queensland Health	\$5125,000	2 years, 6/2024- 6/2026
Ernst Wolvetang, Patrick Kwan, Lata Vadlamudi, Terence O'Brien, Zongyuan Ge, Alison Anderson, Mohammed Shaker, Ana Antonic-Baker, Hannah Leeson	Epilepsy	Transforming the paradigm of epilepsy care with precision medicine - Personalising Epilepsy Regimes with Stem cells and artificial Intelligence models for Superior Treatment outcomes. (PERSIST) Study	MRFF Stem Cell Therapies Mission- Stream 3	\$999,808	3 years, 7/2021- 6/2024
Frank Vadja, Terence O'Brien, Piero Perucca, Lata Vadlamudi, Cecilie Lander, UCB team	Epilepsy	A multicenter, open-label, longitudinal, prospective, pharmacokinetic phase 1b study in pregnant women with epilepsy treated with lacosamide	UCB collaborative research grant	\$403,887	2 years, Dec 2022- Dec 2024
Ernst Wolvetang, Christpher Reid, Ingrid Scheffer, Lata Vadlamudi , Nathan Palpant, Terence O- Brien, Patrick Kwan, Glenn King	Epilepsy	Spider venom peptides: precision therapy for genetic epilepsies	MRFF- Stem cell therapies Mission	\$4,169,463	4 years, 6/2024- 6/2028

Investigator Names (RBWH staff in bold)	RBWH Departments / Research Groups	Research Project Title	Granting Body	Total Awarded (whole all years)	Length of Awards in years and years active
Jayesh Dhanani, Lata Vadlamudi Jason Roberts, Menino Os Cotta, Steven Wallis	Neurology/ICU	A prospective observational comparative plasma and cerebrospinal fluid pharmacokinetics of levetiractam in aneursymal subarachoid haemorrhage and traumatic brain injury (The ALLEVIATE STUDY)	SERTA, RBWH Foundation Grant	\$63,048	2 years, 2023- 2024
Lata Vadlamudi	Neurology/GHQ	Developing a Queensland neuro-genomics service to underpin the era of precision-based medicine	MN clinician research fellowship	\$742,793	4 years, 2021–2024

RBWH Department / Research Group Led Research Activity

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Robert Henderson	Pamela McCombe	Clinical, metabolic, genetic and cognitive MND studies	Linkage with MND&Me and MNDAQ	80
Lata Vadlamudi	Epilepsy	Women with epilepsy- a life course approach to improving clinical care	Queensland Health \$5125,000	
Lata Vadlamudi	Neurology/GHQ	Developing a Queensland neuro-genomics service to underpin the era of precision- based medicine	MN clinician research fellowship \$742,793	

Collaborative Research Activity Involving RBWH Department / Research Group

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Robert Henderson	Paul McEniery, Michael Schuetz, Katie McMahon, et al.	Use of advanced MRI to diagnose brachial plexus injuries and inform surgical intervention	3	5
Jayesh Dhanani	Lata Vadlamudi, Jason Roberts, Menino O, S Cotta, Steven Wallis	A prospective observational comparative plasma and cerebrospinal fluid pharmacokinetics of levetiractam in aneursymal subarachoid haemorrhage and traumatic brain injury (The ALLEVIATE STUDY)		17 in 2024 (13 had EEGs)

Research Publications

Authors

Investigator	ORCID ID
Robert Henderson	000000228208183
Cecilie M Lander	https://orcid.org/0000-0002-3548-9550
Lata Vadlamudi	0000-0002-8742-0125
Andrew Wong	0000-0002-7272-8944
Michael O'Sullivan	https://orcid.org/0000-0002-2869-4580

Publications in 2024

Journal Articles (RBWH staff or consumers in bold)

Nona RJ, **Henderson RD**, **Mccombe PA**. Routine blood biochemical biomarkers in amyotrophic lateral sclerosis: Systematic review and cohort analysis. Amyotrophic Lateral Sclerosis and Frontotemporal Degeneration. 2024 Dec 5;1–19

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Tupil AR, Rivlin W, **Mccombe PA, Henderson RD**, Rodgers J, **Vadlamudi L**. Diagnosing Late-Onset Tay-Sachs Through Next Generation Sequencing and Functional Enzyme Testing. Neurology Genetics. 2024 Oct 23;10(6)

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A CCG expansion in ABCD3 causes oculopharyngodistal myopathy in individuals of European ancestry, A Cortese, SJ Beecroft, S Facchini, R Curro, M Cabrera-Serrano, ... Nature communications 15 (1), 6327

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Date	Title
7/11/2024	38th Epilepsy Society of Australia ASM Neurosteroids and epilepsy
12/8/2024	47th Human Genomics Society of Australia ASM Genomics-guided precision treatment for epilepsy
11/7/2024	Queensland Women's Health Forum The complex interplay between epilepsy and hormones
6/7/2024	EmpowerHER Forum The complex interplay between epilepsy and hormones
27/9/24	A Wong: Session chair, 6.2 Heart and Stroke, Asia Pacific Stroke Conference, Adelaide
6/12/2024	Channelopathy and epilepsy Conference, LA, USA Spider venom peptides as precision therapy for genetic epilepsies

Keynote or Plenary Lectures given in 2024

Department of Rheumatology

Research Publications

Publications in 2024

Journal Articles (RBWH staff or consumers in bold)

Ahn Y, Hawkins C, Pearson E, **Kubler P**. Diagnosis and management of antiphospholipid syndrome. Aust Prescr 2024;47:179-85.https://doi.org/10.18773/austprescr.2024.055.

Department of Thoracic Medicine

Research Highlights

Assoc Professor David Fielding continues to lead interventional pulmonology research in the department. Many novel and new diagnostic devices and technology are currently being studied under research conditions looking at; the use of ION Robotic technology to sample difficult to reach lung lesions for diagnostics, investigating a smart probe device for lung lesion characterisation using impedance technology, ongoing research collaboration with Griffith university using saliva as a biomarker to test for lung nodules, and leading a national multicentre study collaborating with QIMR (Prof Nic Waddell), UQCCR (Prof Peter Simpson), and UQ (Prof Katia Nones) to explore the use of genomic and molecular testing in lung cancer patients. He recently completed his PhD based on this work.

Dr Farzad Bashirzadeh leads a first in Human clinical trial (sponsored by Morair) in patients with COPD which utilises thermal ablation in the lung as a treatment to improve lung function and quality of life. Fantastic results have led to the design of a Phase 2 clinical trial for 2025.

The Sleep studies unit has won 2 Quarrie Awards in 2024. The first award was for achieving a record ever number of sleep studies performed at the RBWH. Our team successfully introduced a portable sleep study service into patient's homes in 2023 in collaboration with Hospital In the Home (HiTH) and achieved a record ever number of sleep studies performed by the RBWH sleep service. Savings were realised in patient transport, cost per occasion of service and patient time away from work. The second Award was for our delivery of the world first TeleSleep model. Our team successfully introduced and conducted a full level 2 sleep service into a city where no previous QH sleep service existed using remote technology, telehealth consultation and service delivery. Savings were realised in patient transport, cost per occasion of service, patient time away from work and the healthcare carbon footprint. TeleSleep aimed to offset the need for Rockhampton patients with sleep problems to have to travel to Brisbane for their sleep care – consultation, diagnosis and treatment - (as no QH sleep service exists in Rockhampton).

Successful Research Higher Degree (e.g. MPhil or PhD) candidates in 2024

Name	Title	Month Competed	Affiliated University	Summary	
Associate Professor David Fielding (PhD)	sor Endobronchial Fielding Ultrasound		University of Queensland	The molecular analysis of advanced lung cancer ca be hampered by insufficient samples. EBUS TBNA a common biopsy procedure for advanced lung cance but specimen insufficiency rates for molecul analysis after EBUS TBNA range from 10% to 25° The overall aim of this thesis was to explore ways improving EBUS TBNA specimen yield for NGS patients with advanced lung cancer. This was national multicentre study of 7 research sites. Ov	
				650 patients have been recruited and 7 papers were published. Overall, the thesis has clarified the great potential of smears and non-formalin-based tissue samples for all forms of molecular sequencing including Whole genome sequencing. <u>Supervisors</u> Associate Professor Peter Simpson (UQCCR) Prof Sunil Lakhani (UQCCR, Pathology Qld)	
24	1				

Research Grants

Investigator Names (RBWH staff in bold)	RBWH Departments / Research Groups	Research Project Title	Granting Body	Total Awarded (whole all years)	Length of Awards in years and years active
Assoc Prof David Fielding	Thoracic Medicine	Cios Spin Mobile Cone Beam CT	Queensland Technology Future Fund	\$510,000	2 years, 2024-2026
Assoc Prof David Fielding	Thoracic Medicine	Clinical Research Fellowship, "Optimising lung nodule biopsy and characterisation for Queenslanders in the fight against lung cancer"	Qld Government Office of Research Innovation	\$200,000	2 years, 2024-2026

RBWH Department / Research Group Led Research Activity

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
David Fielding	Farzad Bashirzadeh, Jung-Hwa Son	Investigation of a smart probe for lung lesion characterization using impedance technology (INSPECT Trial)	3	15
David Fielding	Farzad Bashirzadeh, Jung-Hwa Son	Comparing outcomes of bronchoscopic Robot with EBUS GS sampling of lung nodules- diagnostic yield and resource utilisation (ION) Project	3	55
David Fielding	Farzad Bashirzadeh, Jung-Hwa Son	Non-invasive biomarker testing for lung nodules (VOC)	3	21
David Fielding	Farzad Bashirzadeh, Kimberley Ryan	Streamlining lung cancer diagnosis through genomic testing of cytology	3	103
Farzad Bashirzadeh	David Fielding, Yoon- Hwa Lee	Endobronchial Thermal Liquid Ablation (ETLA) for the Treatment of Emphysema – A First in Human Study	3	10
Chris Zappala	Zuzana Doneley	A Phase 2, Randomized, Double-blind, Placebo- controlled, 24 -week study to evaluate the efficacy, safety and tolerability of BBT-877, as mono or addon on therapy in patients with Idiopathic Pulmonary Fibrosis (IPF).	3	2
Courtney Jarrett (PhD candidate, Uni of Sydney)	Darren O'Brien, Dr Brendon Yee (Uni of Sydney), Dr Elizabeth Cayanan (Uni of Sydney)	Evaluation of the TeleSleep Pilot Model for the delivery of sleep services to regional patients	4	
Kimberley Ryan (PhD candidate, QUT)	Prof Carol Windsor (QUT), Dr Pauline Gillan (CSU), Dr Helen Donovan (QUT)	The phenomenon of living with pancreatic cancer	3	18

Collaborative Research Activity Involving RBWH Department / Research Group

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Michael Holt	Chery Fourie (ICU), Janine Stuart (ICU), Amelia Livermore (ICU), Melissa Lassig-Smith (ICU)	Evaluation of Amikacin Liposome Inhalation Suspension (ALIS) in participants with nontuberculous mycobacterial lung infection caused by Mycobacterium Avium Complex (ENCORE)	3	4 (Screened)

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Prof Rachel Thomson (Gallipoli Medical Research // Greenslopes Private Hospital)	Michael Holt	Mycobacterial disease biobank	3	0

Research Publications

Authors

Investigator	ORCID ID		
David Fielding	https://orcid.org/0000-0003-2311-4919	Michael Holt	https://orcid.org/0000-0003-2612-2447
Farzad Bashirzadeh	https://orcid.org/0000-0002-0761-0675	Darren O'Brien	https://orcid.org/0000-0003-4876-7297
Kimberley Ryan	https://orcid.org/0000-0002-8188-9977		

Publications in 2024

Journal Articles (RBWH staff or consumers in bold)

Brown MV, Badiel A, Arnold M, Jersmann H, Sullivan T, **Fielding D**, Nguyen P. The diagnostic yield of cone beam CT combined with radial-endobronchial ultrasound for the diagnosis of peripheral pulmonary nodules. *CHEST Pulmonary* 2024, 2(2), doi:10.1016/j.chpulm.2024.100037

Van der Heijden EHFM, **Fielding D**. Cone-beam CT imaging for robotic navigation bronchoscopy (Editorial). *Respirology*, doi:10.1111/resp.14654

Fielding D, Lakis V, Dalley AJ, Chittoory H, Newell F...**Bashirzadeh F**, Son J-H, Ryan K, Steinfort D, Williamson JP, Bint M, Pahoff C...**Fairbairn D**, Waddell N, Simpson PT, Nones K. Evaluation of Endobronchial Ultrasound-Guided Transbronchial Needle Aspiration (EBUS-TBNA) samples from advanced non-small cell lung cancer for whole genome, whole exome and comprehensive panel sequencing, *Cancers* 2024, 16(4), 785: doi:10.3390/cancers16040785

Liu L, Zhang J, Wood S, Newell F, Leonard C, Koufariotis LT, Nones K, Dalley AJ, Chittoory H, **Bashirzadeh F**, **Son JH**, Steinfort D, Williamson JP, Bint M, Pahoff C, Nguyen PT, Twaddell S, Arnold D, Grainge C, Simpson PT, **Fielding D**, Waddell N, Pearson JV. Performance of somatic structural variant calling in lung cancer using Oxford Nanopore sequencing technology. *BMC Genomics* 2024, Sep 30;25(1):898

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Zhou Q, Niu X, Zhang Z, I'Byrne K, Kulasinghe A, **Fielding D**, Moller A, Wuethrich A, Lobb RJ, Trau M. Glycan profiling in small extracellular vesicles with a SERS microfluidic biosensor identifies early malignant development in lung cancer. *Advanced Science* 2024.11(3), doi:10.1002/advs.202401818

O'Brien D. The Holocaust and Australia: Refugees, Rejection, and Memory. *Australian Historical Studies* 2024, 55(1), 217-218, doi:10.1080/1031461X.2024.2292301 (Book review)

Holt MR, Baird T. Treatment approach to Mycobacterium abscessus pulmonary disease. Clin Chest Med 2023: 44(4), 785-798.

Keynote or Plenary Lectures given in 2024

Date	Title
Darren O'Brien	The Nazi Nurses of the Belzec Extermination Camp
February	Australian Association For Jewish Studies Conference, Sydney, Australia

David Fielding	Robotic Bronchoscopy
March	Thoracic Society Australia and New Zealand Annual Scientific Meeting
David Fielding	Breath testing in early lung cancer
Мау	Radboud University Medical Centre Nijmegan Netherlands Research Group
David Fielding	When and how to biopsy lung nodules
October	Airways, Sydney
David Fielding	Molecular analysis of lung cancer specimens
October	Thoracic Oncology Group Australia, Sydney
David Fielding	Robotic Bronchoscopy
November	Brisbane Cancer Conference
David Fielding	PET/CT improves lung nodule biopsy management and reduces biopsy number
March	Thoracic Society Australia and New Zealand Annual Scientific Meeting.
Farzad Barshirzadeh	Intervention for COPD and other things – what is coming
March	TSANZ Annual Scientific Meeting, Brisbane
Farzad Barshirzadeh	REDUCE Pilot study Investigator meeting presenting preliminary data from REDUCE (First in
September	human clinical trial) study for European investigators
	ERS, Vienna, Austria
Farzad Barshirzadeh	Robotic bronchoscopy results from Real world study at RBWH
March	TSANZ Annual Scientific Meeting, Brisbane
Farzad Barshirzadeh	Management of persistent air leak
March	TSANZ Annual Scientific Meeting, Brisbane
Michael Holt	The Rise and Rise of NTM
October	TSANZ Annual Scientific Meeting



RBWH Department of Thoracic Medicine - First 100 cases of ION Robotic Bronchoscopy

Emergency and Trauma Centre

Research Highlights

The Emergency and Trauma Centre at Royal Brisbane and Women's Hospital (RBWH) provides a vital entry point to emergency healthcare across Metro North Hospital Health Services (MNHHS). Accessible 24/7, the Emergency and Trauma Centre treats almost 90,000 patients per year across a diverse spectrum of diseases and injuries. Quality and value care are underpinned by ongoing research and quality improvement initiatives.

In 2024, clinician-researchers at the Emergency and Trauma Centre contributed to more than 15 million dollars-worth of grant funding, 22 active research projects, and 23 publications in peer-reviewed journals. These activities were supported by funding from various sources including the Emergency Medicine Foundation, Medical Research Future Fund and National Health and Medical Research Council.

Our research projects are broad in scope, reflecting the range and diversity of clinical activities in the department. These include projects on the diagnosis of chest pain (acute coronary syndrome and pulmonary embolism), diagnosis of mild traumatic brain injuries, treatment of sepsis (randomized control trial of albumin vs saline), trauma care (eScooter injuries, intimate partner violence), pre-hospital care (randomised controlled trial of antiemetic drugs, validation of a fibrinogen deficiency score), communication (clinical handovers), innovative teaching (online learning of trauma procedural skills), and stress management and coping skills.

Our clinician-researchers, including doctors, nurses, and allied health clinicians, collaborate with other emergency departments and research centres, and other specialties and health sectors - locally, nationally, and internationally. We encourage strong collaborations with academic institutions including The University of Queensland, Queensland University of Technology, Griffith University, and the CSIRO's Australian e-Health Research Centre, emphasising our place in the rapidly evolving Herston/Kelvin Grove Health and Medical Research Precinct.

Presenting outcomes at conferences is an important part of research and in 2024 our clinician-researchers showcased their research at the International Conference for Emergency Medicine in Taiwan, and were awarded best oral presentation at the Trauma 2004 Conference of the Australian and New Zealand Trauma Society.

The close of 2024 saw the end of an era with A/Prof. Kevin Chu passing the baton of Director of Emergency Medicine Research to Prof. Louise Cullen. Kevin has been a solid source of guidance, expertise, mentorship, advice, and encouragement in research in the department for the last two decades. As he transitions to retirement, he can be assured that he has left the Emergency and Trauma Centre with strong research foundations and a bright research future.

Name	Title	Month Competed	Affiliated University	Summary
Dr Daniel Lancini	Atrial fibrillation in	February 2024	University of Queensland	Supervisors: Paul Martin, Louise Cullen, John Atherton, Sandhir Prasad, Robert Boots.
(PhD)	critical care			This thesis generated novel and clinically relevant real-world data addressing evidence gaps regarding the drivers and clinical impacts of atrial fibrillation in a range of hospital-based critical care cohorts across ICU, ED and CCU settings. It highlights the importance of dedicated context-specific studies investigating atrial fibrillation in unique settings, wherein traditional understanding of pathophysiology and management established from ambulatory cohorts, may not be accurately extrapolated.

Successful Research Higher Degree candidates in 2024

Research Awards and Achievements

Recipient (RBWH staff in bold)	Award	Event
Frances Williamson	2024 Best Medical Oral Presentation	Trauma 2024 Conference, Australia and New Zealand Trauma Society

Research Grants

Investigator Names (RBWH staff in bold)	RBWH Departments / Research Groups	Research Project Title	Granting Body	Total Awarded (whole all years)	Length of Awards in years and years active
Hui (Grace) Xu	Emergency and Trauma Centre	Co-designed strategies to enhance patient participation in their peripheral intravenous catheter care in the Emergency Department: an implementation trial (CARE-ED)	Queensland Health Clinical Researcher Fellowship	\$100,000	2 years, 2024-2026
Hui (Grace) Xu, Jed Duff, Nicole Marsh, Catherine O'Brien, Robert S. Ware (Griffith University), Paul Mariano, Nathan Brown, Peter Del Mar	Emergency and Trauma Centre, Nursing and Midwifery Research Centre	Does a vascular access specialist model in the Emergency Department (VAS-ED) improve peripheral intravenous catheter outcomes? A randomized controlled trial	Emergency Medicine Foundation Leading Edge Grant	\$105,000	2 years, 2024-2026
Colin Banks, Vinay Gangathimmaiah, Jeremy Furyk (Townsville University Hospital), Gerben Keijzers, Philip Jones (GCUH), Kevin Chu , Sean Lawrence, Georgia Livesay (PA Hospital), Theophilus Emeto (James Cook University)	Emergency and Trauma Centre	Suspected Pulmonary Embolism Exclusion with D-dimers in Emergency Departments (SPEED-ED)	Emergency Medicine Foundation Project Grant	\$169,095	3 years, 2024-2026
Frances Williamson, Kate Thompson, Christina Parker, Damian Candusso, Lori Lockyer, Gavin Winter, Thom Saunders (QUT), Michael Muller, Laura Owens	Emergency and Trauma Centre, Trauma Services	Can interactive online learning using enhanced technology adequately teach trauma-based procedural skills to emergency nursing clinicians?	Emergency Medicine Foundation Leading Edge Grant	\$97,469	2 years, 2024-2025
Melinda Nebauer	Emergency and Trauma Centre	Advanced practice nursing and the Nurse Practitioner	Metro North Hospital and Health Service Pre-RHD Scholarship	\$15,000	1 year, 2024-2024
Yit Jian Lee (Redland Hospital), Nathan Brown	Emergency and Trauma Centre	How are hypertensive urgencies managed in emergency departments in Queensland?	Emergency Medicine Foundation Emerge Grant	\$9,766	1 year, 2024-2024
Jaimi Greenslade, Julian Williams, Claire Bertenshaw, Lachlan Parker (QAS), Emma Bosley (QAS), Jason Waddell (QAS), Anna Zipf, Stephanie Nixon (QAS)	Emergency and Trauma Centre	Treatment for nausea and vomiting: A multi-arm double blind, placebo- controlled trial comparing the efficacy of droperidol, metoclopramide, and ondansetron for patients in the prehospital setting	Emergency Medicine Foundation Leading Edge Grant	\$99,527	2 years, 2024-2025
Daniel Bodnar, Martin Wullschleger (GCUH), Robyn Charles, Glenn Ryan (PAH), Jessica Forbes (GCUH), Julian Wong (TUH), Alfred K Lam (PQ), Emma Bosley (QAS)	Emergency and Trauma Centre, Trauma Service	Validation of a Modified Fibrinogen on Admission with Trauma (FibAT) Score in the Australian Setting	Emergency Medicine Foundation Jumpstart Grant	\$39,952	1 year, 2023-2024
Emily Brownlee, Louise Cullen, Jaimi Greenslade, William Parsonage, Tracey Hawkins, Laura Stephensen, Ellyse McCormick	Emergency and Trauma Centre, Department of Cardiology	Relief of chest pain in the Emergency Department (RELIEF)	Emergency Medicine Foundation Jumpstart Grant	\$37,356	1 year, 2023-2025

Investigator Names (RBWH staff in bold)	RBWH Departments / Research Groups	Research Project Title	Granting Body	Total Awarded (whole all years)	Length of Awards in years and years active
Derek Chew (Flinders University), Tom Briffa, Louise Cullen , Stephen Quinn, Jonathon Karnon, S-T Liaw, M Harris, V Eapen, B Liu, M Kahn, F Sitas, D Muscatello, A Sharma, J Hall, J Jonnagaddala	Emergency and Trauma Centre	Optimizing evidence translation in the high-risk time-critical environment of the emergency management for suspected cardiac chest pain (RAPIDx)	National Health and Medical Research Council Partnership Project	\$1,230,191	4 years, 2021-2024
Louise Cullen, William Parsonage, Laura Stephensen, Ray Mahoney, Jaimi Greenslade, Abdul Ihdayhid, Derek Chew, Zephanie Tyack, Andrew Goodman, Susanna Cramb, Greg Starmer, Andrea McKivett, Gemma Figtree, Victoria McCreanor, Graham Hillis	Emergency and Trauma Centre, Department of Cardiology	Clinical and health economics implications of routine CTCA for emergency department assessment of Aboriginal and Torres Strait Islander people at risk of acute coronary syndrome	Medical Research Future Fund 2022 Cardiovascular Health Grant	\$1,488,718	4 years, 2023-2026
Louise Cullen	Emergency and Trauma Centre	A new model of care for tackling heart attacks with First Nations Australians (The Powerful Pictures Study)	Queensland Health Clinical Researcher Fellowship	\$249,648	3 years, 2023-2026
Egerton-Warburton D, Cameron P, Louise Cullen, Teede H, Rickard CM, Morphet J, Fatovich DM, O'Reilly G, Callander E, Kuhn L, Keijzers G, Le L, Enticott J, Buntine P, Tran V, Heiss L, Hullick C, Blecher G, Gourley S, Lee R, Tracey Hawkins , Chan T, Melder A, Saddington E, Yang S, Mihalopoulos C	Emergency and Trauma Centre	Just Say No to the Just in Case Cannula: An Implementation Science Trial	Medical Research Future Fund Clinical Trials Activity Initiative	\$2,890,284	6 years, 2023-2029
Elizabeth Elder, Julia Crilly, Jaimi Greenslade, Brough P, Morphet J, Cameron P, Ellyse McCormick	Emergency and Trauma Centre	Emergency department doctors and nurses stress and coping: A national perspective	Griffith University Health Group Seed Grant	\$20,742	2 years, 2023-2024
Elizabeth Elder, Julia Crilly, Jaimi Greenslade	Emergency and Trauma Centre	National emergency department stress, coping and intention to leave survey (DESTRESS)	Emergency Medicine Foundation Leading Edge Grant	\$99,607	2 years, 2023-2024
Fitzgerald M, Bullen J, McCrory P, Barlow K, Collins-Praino L, Young J, Hellewell S, Vallmuur K, Ring A, Bragge P, Simpson G, Gilroy J, Lannin N, Fatovich D, Makdissi M, Kwan P, Levi C, Ge Z, Davis G, Gabbe B, Parizel P, Charalambous G, Babl F, Curtis K, Caeyenberghs K, Cullen J, Shultz S, Ratajczak P, Anderson V, Henrie D, O'Brien T, Nasrallah F, Armstrong E, Olver J, Togher L, Rushworth N, Fleming J, Mitra B, Gary Mitchell , McDonald S, Reade M, Berg Mvd, Ponsford J, Williams J-K, Ziebell J, Cowen G, Hutchinson A, Gardner A, Ownsworth T, Menon D	Emergency and Trauma Centre	AUS-mTBI: designing and implementing the health informatics approaches to enhance treatment and care for people with mild TBI	Medical Research Future Fund Traumatic Brain Injury Mission	\$2,999,658	3 years, 2022-2025

Investigator Names (RBWH staff in bold)	RBWH Departments / Research Groups	Research Project Title	Granting Body	Total Awarded (whole all years)	Length of Awards in years and years active
Jaimi Greenslade, Louise Cullen, William Parsonage, Derek Chew, Stephen McPhail, Gemma Figtree, David Brain	Emergency and Trauma Centre, Department of Cardiology	The Limit of Detection in the Emergency Department Trial: A stepped-wedge cluster randomised trial for rapid assessment of patients with suspected acute coronary syndrome in the Emergency Department	National Health and Medical Research Council Partnership Project	\$532,120	4 years, 2021-2024
Palpant N, King G, MacDonald P, Kaye D, Fraser J, Louise Cullen	Emergency and Trauma Centre	Development of first-in- class therapeutic for protecting the ischemic heart	National Health and Medical Research Council Development Grant	\$926,673	4 years, 2021-2024
Punyadeera C, Alexandrov K, Atherton J, Coats A, Louise Cullen , Dimeski G, Zhang X	Emergency and Trauma Centre	Biosensor based clinical decision support for patients with heart failure	National Health and Medical Research Council Ideas Grant	\$691,933	4 yrs, 2021- 2024
Rickard CM, Ullman AJ, Marsh N, Kleidon TM, Keijzers G, Schults JA, Cooke M, Byrnes J, Ware RS, Louise Cullen	Emergency and Trauma Centre	Difficult peripheral intravenous catheter insertion: Australian considerations for sustainable implementation of ultrasound guided procedures	National Health and Medical Research Council NHMRC Partnership Grant	\$1,497,197	4 years, 2021-2024
Shultz S, O'Sullivan M, Fitz- Gibbon K, Meyer S, Donkelaar Pv, Christie BR, Mychasiuk R, McDonald S, Law M, Vivash L, O'Brien T, Ponsford J, Jupp B, Chen Z, Mitra B, Jaqueline Marks	Emergency and Trauma Centre	Brain injury in intimate partner violence: insight into a silent pandemic	National Health and Medical Research Council Ideas Grant	\$1,924,134	3 years, 2022-2024
Julian Williams, Angela Hills, Mercedes Ray, Jaimi Greenslade, David Paterson	Emergency and Trauma Centre, Department of Infectious Diseases	Trials in Emergency for Advancing Management of Sepsis: TEAM SEPSIS	Emergency Medicine Foundation Project Grant	\$261,787	3 years, 2023-2025

RBWH Department / Research Group Led Research Activity

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Peter Del Mar	Williams J, Sng N, Greenslade J, Barrett K	Endovascular clot retrieval pathway for acute ischaemic stroke: outcomes after- hours in an Australian metropolitan ED	3	565
Daniel Bodnar	Wullschleger M, Charles R, Ryan G, Forbes J, Wong J, Lam A, Bosley E	Validation of a Modified Fibrinogen on Admission with Trauma (FibAT) Score in the Australian Setting	3	-
Julian Williams	Greenslade J, Hills A, Ray M, Carmichael H.	Intervention with concentrated albumin for resuscitation of undifferentiated sepsis (ICARUS): A randomised controlled trial	3	464

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Julian Williams	Greenslade J, Hills A, Ray M, Carmichael H	Intervention with concentrated albumin for resuscitation of undifferentiated sepsis (ICARUS) Multi-day: A randomised controlled trial	3	-
Julian Williams	Peri A, Hills A, Ray M, Greenslade J, Paterson D	Bacteraemia evaluation with T2MR in the emergency room (BETTER)	3	250
Kevin Chu		Mapping headache features to abnormal CT brain scan reports in emergency department patients	3	0
Jaimi Greenslade	Cullen L, Parsonage W, Hawkins T	Limit of Detection in the Emergency Department Trial (LEGEND): A stepped wedge trial of a clinical decision rule to rule out acute myocardial infarction	3	2205
Louise Cullen	Greenslade J, Parsonage W, Stephensen L	Use of Siemen's Atellica high sensitivity troponin assay for assessment of patients with suspected acute myocardial infarction (SAMIE)	3	293
Louise Cullen	Greenslade J, Parsonage W, Stephensen L.	Use of Siemen's POC high sensitivity troponin assay result to rapidly rule out acute myocardial infarction	3	216
Louise Cullen	Greenslade J, Parsonage W	Use of a single Abbott point of care high sensitivity troponin for rule out of acute myocardial infarction (APOC)	3	455
Louise Cullen	Parsonage W., Stephensen L., Mahoney R., Greenslade J., Ihdayhid A., Chew D., Tyack Z., Goodman A., Cramb S., Starmer G., McKivett A., Figtree G., McCreanor V., Hillis G	Picture This: A new model of care for tackling heart attacks with First Nations Australians (The Powerful Pictures Study)	1	0
Gary Mitchell	Droder B, Smyth T, Jacobson E	Electronic personal mobility devices surveillance: patient interview study (E- MODES II)	3	
John Burke	Brown N, Corry P, South L, Chu K, van der Weegen T	A DES model of ED patient flow	3	-
Emily Brownlee	Greenslade J, Cullen L, Parsonage W, Hughes J, Stephensen L, McCormick E, Hawkins T, McKenzie J, Carl J, Robinson A, Saad I	Relief of chest pain in the Emergency Department (RELIEF)	3	125
Frances Williamson	Thompson K, Parker C, Candusso D, Lockyer L, Muller M, Winter G, Saunders T, Owens L	Can interactive online learning using enhanced technology adequately teach trauma-based procedural skills to emergency nursing clinicians?	4	0
Daniel Bodnar	Mitchell G, Brown N, Hughes J, Chu K	How long can a clinician wearing personal protective equipment safely work in a high-risk isolation area during one continuous shift?	4	0
Grace Xu	Duff J, Keogh S, Chu K, Jones L, Brown N	Promoting patient participation in their peripheral intravenous catheter care in emergency departments (CARE-ED)	2	0

Collaborative Research Activity Involving RBWH Department / Research Group

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Melinda Fitzgerald (Curtin University)	Mitchell G, Brown N, Johnson L	AUS-mTBI: designing and implementing the health informatics approaches to enhance treatment and care for people with mild TBI	3	
Colin Banks (The Townsville university Hospital)	Chu K, Brown N. Johnson L	Suspected pulmonary embolism exclusion with d-dimers in emergency departments (SPEED-ED)	3	
Sandy Schultz (Monash University)	O'Sullivan M, Fitz-Gibbon K, Meyer S, Donkelaar Pv, Christie BR, Mychasiuk R, McDonald S, Law M, Vivash L, O'Brien T, Ponsford J, Jupp B, Chen Z, Mitra B, Marks J	Traumatic brain injury in intimate partner violence	3	
Yit Jian Lee (Redland Hospital)	Brown N	How are hypertensive urgencies managed in emergency departments in Queensland?	3	-
Ben Matthews (The University of Queensland)	Bodnar D, Ambe A, Salisbury I, Brown N, Sanderson P	Understanding work practices and communication systems in emergency medical service contexts: Use cases for head-worn displays	4	-

Research Activity With a Specific Focus on Aboriginal and Torres Strait Islander Peoples

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Number of RBWH Patients Recruited
Cullen L	Parsonage W., Stephensen L., Mahoney R., Greenslade J., Ihdayhid A., Chew D., Tyack Z., Goodman A., Cramb S., Starmer G., McKivett A., Figtree G., McCreanor V., Hillis G.,	Picture This: A new model of care for tackling heart attacks with First Nations Australians (The Powerful Pictures Study)	-

Research Publications

Authors

Investigator	ORCID ID		
Claire Bertenshaw	https://orcid.org/0000-0001-8941-9067	John Burke	https://orcid.org/0000-0001-7450-3127
Daniel Bodnar	https://orcid.org/0000-0002-1823-5620	Kevin Chu	https://orcid.org/0000-0002-1709-7174
Nathan Brown	https://orcid.org/0000-0001-7149-8895	Angela Hills	https://orcid.org/0000-0002-9832-0461
Emily Brownlee	https://orcid.org/0000-0002-1644-4541	Louise Cullen	https://orcid.org/0000-0001-6611-8229
Julia Brownlie		Peter Del Mar	https://orcid.org/0000-0001-7389-7339
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Jill Duncan		Felicity Gilbert	https://orcid.org/0000-0002-0487-8828
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Anna-Lisa Lyrstedt	https://orcid.org/0000-0001-9757-485X	Grace Xu
Ellyse McCormick	https://orcid.org/0000-0003-2462-8022	Jordan Young
Gary Mitchell	https://orcid.org/0000-0001-6440-3683	Sarah Wilkinson
Frances Williamson	https://orcid.org/0000-0002-5476-1791	David Rosengren

Publications in 2024

Journal Articles (RBWH staff or consumers in bold)

Sweeny AL, Alsaba N, Grealish L, Denny K, **Lukin B**, Broadbent A, Huang YL, Ranse J, Ranse K, May K, Crilly J. The epidemiology of dying within 48 hours of presentation to emergency departments: a retrospective cohort study of older people across Australia and New Zealand. Age and Ageing. 2024;53(4)

Chu K, Kelly A-M, Kuan WS, Kinnear FB, Keijzers G, Horner D, Laribi S, Cardozo A, Karamercan MA, Klim S, Wijeratne T, Kamona S, Graham CA, Body R, Roberts T. Predictive performance of the common red flags in emergency department headache patients: a HEAD and HEAD-Colombia study. Emerg Med J. 2024;41(6):368-75

Pickering JW, Young JM, George PM, Watson AS, Aldous SJ, Verryt T, Troughton RW, Pemberton CJ, Richards AM, **Cullen LA**, Apple FS, Than MP. Derivation and Validation of Thresholds Using Synthetic Data Methods for Single-Test Screening of Emergency Department Patients with Possible Acute Myocardial Infarction Using a Point-of-Care Troponin Assay. The Journal of Applied Laboratory Medicine. 2024;9(3):526-39

Assiry AAM, **Brown NJ**, Hazelwood S, Lyrstedt AL, Jarugula R, Jones L, Chu K, Hughes JA. The use and outcomes of non-pharmacological analgesia in the adult emergency department. Int Emerg Nurs. 2024;74:101458

Ramlakhan KP, Roos-Hesselink JW, Basso T, **Greenslade J**, Flint RB, Krieger EV, Shotan A, Budts W, De Backer J, Hall R, Johnson MR, **Parsonage WA**. Perinatal outcomes after in-utero exposure to beta-blockers in women with heart disease: Data from the ESC EORP registry of pregnancy and cardiac disease (ROPAC). Int J Cardiol. 2024;410:132234

Pickering JW, Devlin G, Body R, Aldous S, Jaffe AS, Apple FS, Mills N, Troughton RW, Kavsak P, Peacock WF, **Cullen L**, Lord SJ, Müller C, Joyce L, Frampton C, Lacey CJ, Richards AM, Pitama S, Than M. Protocol for Improving Care by FAster risk-STratification through use of high sensitivity point-of-care troponin in patients presenting with possible acute coronary syndrome in the EmeRgency department (ICare-FASTER): a stepped-wedge cluster randomised quality improvement initiative. BMJ Open. 2024;14(6):e083752

Lee KK, Doudesis D, Mair J, Mills NL, **Study Group on Biomarkers of the ESC Association for Acute Cardiovascular Care**. Clinical decision support using machine learning and natriuretic peptides for the diagnosis of acute heart failure. Eur Heart J Acute Cardiovasc Care. 2024;13(6):515-6

Khan E, Lambrakis K, Liao Z, Gerlach J, Briffa T, **Cullen L**, Nelson AJ, Verjans J, Chew DP. Machine-Learning for Phenotyping and Prognostication of Myocardial Infarction and Injury in Suspected Acute Coronary Syndrome. JACC Adv. 2024;3(9):101011

Hughes JA, Wu Y, Jones L, Douglas C, **Brown N**, Hazelwood S, **Lyrstedt A-L**, Jarugula R, **Chu K**, Nguyen A. Analyzing pain patterns in the emergency department: Leveraging clinical text deep learning models for real-world insights. Int J Med Inform. 2024;190:105544

Williamson F, Cole E. Trauma team activation for older patients with pelvic fractures: Are current criteria adequate? Emerg Med Australas. 2024;36(6):907-14

McLeod K, **Owens L, Williamson F,** Faulkner B, McLanders M. Queensland Trauma Education (QTE): an innovative simulation program that addresses the needs and barriers of interprofessional trauma care education across a complex landscape. Rural Remote Health. 2024;24(2):8851

Cullen L, Greenslade J, Parsonage W, **Stephensen L**, Smith SW, Sandoval Y, Ranasinghe I, Gaikwad N, Khorramshahi Bayat M, Mahmoodi E, Schulz K, Than M, Apple FS, and the SAMIE and SEIGE investigators. Point-of-care high-sensitivity cardiac troponin in suspected acute myocardial infarction assessed at baseline and 2h. Eur Heart J. 2024;45(28):2508-15

Garde V, Thornton K, Pardon M, Gangathimmaiah V, Mallett AJ, **Greenslade J**, Watt K. Functional somatic symptoms in Emergency Department frequent presenters. BMC Emerg Med. 2024;24(1):122

van Oppen JD, Coats T, Conroy S, Hayden S, Heeren P, Hullick C, Liu S, Lucke J, **Lukin B**, McNamara R, Melady D, Mooijaart SP, Rosen T, Banerjee J. Person-centred decisions in emergency care for older people living with frailty: principles and practice. Emerg Med J. 2024:213898

Hoey P, Ryan K, **McDonald C, Brown NJ,** Boon K, Grimpen F, Appleyard M. Repeated intentional foreign body ingestion, what can be done? Emerg Med Australas. 2024;36(4):659-61

Toprak B, Solleder H, Di Carluccio E, **Greenslade JH**, Parsonage WA, Schulz K, **Cullen L**, Apple FS, Ziegler A, Blankenberg S, on behalf of the Artificial Intelligence in Suspected Myocardial Infarction Study (ARTEMIS) group. Diagnostic accuracy of a machine learning algorithm using point-of-care high-sensitivity cardiac troponin I for rapid rule-out of myocardial infarction: a retrospective study. Lancet Digit Health. 2024;6(10):e729-38

Peters N, **Williamson F**, Eley V. Ultrasound transducer disinfection for percutaneous procedures: A review of the evidence supporting guideline recommendations. Australas J Ultrasound Med. 2024;27(4):242-50

Watson N, Droder B, **Mitchell G**, Hacking C. Head, face and neck injury patterns for electric scooter accidents identified on computed tomography scanning: Does legislative change enforcing safer riding practices have an impact on morbidity for significant head, face and neck trauma? J Med Imaging Radiat Oncol. 2024;68(7):796-804

Freeman N, Doolabh A, Maas E, Cupitt B, Shap A, **Bertenshaw C, Mitchell G**. SAFE: Safety of procedural sedation and analgesia administration in the fast-track area of the emergency department. Emerg Med Australas. 2024

Thomas L, Fowler M, Marsh L, **Chu K**, Muller C, Wong A. Validation of a diagnostic support tool for early recognition of cervical arterial dissection in primary care. Clin Neurol Neurosurg. 2024;247:108627

Williamson F, Proper M, Shibl R, Cramb S, McCreanor V, Warren J, Cameron C. Community opioid dispensing after rib fracture injuries: CODI study. Br J Pain. 2024

Liu J, Koopman B, **Brown NJ, Chu K**, Nguyen A. Generating synthetic clinical text with local large language models to identify misdiagnosed limb fractures in radiology reports. Artif Intell Med. 2024:103027

Williamson F, Heng PJ, Okubo M, Mejias AM, Chang W-T, Douma M, Carlson J, Raitt J, Djärv T. Does delivering chest compressions to patients who are not in cardiac arrest cause unintentional injury? A systematic review. Resuscitation Plus. 2024;20:100828.

Geriatric and Rehabilitation Services

Research Highlights

Geriatric and Rehabilitation services participated in diverse research projects, leading to presentations at various national conferences.

Dr. Kavya Venkatesh won the best scientific paper award at the Queensland Geriatric Medicine Advanced Trainee presentation evening for her work in Trauma Geriatrics.

Dr. Leah Goodwin is undertaking a health service quality improvement project aimed at improving opioid stewardship in subacute care.

Dr Hui Shan Lin and Dr Aparna Arjunan have participated in various advanced trainee research projects, which have led to presentations at national scientific conferences.

Research Awards and Achievements

Recipient (RBWH staff in bold)	Award	Event
Dr.Kavya Venkatesh	QLD Geriatric Medicine Advanced trainee presentation-Winner	QLD ANZSGM AT presentation evening

RBWH Department / Research Group Led Research Activity

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Dr.Kanchuka Gunaratna	Dr.Hui-Shan Stella Lin	Prevalence and factors influencing prescription of oral anticoagulation in people over 80 years old with non-valvular Atrial Fibrillation: A systematic review		
Dr.Nishi Khetani Dr.Hui-Shan Stella Lin		Rehabilitation Outcomes in Haemodialysis Patients: The Role of Frailty		
Dr.K. Venkatesh	A. Arjunan ; M. Wullschlegger; J. Warren; L. Jones	Trauma geriatrics – Characteristics and outcomes post-intensive care admission		
Dr.Aparna Arjunan, Dr.Loke,C		Opioid usage pattern in an older hospitalised population		
Dr.Amy Carpenter Dr.Hui-Shan Stella Lin		Statin Therapy in Patients Over the Age of 90		
Dr.Leah Goodwin		Initiative to improve inpatient opioid stewardship practices in the STARS Geriatrics and Rehabilitation Service		

Collaborative Research Activity Involving RBWH Department / Research Group

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Dr.Emma Doig	Dr.Aparna Arjunan	The clinical and cost effectiveness of the Action Falls rehabilitation programme compared to usual care alone to reduce falls in stroke survivors		

Research Publications

Publications in 2024

Journal Articles (RBWH staff or consumers in bold)

Trauma geriatrics – Characteristics and outcomes post-intensive care admission, **K. Venkatesh; A. Arjunan**; M. Wullschlegger; J. Warren; L. Jones, The Australian and New Zealand Society for Geriatric Medicine Annual Scientific Meeting 2024.https://doi.org/10.1111/ajag.13320

Opioid usage pattern in an older hospitalised population, **Arjunan A, Loke C**, The Australian and New Zealand Society for Geriatric Medicine Annual Scientific Meeting 2024.https://doi.org/10.1111/ajag.13320

Post-stroke depression screening in inpatient rehabilitation, **Adsett I, D'Adamo L, Arjunan A, Lin S**, The Australian and New Zealand Society for Geriatric Medicine Annual Scientific Meeting 2024.https://doi.org/10.1111/ajag.13320

Inpatient rehabilitation outcomes in haemodialysis patients: an analysis into missed therapy, **Abdul Mueez Khalil (1), Hui-Shan Lin (2), Kirsten Hepburn (1)** Nephrology Annual Scientific Meeting 2024.

Keynote or Plenary Lectures given in 2024

Date	Title
23/05/2024	Practically Focused Continence ANZSGM ASM Christchurch, Dr. Aparna Arjunan-Session Chair

Internal Medicine Research Unit

Research Highlights

The Internal Medicine Research Unit supports clinician led, collaborative research and knowledge translation to improve the quality, experience and outcomes of hospital and post-hospital care. While our research spans the breadth of general medicine, we have a particular interest in improving multidisciplinary care of older, frail and/or complex patients, including those in perioperative settings, and in improving appropriate and safe use of medications.

We have a strong focus on multidisciplinary collaboration. We aim to build clinician, consumer and health student capacity in research and knowledge translation, to help answer questions that matter to patients, carers and clinicians and to support implementation of evidence into practice and policy. As an example of collaboration and capacity building, Dr Adrienne Young presented our team's collaborative mealtimes research at the International Congress of Nutrition and Dietetics in Toronto in June, and Dr Julie Adsett is leading a large-scale improvement program that is reducing mobility barriers and improving mobility in medical inpatients across Metro North Health.

The success of our research is illustrated by impacts on practice and policy. For example, the Eat Walk Engage program developed and evaluated by our unit has now been successfully implemented in 52 wards in 19 Queensland hospitals, and our advocacy for age friendly hospitals has contributed to amendments to the Queensland Health Capital Division and the Australian Health Facility Guidelines to promote evidence-based hospital design for older person friendly practice. At RBWH, our observational study showing 42% prevalence of cognitive impairment in adult inpatients across all Metro North Health facilities led directly to executive commitment to a 5 year strategy to improve care for this growing and vulnerable patient group. At Metro North level, our observational work demonstrating low mobility and multiple organisational barriers has led to Australia's first policy to maintain and restore function in healthcare.

Associate Professor Denaro and Professor Ian Coombes with the Department of Pharmacy at the University of Sydney continue the ASPIRE Clinical Trial funded from a \$2.4million Medical Research Future Fund grant. This trial, with engagement of the Metro North Primary Healthcare Network, is a stepped-wedge RCT to improve community medicines management in patients at high risk of medicines misadventure on discharge from hospital.

Investigator Names (RBWH staff in bold)	RBWH Departments / Research Groups	Research Project Title	Granting Body	Total Awarded (whole all years)	Length of Awards in years and years active
Adsett J, Mudge A, McRae P, Cahill M, Harvey E, Williams R, Shealy M	Internal Medicine Research Unit, Physiotherapy Department	Time to get moving: Creating active hospitals to reduce hospital associated functional decline	Metro North Clinician Researcher Fellowship		4 years, 2023-2026
Phillips S, Adsett J, Mahoney A, El- Ansary D	Internal Medicine Research Unit	Implementing evidence- based exercise guidelines at scale following median sternotomy surgery, using a co-designed education and training strategy for clinicians	Health Practitioner Research Scheme grant	\$29,869	1 year, 2023-2024
Chen T, Schneider C, Gnjidic D, Hilmer S, Bennett A, Patanwala A, Cairns R, Coombes I, Denaro C , Magin P, Robinson F, Lyle D, Saurman E, Laba T, Moullin J, Luetsch K, Fujita K.	Internal Medicine and Aged Care & Department of Pharmacy	2020; Quality, Safety and Effectiveness of Medicine Use and Medicine Intervention by Pharmacists; A systems-approach to enhancing community-based medication review	Medical Research Future Fund	\$2,432,288	5 years, 2020-2025.
Mackay S, Young A , Bell J Christoffersen A, Trevor D, Mudge A	Internal Medicine and Aged Care, Dietetics and Food Services	Malnutrition – Call it what it is or something else?	The Common Good	\$9,991	1 year, 2023-2024

Research Grants

RBWH Department / Research Group Led Research Activity

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Julie Adsett	Alison Mudge, Prue McRae, Margaret Cahill, Emily Harvey, Rachel Williams, Morag Shealy	Time to get moving: Creating active hospitals to reduce hospital associated functional decline	3	No patient recruitment during 2023 (pre-post study)
Alison Mudge	Charles Denaro, John Atherton, Catherine Yelland, Zaheer Bhikoo, Annabel Hickey, Julie Adsett, Sophie Lloyd, Serena Rofail, George Xue	Improving acute heart failure management in general medical inpatients: a mixed methods study	2	134 recruited in 2023 (analysis continuing in 2024)
Angela Byrnes	Alison Mudge, Adrienne Young, Rhiannon Young (Dietetics & Food Services), Mary Hannan-Jones, Jessica King (QUT)	"We all must eat": analysis of patient reported experience of eating in hospital from the Eat Walk Engage statewide program	0	20 (analysis of data collected in 2019- 2020)
Alison Mudge	Alice Pashley, Aneesha Baghat-Singh, Aparna Arjunan, Janette Moore	Stratifying trajectories after rehabilitation (STAR) mixed methods analysis of the influence of frailty and post- hospital rehabilitation outcomes	2	Conducted at STARS
Karen Lee-Steere	Alison Mudge, Jacki Liddle, Sally Bennett	Family carer perceptions and experiences of delirium prevention and care in acute hospital	0	8 patients and 17 family carers
Angela Byrnes	Alison Mudge, Prue McRae, Adrienne Young, Karen Lee-Steere, Margaret Cahill, Alice Pashley	Sustaining high-value care: multisite survey of sustainability capacity of the Eat Walk Engage program in Queensland hospitals		NA—staff survey
Alison Mudge	Karen Lee-Steere, Margaret Cahill, Elise Treleaven, Amanda Fox, Joel Dulhunty, Alison Craswell, Nicole Gavin, Peter Lawrenson, Laura Beth White, Andrew Teodorczuk, Chloe Yap, Stella Lin, Aparna Arjunan	Delirium and cognitive impairment prevalence and care in adults admitted to Metro North Health facilities: a multisite point prevalence quality assurance study	0	353 recruited 2023, analysis ongoing in 2024
Ahron Rahel	Bankole Sotade, Alison Mudge	Does automatic versus manual titration of oxygen flow rate for hospitalised adults with chronic obstructive airways disease improve time in target range? A systematic review	0	NA—systematic review

Collaborative Research Activity Involving RBWH Department / Research Group

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Andrea Taylor	Craswell A ., Mudge A, Lisec C, Andreson J, Harvey M, Woollett K, Daly N. P	Post-operative functional recovery in older adults who have undergone emergency non-cardiac surgery – a multisite prospective longitudinal cohort study	0	279

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Andrea Taylor	Marsh N, Mudge A, Duff J	The incidence of hospital-associated functional decline until 6 months in older adults who have undergone elective non-cardiac surgery – a cohort study	0	281
Craswell A,	Coates K, Wallis M, Mudge A, Chapman P, Kaur D, Merollini K	Improving access to primary care for older adults in rural aged care homes: implementation of a nurse practitioner role	1	NA
Claudia Virdun	Button E, Mudge A , Yates P	Improving the quality of hospital care for people with serious illness through the use of audit and feedback of patient experience data and ward- based facilitation: an implementation pilot study	0	737
Michael Boules	Mudge A, Krepska A, Bright M	Association of postoperative elevation in markers of neural injury in blood with postoperative neurocognitive disorders in adults receiving general anaesthesia, a systematic review.	0	NA
Michael Boules	Eley V, Mudge A, Van Zundert A	Postoperative neural injury after non-surgical procedures: prospective observational study in patients age 60 years or older undergoing vitrectomy	0	50
Jo Nolan	Conroy T, Hutchinson C, Ross A , Mudge A	Organisational Barriers and Enablers to Adult Patient Mobility in Acute Hospitals: systematic review	0	NA
Nicola Gearon	Cartwright J, Tynan J, Hilder J , Mudge A	Exploring use of life story work in residential aged care to enable person-centred communication and relational care: a video-reflexive ethnography study	0	NA
lan Coombes	Charles Denaro, Liza Jane Raggatt, Angela Smith	RBWH/MN PHN arm of the ASPIRE Trial	0	240

Research Publications

Authors

Investigator	ORCID ID	Investigator	ORCID ID
Prue McRae	https://orcid.org/0000-0002-1039-3632	Karin Lust	https://orcid.org/0000-0002-6536-7191
Julie Adsett	https://orcid.org/0000-0002-4230-4577	Alison Mudge	https://orcid.org/0000-0002-0242-2165
Adrienne Young	https://orcid.org/0000-0002-4498-4342	Charles Denaro	https://orcid.org/0000-0002-6570-3028
Angela Byrnes	https://orcid.org/0000-0003-4069-4724	Julian DeLooze	https://orcid.org/0000-0003-2084-0229
Karen Lee-Steere	https://orcid.org/0000-0002-0121-0136	Elise Treleaven	https://orcid.org/0000-0002-6982-2593
Margaret Cahill	https://orcid.org/0000-0001-8112-8847	Liliana Botero	https://orcid.org/0000-0002-8460-0606
		Alice Pashley	https://orcid.org/0000-0001-7984-7850

Publications in 2024

Journal Articles (RBWH staff or consumers in bold)

Yin S, McRae P, Mudge AM, Adsett J. "It's just really important for us all to be on the same page" Qualitative evaluation of factors that influence written mobility communication. Physical Therapy accepted 6 November 2024 https://doi.org/10.1093/ptj/pzae158

Craswell A, Watson K, Wallis M, Baker J, Merrollini K, Coates K, **Mudge A.** Interpreting context in rural and remote aged care facilities in readiness for a new care model: a mixed method study. J Adv Nurs accepted Nov 21 2024

Adsett J, McRae P, Mudge AM. Staff perceived barriers to patient mobilisation vary by hospital, discipline and experience: a multisite cross-sectional survey. Arch Phys Med Rehabil accepted September 12 2024

Harvey E, **Adsett J, Mudge A**, Steele M, **McRae P**. Written mobility communication in acute care medical wards: an observational study of physical therapists' and nurses' documentation practice. Physical Therapy accepted 10 September 2024 https://doi.org/10.1093/ptj/pzae122

Reid N, **Young A**, Baldassar L et al. The Australian Frailty Network: Development of a consumer-focussed national response to frailty. Aust J Ageing 2024; 43 (4): 852-60

Singh G, **Mudge AM**, **Mattthews R**, Yates P, Phillips J, Virdun C. Experience of care from the perspectives of inpatients with palliative care needs: A cross-sectional study using a patient reported experience measure (PREM) BMC Palliative Care 2024; 23 (1):177

Adsett JA, Mudge AM. Interventions to promote physical activity and reduce functional decline in medical inpatients: an umbrella review. J Am Med Dir Assoc 2024; 25 (8):105052

Deeth S, Stevens S, Bell J, Mudge A. Nutrition care for older adults with delirium: a scoping review. J Clin Nurs 2024; 33 (10): 3886-3904

Lee-Steere K, Mudge AM, Liddle J, Bennett S. Understanding family carer experiences and perceptions of engagement in delirium prevention and care for adults in hospital: Qualitative systematic review. J Clin Nurs 2024; 33 (4): 1320-45

Young AM, Byrnes A, Mahoney D et al. Exploring hospital mealtime experiences of older inpatients, caregivers and staff using photovoice methods. J Clin Nurs 2024; 33 (5): 1906-20

Treleaven E, Matthews-Rensch K, Garcia D et al. Mealtimes matter: measuring the hospital mealtime environment and care practices to identify opportunities for multidisciplinary improvement. Nutr Diet 2024; 81 (4): 436-44

Osborne A, Aung AK, Johnson D, Gibb C, **Mudge AM.** General physicians and perioperative medicine: what is on the horizon? Internal Med J 2024; 541): 12-15

Nolan J, Mackay I, Nolan T, de Looze J. Medical Emergency Team call within 24h of medical admission with a focus on sepsis: a retrospective review. Intern Med J 2024; 54 (6): 961-69

Byrnes A, Flynn R, Watt A, Barrimore S, **Young A**. Sustainability of enhanced recovery after surgery programmes in gastrointestinal surgery: A scoping review. J Eval Clin Pract. 2024; 30 (2): 217-233

Botero L, Banks M, Gordon EH, Bauer J, Young AM. Incidence and outcomes of in-hospital nutritional decline: A prospective observational cohort study in adult patients. Clin Nutr 2024; 43 (5): 1057-64

Botero L, Banks MD, Bauer J, **Young AM**. Self-Determination, Optimism, Social Support, Knowledge, and Skills Have a Positive Influence on the Oral Intake of Long-Stay Acute Patients: A Qualitative Study. J Acad Nutr Diet. 2024.

Mackay S, Botero L, Bell J, Young AM. Exploring adult inpatients' perceptions, understanding and preferences regarding the term 'malnuttition': a qualitative study. J Clin Nurs 2024; 33 (8): 3236-3246

McHugh L, D'Antoine HA, Sarna M, Binks MJ, Moore HC, Andrews RM, Pereira GF, Blyth CC, Van Buynder P, **Lust K**, Regan AK. The effectiveness of maternal pertussis vaccination for protecting Aboriginal and Torres Strait Islander infants against infection, 2012-2017: a retrospective cohort study. Med J Aust. 2024 Mar 4;220(4):196-201. doi: 10.5694/mja2.52220. Epub 2024 Feb 14

Bowyer L, Cutts BA, Barrett HL, Bein K, Crozier TM, Gehlert J, Giles ML, Hocking J, Lowe S, **Lust K**, Makris A, Morton MR, Pidgeon T, Said J, **Tanner HL**, Wilkinson L, Wong M.SOMANZ position statement for the investigation and management of sepsis in pregnancy 2023. Aust N Z J Obstet Gynaecol. 2024 Jun 24. doi: 10.1111/ajo.13848

Aboud L, **Tanner H**, Parsonage W, **Lust K**, **Callaway L**. Haemorrhagic and thromboembolic outcomes in pregnant patients with mechanical heart valves who undergo interruption of anticoagulation for birth - A case series. Aust N Z J Obstet Gynaecol. 2024 Nov 4. doi: 10.1111/ajo.13897

Nicholls K, **Denaro C**, Tchan M, Ellaway C, Bratkovic D, Campbell S, Fookes M, Thomas M. Fabry-specific treatment in Australia: Time to align eligibility criteria with international best practices. IMJ January 2024; <u>https://doi.org/10.1111/imij</u>; 54: 882-890.

Keynote or Plenary Lectures given in 2024

Date	Title
April 2024	Identifying barriers to lead organizational change (Adsett) Invited speaker, Johns Hopkins Activity and Mobility Promotion annual conference, Baltimore
May 2024	'Postoperative delirium' (A Mudge) Invited plenary speaker, Australia and New Zealand College of Anaesthetists
May 2024	Preventing hospital-associated complications (A Mudge)

	Invited keynote presentation Australia and New Zealand Society for Geriatric Medicine
June 2024	'5 years' experience leading a collaborative statewide delirium prevention program for older hospital inpatients in Australia' (A Mudge, M Cahill)
	Symposium, American Delirium Society annual scientific meeting
June 2024	Measuring Mealtimes: Methods to Measure and Improve Hospital Mealtime Care (A Young) Co-Designing a Framework for Delivering an Enhanced Therapeutic Mealtime Experience (A Pashley) Standardised Post-Operative Diet Upgrade Processes Across Australia and New Zealand (A Byrnes) Long-Stay Adult Patients with In-Hospital Nutritional Decline Experience Worse Outcomes (L Botero) International Congress of Nutrition and Dietetics, Toronto
July 2024	"20-year experience with Fabrazyme' (C Denaro)
	Invited lecture - 19 th Japanese Fabry Disease Forum, Tokyo Japan.
August 2024	 Flexible, adaptable, and supportive: qualitative exploration of the ideal mealtime in rehabilitation (A Pashley) Co-designing a framework for delivering an enhanced therapeutic mealtime experience for rehabilitation (A Pashley) Creating Alliances Nationally to Address Disease-related Malnutrition - Launching Australia's Commitment to Action (A Young) Measuring What Matters: What makes hospital nutrition and food services great quality? (A Young) Dietitians Australia National Conference, Brisbane
September 2024	'Improving hospital care for older people' (A Mudge) Invited keynote,National Aging Research Institute (NARI) Seminar Series
September 2024	'Delirium' (A Mudge) Invited keynote Health Roundtable Better Together Patient Safety national workshop
October 2024	'Preventing and caring for delirium in hospital wards' (A Mudge) Invited plenary speaker, Hunter International Geriatrics Program
October 2024	Conference Chair Session 8 - ISOM /SOMANZ International Meeting Sydney (K Lust)
October 2024	Session Chair and Speaker – The Vital Role of maternity Health care Providers in RSV prevention – ISOM /SOMANZ International Meeting Sydney (K Lust)
December 2024	Measuring What Matters: What makes hospital nutrition and food services great quality? (A Young) Health Services Research Conference, Brisbane

Kidney Health Service

Research Highlights

The Kidney Health Service's broad research programs target areas of kidney diseases where we currently do not have effective treatments. The >50 manuscripts published in 2024 attests to the productivity of these programs.

In 2024 we expanded our Clinical Trials Group, with more Clinicians joining the group. The Group's portfolio of studies and projects expanded, with new site Principal Investigators initiating several international studies to test novel therapeutics for IgA nephropathy, membranous nephropathy and lupus nephropathy.

Our Conjoint Internal Medicine – Kidney Research Group's research program of the mechanisms of chronic kidney disease findings of a ferroptotic wave of tubular cell death, presented by Dr Andrew Kassianos, received awards at the International Society of Extracellular Vesicles and the Australian and New Zealand Society of Nephrology Scientific Meetings. Assoc Professor Healy was invited to present the Group's work on the maladaptive kidney cell senescent response in chronic kidney disease in Seoul at the Asia Pacific Congress of Nephrology.

The portfolio of research programs is set to expand with two of our researchers, Dr Monica Ng and Dr Eoin O'Sullivan, receiving the highly competitive Metro North Health Office of Research and Innovation Clinician Research Fellowships. The three-year funding is capacity building, securing protected time to build independent research programs and is an investment forward into research for future years.

Capacity building through collaborations was a common focus across the research programs, with productive achievements in expanding our international and national networks like the Australian Kidney Trials Network as platforms for both Investigator and Sponsor initiated trials. An ongoing important focus is recruiting consumers into the programs, an area that continues to develop.

Successful Research Higher Degree candidates in 2024

Name	Title	Month Competed	Affiliated University	Summary
Amanda McKie (MPhil)	Understanding nurses' perception of sexual dysfunction in people with end stage kidney disease requiring haemodialysis	July 2024	Griffith University	This thesis examined the knowledge, attitudes and confidence of nephrology nurses in discussing sexual dysfunction with adult patients who have kidney failure and receiving haemoidalysis
David McIntyre (PhD)	The development and validation of haemodialysis nurse sensitive indicators	December 2024	Griffith University	This thesis developed haemoidalysis nursing sensitive indicators and then tested the feasibility of auditing these indicators in practice

Research Awards and Achievements

Recipient (RBWH staff in bold)	Award	Event
Benjamin ADAMS	2024 Young Investigator Discovery and Translational Science finalist	Australian and New Zealand Society of Nephrology Annual General Meeting
Laura AUSTIN	2024 Best Paper – Quality Improvement Award	Renal Society of Australia Annual General Meeting
Ann BONNER	2024 Best Oral Presentation	European Dialysis and Transplant Nurses Association (EDTNA)
Ann BONNER	2024 Best Research Paper	Renal Society of Australia Annual General Meeting
Sanjana DANG	2024 Shaun Summers Clinical Trainee Award finalist	Australian and New Zealand Society of Nephrology Annual General Meeting
Andrew KASSIANOS	2024 Discovery and Translational Science winner	Australian and New Zealand Society of Nephrology Annual General Meeting
Andrew KASSIANOS	2024 ISEV2024 Journal of Extracellular Biology oral prize	International Society of Extracellular Vesicles

Recipient (RBWH staff in bold)	Award	Event
Mina KHAIR	2024 Clinical Research Award finalist	Metro North Research Excellence Awards
Dharmenaan PALAMUTHUSINGAM	2024 Early Career Research Award finalist	Australian and New Zealand Society of Nephrology Annual General Meeting

Research Grants

Investigator Names (RBWH staff in bold)	RBWH Departments / Research Groups	Research Project Title	Granting Body	Total Awarded (whole all years)	Length of Awards in years and years active
Finderup J, Konradsen H, Ann Bonner , Agerskov H	COMFORT Nursing Programme	Nursing Research Programme	Novo Nordisk Foundation	\$1,600,000	5 years, 2023-2027
Alexandra Cation, Angela White, Lorraine Garry, Brian Doucet, Helen Healy, Rachel Latimore, Kelsey Pateman, Louise Purtell	Adolescent and Young Adult Group	Co-designing the future of adolescent and young adult care	Royal Brisbane and Women's Hospital Foundation	\$49,953	1 year, 2024
Helen Healy, Chang Seong Kim, Andrew Kassianos	Conjoint Kidney Research Group/Kidney Health Service	Unlocking the death code of IgA nephropathy progression	Metro North Health Office of Research SWIFT program grant	\$23,000	1 year, 2023-2024
Helen Healy, Andrew Kassianos, Monica Ng, Nic WADDELL	Conjoint Kidney Research Group/Kidney Health Service	Prognostic MicroRNA biomarkers for Acute Kidney Injury progression – PROM-AKI	Royal Brisbane and Women's Hospital Foundation	\$50,000	1 year, 2024-2025
Helen Healy, Andrew Kassianos, Ben Adams , Quan Nguyen, Chang Seong Kim	Conjoint Kidney Research Group/Kidney Health Service	Kidney Injury in Diabetic Care and Acute Risk Evaluation – KID- CARE	Royal Brisbane and Women's Hospital Research Project grant	\$50,000	1 year, 2024-2025
Kirsten Hepburn, Martin Wolley, Helen Healy, Pedro Franca Gois, Marina Waisntein, Anne Bonner, Rebecca Saunderson, Kelly LI, Matthew Samasiewicz, Vera Miao, Bobby Chacko, Cylson Mutatiri	Kidney Health Service	Enhancing the patient experience and assisting complex decision making in haemodialysis through digital platforms: eConsent HD	Royal Brisbane and Women's Foundation	\$48,242.00	1 year, 2024-2025
Monica Ng	Conjoint Kidney Research Group/Kidney Health Service	REduce Complications Associated with Nephrological Tests (RECANT) study	Queensland Health Office of Research and Innovation	\$200,000	3 years, 2023-2025
Monica Ng	Kidney Health Service	Revolutionising precision medicine for kidney diseases in the age of nanotechnology, big data and targeted therapies	Metro North Health Office of Research and Innovation Clinician Research Fellowship	\$527,991.00	3 years, 2024-2026
Monica Ng, George John, Carla Scuderi, Jason Roberts, Lorraine Garry	Kidney Health Service	Effect of uraemic gut on absorption profile of oral tacrolimus	Royal Brisbane and Women's Hospital Research Project grant	\$38,700.00	1.5 years, 2024-2025

Investigator Names (RBWH staff in bold)	RBWH Departments / Research Groups	Research Project Title	Granting Body	Total Awarded (whole all years)	Length of Awards in years and years active
Eoin O'Sullivan	Kidney Health Service	Cellular Senescence Precision Medicine for Chronic Kidney Disease	Metro North Health Office of Research and Innovation Clinician Research Fellowship	\$545,124.00	3 years, 2024-2027
Eoin O'Sullivan	Kidney Health Service	SENSE-CKD study	Queensland Health targeted Clinical Research	\$125,000	2 years, 2024-2026
Dwarakanathan Ranganathan, Sharad Ratanjee, Zaw Thet, Yishen Wang	Kidney Health Service Glomerulonephritis Group	Clinical evaluation of COVID-19 related glomerular disease: a mixed method study in Australia	Metro North Health Office of Research SWIFT program grant	\$25,000	1 year, 2023-2024

RBWH Department / Research Group Led Research Activity

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Alexandra Cation	Lorraine Garry, Brian Doucet, Helen Healy, Louise Purtell, Monica Ng, Angela White, Rachel Latimore, Fiona Cullimore, Jack Gardiner, Holly Wakelin, Grace Woodford, Claire Lee, Tori Clough	Co-designed adolescent and young adult kidney care	1	9-18
Shaun Chandler	Eoin O'Sullivan, Dwarkanathan Ranganathan, Jue (Jenny) Wang, Shih- Han (Shirley) Tseng	APAXANS	3	1-5
Helen Healy	Andrew Kassianos, Monica Ng, Xiangju Wang, Benjamin Adams, Chang Seong Kim, Vicki Martin	Conjoint Kidney Research Group - mechanisms of progression in declining kidney function	2	80
Kirsten Hepburn	Ann Bonner, Ilse Berquier, Laura Austen, Helen Healy, Louise Purtell	Kidney Supportive Care	3	1000
Helen MacLaughlin	Marguerite Conley, David Johnson, Andrea Viecelli, Kirsten Hepburn, Tammy Tonges, Justin Holland, Richard Modderman, Carel Pretorius, Hannah Mayr, David Mudge	Slowing kidney disease with weight loss: a randomised controlled feasibility study (SLOWCKD feasibility study)	1	27
Helen MacLaughlin	Erynn McAuley, Jessica Fry , Catherine McFarlane, Marguerite Conley, Sharad Ratanjee	Healthy Eating in Haemodialysis: a prospective cohort study	2	84
Monica Ng	Eoin O'Sullivan, Martin Wolley, Shaun Chandler, Dharmenaan Palamuthusingam, Sharad Ratanjee, Madhivanan Sundaram, Prianka Puri, Dwarakanathan Ragnanathan, Julie Dent, Jue Wang, Shih-Han (Shirley) Tseng, Tanu Taylor	Clinical Trials Unit	3	
Monica Ng	Chin-Ya (Sophie) Chiang, Helen Healy, Andrew Kassianos, Xiangju Wang, Benjamin Adams, Tanu Taylor, Uta Erdbrugger, Fabian Braun, Benedetta Bussolati, Cristina Grange, Samantha Upson	Developing extracellular vesicles in novel non- invasive tests for kidney disease	3	20-25

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Dharmenaan Palamuthusingam	Magid Fahim, Carmel Hawley, David Johnson, Elaine Pascoe	Perioperative outcomes and risk assessment of patients on chronic kidney replacement therapy	4	0
Prianka Puri	Shaun Chandler, Eoin O'Sullivan, Kirsten Hepburn, Shih-Han (Shirley) Tseng, Jae (Jenny) Wang, Tanu Taylor	LUPUS-80298 MACHINE	3	20-25
Monica Ng	Helena Xiang, Carmel Hawley, Ross Francis, Katharine Hegerty, Sophie Harmos, Dharmenaan Palamuthusingam	Immunosuppression regimes after graft failure	2	0
Dwarakanathan Ranganathan	Daniel Schuster, David Gillis, Richard Wong, Aruna Kodituwakku, Eva Malacova, Zihao Tan, Nyi Aung, Sree Krishna Venuthurpalli , Eoin O'Sullivan	ANCA vasculitis registry	3	25-30

Collaborative Research Activity Involving RBWH Department / Research Group

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Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Martin Gallagher	Martin Wolley, Eion O'Sullivan, Jue (Jenny) Wang, Tanu Taylor	ACHIEVE	3	10
Novartis Pharmaceuticals	Dharmenaan Palamuthusingam, Martin Wolley, Monica Ng, Tanu Taylor, Jue (Jenny) Wang	AFFINITY	3	1-5
Alexion	Shaun Chandler, Jue (Jenny) Wang, Dwarakanathan Ranganathan	AHUS registry	3	1-5
Novatis Pharmaceuticals	Dharmenaan Palamuthusingam , Dwarakanathan Ranganathan, Martin Wolley, Monica Ng, Shih- Han (Shirley) Tseng, Tanu Taylor	ALIGN	3	25-30
Alexion	Monica Ng, Martin Wolley, Dwarakanathan Ranganthan, Tanu Taylor	ALXN1210-NEPH - 202	3	3
Alexion	Monica Ng, Shaun Chandler, Eoin O'Sullivan, Dwarakathan Ranganathan, Tanu Taylor	ALXN1210-IGAN - ICAN	3	3
Sree Krishna Venthurapalli	Dwarakanathan Ranganathan, Eoin O'Sullivan, Zaw Thet, Roy Cheraian, Clyson Mutairi, Jue (Jenny) Wang	Multicentre prospective observational cohort study investigating association between ANCA results and relapse of ANCA associated vasculitis	3	1-5
Richard Kitching	Dwarakanathan Ranganathan	Real world experience with Avacopan in ANCA associated vasculitis in Australia and New Zealand	3	1
Eric Morand, Alberta Hoi	Eoin O'Sullivan, Dwarakanathan Ranganathan	Australian Lupus Registry and Biobank	3	5-15
Boehirng-Ingelheim	Monica Ng, Martin Wolley, Tanu Taylor, Jue (Jenny) Wang	BI 1434-0004	3	1-5
Claire Rickard	Jue (Jenny) Wang, Eoin O'Sullivan	A trial of clear guard to reduce dialysis line associated infections in HD units	3	1-5

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Sharon Ricardo	Andrea Wise, Ari Krisnadevi, Shoni Bruell, Han-Chung Lee, Tejasvini Bhuvan , Andrew Kassianos, Sheetal Saini, Xiangju Wang, Helen Healy , Elizabeth Qian, David Elliot, Joel Steele, Maria Fuller, Kathleen Nicholls	Molecular mechanisms of podocyte injury in Fabry disease	3	0
Nyoman Kurniawan	Aurel Amar Lusie Cullen-McEwen, Alexander Combes, Raeesah Hayatudin, Andrew Kassianos, Jianin Du, Sarad Gazzard , Helen Healy, Wendy Hoy, John Bertram, David Ruetens	Counting glomeruli in human kidney specimens using MRI without contrast agents	3	1
Suceena Alexander	Selwyn, Sunder, Raj , George Johne	IgA-GRACE-IgANT - which of the commonly available and approved drugs in addition to standard of care can significantly improve the slope of estimated glomerular filtration rate at two years when compared to standard of care alone in South Asian kidney biopsy proven adult (≥18 years) primary IgA nephropathy	2	0
Adrian Brown	Helen MacLaughlin, Rachel Batterham, Reza Motallebzadeh, Sebastian Potthoff	INFILTRATE: ImplemeNtation of a Formula low energy diet programme for weight loss in a renaL TRansplAnT sErvice	1	0
Andrew Mallett	Shaun Chandler, Eoin O'Sullivan, Jue (Jenny) Wang, Shih-Han (Shirley) Tseng	IMPEDE	3	10-15
Peter Kerr, David Johnson, Andrea Viecelli	Shaun Chandler, Martin Wolley,	INCH HD	2	0
Anna Moles Fernandez	Eoin O'Sullivan and others	The role of CTSD in macrophage biology	4	0
James Burgess	Jeffrey Nirschl, Serena Yeung-Levy and others, Helen Healy, Andrew Kassianos, Benjamin Adams	MicroVQA – an AI multimodal scientific reasoning tool for biomedical research	4	2
Bryan Conway	Eoin O'Sullivan and others	Multiomic analysis of human kidney disease identifies a tractable inflammatory profibrotic tubular cell phenotype	4	0
Caroline Bachmeier	Andrew Kassianos, Karam Kostner, Carel Pretorius	Familial hypercholesterolaemia: towards diagnosis in newborns.	3	0
Sunil Badve, Rathika Krishnasamy	Sharad Ratanjee, Martin Wolley, Shih-Han (Shirley) Tseng, Tanu Taylor	PHOSPHATE	3	10-15
Verity Rawson	Martin Wolley, Dharmenaan Palamuthusingam , Monica Ng, Tanu Taylor, Jue (Jenny) Wang	РНҮОХ	3	2
Sree Krishna Venthurupalli	Dharmenaan Palamuthusingam, Dwarakanathan Ragnanathan, Madhivanan Sundaram	Queensland Renal Biopsy Registry	3	100-105
Clare Arnott, Sunil Badve	Dharmenaan Palamuthusingam, Martin Wolley, Eoin O'Sullivan, Jue (Jenny) Wang, Shih-Han (Shirley) Tseng	Renal LIFECYCLE Trial	3	5-10

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Thomas Bird	Eoin O'Sullivan and others	Inter-organ transmission of hepatocellular senescence	4	0
Wendy Hoy	Helen Healy, Rajitha Abeysekera	The landscape of chronic kidney disease in Sri Lanka – beyond endemic chronic kidney disease of unknown aetiology	3	0
Rajiv Khanna	Michelle Neller, George Ambalathingal, George John Brian Doucet, Shaun Chandler and others	Phase1 Open-Label clinical trial of Allogenic multi-virus specific T cells for the treatment of viral complications in transplant recipients	3	4

Research Publications

Authors

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Ann Bonner	https://orcid.org/0000-0001-9920-6743
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Jayna Gill	https://orcid.org/0000-0003-0271-6996
Helen Healy	https://orcid.org/0000-0003-4342-5300
Kristen Hepburn	https://orcid.org/0000-0003-3142-9195
George John	https://orcid.org/0000-0001-6145-1591
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Sharad Ratanjee	https://orcid.org/0000-0002-6024-7684
Madhivanan Sundaram	https://orcid.org/0000-0002-7331-441X
Martin Wolley	https://orcid.org/0000-0002-7870-5073

Publications in 2024

Journal Articles (RBWH staff or consumers in bold)

Amar A, Kurniawan ND, Cullen-McEwen LA, **Kassianos AJ, Healy HG,** Bertram JF, Chandra SS, **Reutens DC.** Automated 3D segmentation of glomeruli in human kidney tissue specimens using 16.4 T MRI without contrasts agents. ISBI 2024

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Book Chapters (RBWH staff or consumers in bold)

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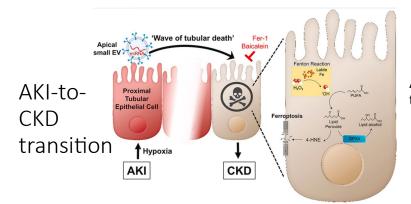
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Keynote or Plenary Lectures given in 2024

Date	Title	
16 February 2024	Monica Ng - Extracellular vesicle separation and concentration. Plenary speaker, GUSEV SIG Education Day (virtual), International Society of Extracellular Vesicles; February 16, 2024	
2024	Dwarakanathan Ranganathan – Update in Membranous Nephropathy. Keynote Speaker, GLOMCON Australia virtual lecture series	
9 May 2024	Monica Ng - Highlights of GUSEV Research. Session co-Chair, International Society of Extracellular Vesicles Annual Meeting; Melbourne, Australia; May 9, 2024	
9 May 2024	Helen Healy - Extracellular vesicles and kidney and 2023 – overview of the 2023 literature. Invited Keynote Speaker, Highlights of GUSEV Research, International Society of Extracellular Vesicles Annual Meeting; Melbourne, Australia; May 9, 2024	
30 May 2024	Madhivanan Sundaram – Genetic diagnosis in glomerulonephritis. Keynote Speaker, GLOMCOM Australia virtual lecture series	
13 June 2024	Kirsten Hepburn – Withdrawal from dialysis. Invited Keynote Speaker, Kidney Supportive Care Session, Renal Society of Australasia Conference 2024, Brisbane 13-15 June 2024	
14 June 2024	Helen Healy - PTEC senescence – a maladaptive pathway of repair. Invited Speaker, Renal Conservative Care session, Asia Pacific Congress of Nephrology 2024, Seoul South Korea 13-16 June 2024	
31 August-1 September 2024	Eoin O'Sullivan - Convenor and Chair, Update Course 59 th Australian and New Zealand Society of Nephrology, Adelaide Australia 31 August-6 September 2024	
31 August 2024	Kirsten Hepburn – Decision making around dialysis vs conservative management. Invited Speaker. Invited Keynote Speaker, Update Course 59 th Australian and New Zealand Society of Nephrology, Adelaide Australia 31 August – 6 September 2024	
1 September 2024	Helen Healy - How to get your first post-doc or research assistant. co-Chair Research and Career Opportunity event, Scientists' Day 59 th Australian and New Zealand Society of Nephrology, Adelaide Australia 31 August-6 September 2024	
1 September 2024	Monica Ng - Hitchhiker's guide to spectral flow cytometry for extracellular vesicle characterisation. Invited Keynote Speaker, Scientists' Day 59 th Australian and New Zealand Society of Nephrology, Adelaide, Australia 31 August-6 September 2024	
1 September 2024	Dharmenaan Palamuthusingam – Updates in Onconephrology, Invited Keynote Speaker, Update Course 59 th Australian and New Zealand Society of Nephrology, Adelaide Australia 31 August-6 September 2024	
1 September 2024	Dharmenaan Palamuthusingam - Non-infectious complications of peritoneal dialysis. Invited Keynote Speaker, Update Course 59 th Australian and New Zealand Society of Nephrology, Adelaide Australia 31 August-6 September 2024	
1 September 2024	Monica Ng – Nephrology: a Lifelong Journey. Moderator, Update Course 59 th Australian and New Zealand Society of Nephrology, Adelaide Australia 31 August-6 September 2024	

4 September 2024	Kirsten Hepburn – KSC Models of care around Australia. Invited Keynote Speaker, 59 th Australian and New Zealand Society of Nephrology Annual Scientific Meeting, Adelaide Australia 31 August-6 September 2024
5 September 2024	Kirsten Hepburn – Decision making around dialysis vs conservative management. Invited Keynote Speaker, Kidney Supportive Care Symposium, Australia and New Zealand Society of Palliative Medicine Biennial Conference, Adelaide 5-8 September 2024
9 October 2024	Andrew Kassianos - Emerging molecular and cellular drivers of kidney disease progression (Invited Keynote Lecture). University of Malaysia Health Academia Month & Research Carnival (UM HAMRC), Kuala Lumpur, Malaysia
10-13 October 2024	Helen MacLaughlin - Kidney Disease Improving Quality Outcomes (KDIGO) Controversies Conference on Obesity and Chronic Kidney Disease, Prague, Czechia, Conference Steering Committee and Group Co-chair
25 October 2024	Monica Ng - Extracellular Vesicles in Kidney Diseases: Tiny Packages with Big Impact. Session co-Chair, American Society of Nephrology Kidney Week; San Diego, USA; October 25, 2024
8 November 2024	Monica Ng – Post training Pathways and Education Updates. Young Australia and New Zealand Society of Nephrology Mentoring night, Australian and New Zealand Society of Nephrology, Brisbane Australia.
22 November 2024	Kirsten Hepburn – Withdrawal from dialysis. Invited Keynote Speaker, Inaugural Australian Kidney Supportive Care Masterclass, 22 nd November, Brisbane Australia.
29 November 2024	Dwarakanathan Ranganathan – Update in Membranous Nephropathy: Keynote Speaker, Pune Society of Nephrology; Pune, India



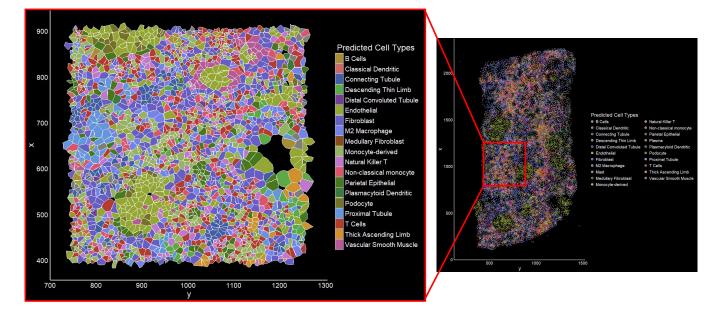
Acute kidney injury does not recover if the injury triggers a wave of kidney tubular cell death.

X Wang Redox Biology 2024;70:103042



Dr Andrew Kassianos receives the award for Discovery and Translational Science at the 2024 Australian and New Zealand Society of Nephrology Scientific Meeting for his work on the wave of kidney tubular cell death.

HuBMAP referenced cell annotation



We can now visualize how the >40 different cell types that make up the kidney are organized using leading edge spatial transcriptomic technologies.

Metro North Sexual Health and HIV Service

Collaborative Research Activity Involving RBWH Department / Research Group

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Gaffney L	Smith A, Van Lieshout T, Redmond A	MK8591A-018: A Phase 3, Randomized, Active- Controlled, Double-Blind Clinical Study to Evaluate a Switch to Doravirine/Islatravir (DOR/ISL) Once-Daily in Participants With HIV- 1 Virologically Suppressed on Bictegravir/Emtricitabine/Tenofovir Alafenamide (BIC/FTC/TAF)		6
Gendrano I	Smith A, Van Lieshout T, Redmond A	MK8591A-017: A Phase 3 Randomized, Active- Controlled, Open-Label Clinical Study to Evaluate a Switch to Doravirine/Islatravir (DOR/ISL) Once-Daily in Participants With HIV-1 Virologically Suppressed on Antiretroviral Therapy		6
Barninger E	Smith A, Van Lieshout T, Redmond A	MK-8591A-052: A Phase 3, Randomized, Active- Controlled, Double-Blind Clinical Study to Evaluate a Switch to Doravirine/Islatravir (DOR/ISL 100 mg/0.25 mg) Once-Daily in Participants With HIV-1 Who Are Virologically Suppressed on Bictegravir/Emtricitabine/Tenofovir Alafenamide (BIC/FTC/TAF)		6
Jackson B	Smith A, Van Lieshout T, Redmond A	MK-8591A-051: A Phase 3, Randomized, Active- Controlled, Open-Label Clinical Study to Evaluate a Switch to Doravirine/Islatravir (DOR/ISL 100 mg/0.25 mg) Once-Daily in Participants With HIV-1 Who Are Virologically Suppressed on Antiretroviral Therapy.		6
Dore G	Smith A, Van Lieshout T	CEASE-D: Control and Elimination within Australia of Hepatitis C from people living with HIV		20
Neaton JD	Smith A, Van Lieshout T	START: The strategic timing of Antiretroviral Treatment (START) study.		8
Petoumenos K	Smith A, Van Lieshout T, Redmond A	Australian HIV Observational Database		120
Punyadeera C	Smith A	A simple saliva test to diagnose head and neck cancer at an early stage. Head and neck cancer detection is a spitting distance away		98

Research Publications

Authors

Investigator	ORCID ID
Angela Smith	https://orcid.org/0000-0001-5054-1196
Andrew Redmond	https://orcid.org/0000-0002-1125-5362
Arron Sparkes	
Luke Coffey	https://orcid.org/0009-0004-3600-7121
Sara Yeganeh	

Palliative and Supportive Care Service

Research Highlights

The Royal Brisbane Palliative and Supportive Care Department has continued to collaborate with other specialties within the Royal Brisbane Hospital to produce research projects and activities. This year we have begun to formalise our collaboration with cardiology to introduce the cardiology supportive care service to the Royal Brisbane Hospital and are currently awaiting ethics approval to facilitate quality assurance for this service. We continue to be actively involved in clinical practice including research within the hepatology service, the nephrology service and in the motor neurone disease area.

We look forward to active involvement in other spaces such as ICU and beginning research into carer bereavement and satisfaction of care in the coming year.

RBWH Department / Research Group Led Research Activity

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Dr Alison Kearney, Sophie Lloyd, Annabel Hickey	Dr Gursharan Singh, Dr Nashringi Weir, Dr Louise McCormack, Jennifer Walker, Tracee Kresin	Cardiac Supportive Care Clinic Implementation Study: A multidisciplinary model of supportive care that addresses the needs of patients with advanced heart failure	2	0

Collaborative Research Activity Involving RBWH Department / Research Group

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Dr Alison Kearney, Sophie Lloyd, Annabel Hickey	Dr Gursharan Singh, Dr Nashringi Weir, Dr Louise McCormack, Jennifer Walker, Tracee Kresin	Cardiac Supportive Care Clinic Implementation Study: A multidisciplinary model of supportive care that addresses the needs of patients with advanced heart failure	2	0

Research Publications

Keynote or Plenary Lectures given in 2024

Date	Title
24/08/2024	Palliative Care Principles in Theranostics – Australiasian Association of Nuclear Medicine Specialists Theranostic Conference, Dr Katrina Kramer
22/11/2024	Calciphylaxis Cases in Kidney Disease – Kidney Supportive Care Masterclass, Dr Katrina Kramer
Sep 2024	Is it ever too early to refer to Palliative Care – Gastroenterological Society of Queensland Conference

Queensland Statewide Antimicrobial Stewardship Program

Research Publications

Authors

Investigator	ORCID ID
Dr Sarah Boyd	https://orcid.org/0000-0002-5158-5032
Dr Angela Berkhout	https://orcid.org/0000-0001-6173-7768
Bonnie Smith	https://orcid.org/0009-0004-1243-7987

Publications in 2024

Journal Articles (RBWH staff or consumers in bold)

Commons RJ, Rajasekhar M, Edler P, Abreha T, Awab GR et al on behalf of the Worldwide Antimalarial Resistance Network (WWARN) Vivax Adherence Study Group. Effect of primaquine dose on the risk of recurrence in patients with uncomplicated Plasmodium vivax : a systematic review and individual patient data meta-analysis. Lancet Infectious Diseases 2024 ;24 (2) :172-83

Commons RJ, Rajasekhar M, Allen EN, Yilma D, Chotsiti P et al on behalf of the Worldwide Antimalarial Resistance Network (WWARN) Vivax Adherence Study Group. Primaquine for uncomplicated Plasmodium vivax malaria in children younger than 15 years : a systematic review and individual patient data meta-analysis. Lancet Child Adolesc Health 2024; 8 : 798-808

Berkhout A, Yeoh DK, Teutsch S, Morris A, Nourse C, Clark JE, Blyth CC, Jones CA; APSU Neonatal HSV Study Advisory Group. Herpes simplex virus in infancy: Evaluation of national surveillance case capture. J Paediatr Child Health. 2024 Oct;60(10):526-530. doi: 10.1111/jpc.16596. Epub 2024 Aug 1. PMID: 39087438

Shaw, P.K.; Hayes, A.J.; Langton, M.; **Berkhout, A**.; Grimwood, K.; Davies, M.R.; Walker, M.J.; Brouwer, S. Clinical Snapshot of Group A Streptococcal Isolates from an Australian Tertiary Hospital. *Pathogens* **2024**, *13*, 956. <u>https://doi.org/10.3390/pathogens13110956</u>

Berkhout A, Clark JE, Jones CA, McMullan B, Grimwood K, Britton PN, Palasanthiran P, Lim S, Yeoh DK, Wong S, Cheng DR, Gwee A, Cross J, Nguyen T, Jeffs E, Walls T, Mahony M, Yan J, Nourse C. Parenteral aciclovir use for suspected herpes simplex virus infection in children (0-18 years). Journal Antimicrobial Chemotherapy, accepted 29/10/24

Bowen, A, **Smith, B**, Daveson, K, Eldridge, L, Hempenstall, A, Mylne, T, Szalkowski, R, Van Rooijen, K, Anderson, L, Stephens, M, Tong, SYC, Yarwood, T (2024), "Capacity building to address antimicrobial resistance in remote Australia: The inaugural HOT NORTH Antimicrobial Academy." Infection, Disease & Health", Infectious Diseases Health, 29 (3) 117-123, doi: 10.1016/j.idh.2024.03.001.