



2022

RBWH Research Report

CANCER CARE SERVICES

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For more information, contact:

RBWH Research Services, Metro North Hospital and Health Service, Building 34, Level 1, South Wing, Herston QLD 4006, email RBWH-Research-AdminCoord@health.qld.gov.au.

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Cancer Care Services



Dr Glen Kennedy
Executive Director RBWH MNHHS

Cancer Care Services (CCS) at RBWH continues to provide expert highly skilled, evidence-based care to patients affected by cancer and non-malignant haematological conditions, including haemophilia.

As a service committed to striving for excellence, our multidisciplinary research team is an integral part of ensuring the provision of cutting-edge treatment to our patients. The Cancer Care research team includes the Allied Health Professions, Cancer Nursing Professorial Precinct, Medical Oncology, Radiation Oncology and Haematology including the Haemophilia Centre and Bone Marrow Transplant Unit. Research is considered core business within Cancer Care, and a vehicle to the facilitation of progressive treatment for our patients.

2022 represented another year of fantastic achievement in research for Cancer Care. The annual CCS Research Retreat brought together a hybrid (virtual and in person) event, for the first time, saw investigators from CCS and senior hospital and district executives to enable planning to ensure that research remains at the forefront of our service both now and into the future.

Highlights in 2022 include progressing the commencement a local clinical trial incorporating locally manufactured chimeric antigen receptor T-cells (CAR-T) as well as participation in several commercial CAR-T studies. Our oncology team has been at the forefront of COVID research into exploring the psychosocial impacts of COVID-19 on oncology workforces during the pandemic.

Our Research Advisory Group (RAG) continued to link and develop cancer research across our district. Ongoing use of a research trial database has significantly improved our ability to track and plan our clinical trial resources more effectively. The Cancer Care Trust committee has allowed the ongoing process of a cancer-care grant round for investigators in 2022.

Other research highlights for the year are detailed in our separate departmental reports, and I encourage all to read these.

This year's Research Report would not be complete without acknowledging the global pandemic. The pandemic brought along with-it restrictions and situations that have never been seen before and the teamwork and professional response from the Cancer Care Services Team who adapted daily to the changes; taking everything in their stride was something extraordinary to witness.

We look forward to 2023 to continue to strive to expand and embed research within CCS across all patient and disease groups, incorporating new and novel approaches to care within clinical, translational, and basic science research programmes and partnerships, aiming to constantly improve clinical outcomes for our patients.

Several notable achievements within Cancer Care Services include.

- The Department of **Haematology** and BMT continues to strive to provide exceptional care for patients with blood disorders and cancers through a comprehensive research program which includes translational, correlative, collaborative and investigator initiated clinical trials across a diverse group of haematological malignancies. Several notable funding grants were attained in 2022 including: NHMRC investigator grant - 2021-2025 (\$1.9 million), MRFF clinical trials activity – 2021-2025 (\$2.69 million), SERTA project grant - \$ 75k, MNHHS collaborative research grnt – 2022-2024 - \$ 50k
- 2022 was another exciting year for the **Queensland Haemophilia Centre (QHC)** working in collaboration with the Clinical Research Unit Cancer Care Services and the Cellular Therapy/ BMT Laboratory. We built further

on our experience with AAV5-FVIII gene therapy, having dosed 8 patients in total across the two trials. We have commenced another phase II/III clinical trial in AAV5-FIX gene therapy and have recruited 3 patients to this initial observational study, with subsequent dosing to begin in early 2023. There remains much to be understood about vector transduction, intracellular trafficking, and transgene expression in the Haemophilia gene therapy space. The QHC also finished the HAVEN-4 study, evaluating the efficacy of a factor VIII mimetic (Emicizumab) given via monthly subcutaneous injection.

- The culture of inter-disciplinary collaboration and advancing technology in research remained strong for **Radiation Oncology** in 2022. Some of the departments 2022 achievements include: Professor Lizbeth Kenny and team were awarded a 2022 Garnett Passe & Williams grant for \$375 000 to allow investigation of the use of a novel assay for early detection of minimal residual disease in head and neck cancer patients. Associate Professor Tanya Kairn was appointed as the first female Director of Radiation Oncology Medical Physics in Queensland Health. The Cancer Care Services 3D printing research team were awarded the Metro North Research Excellence Discovery and Innovation award for: Safer, more accurate and more comfortable radiotherapy through 3D printing. Associate Professor Tanya Kairn, Director of Medical Physics, was a finalist in the Metro North Research Excellence awards in the Clinical Research Excellence award category. Dr. Samuel Peet, a medical physicist with the radiation oncology team, successfully completed his PhD on out-of-field dose in contemporary radiation therapy. In the same month, he also secured a CAHRLI early-career fellowship to support the development of a secondary cancer risk evaluation tool. A team of Radiation Therapists led by Brianna McCoola have been awarded the Consumer Focus Project QuARRIES Award for their project titled “AYA multimedia patient education in Radiotherapy”.
- The Department of **Medical Oncology’s** research program remained very active throughout 2022, with the unit continuing to undertake research with a wide variety of collaborators. The RBWH Medical Oncology unit was recently awarded the 2022 Australasian Gastrointestinal Trials Group (AGITG) Outstanding Metropolitan Site Award. The RBWH Medical Oncology Department has received global recognition as a “high-performing” clinical trial site, by being one of only 2 sites in Australia to be offered a Clinical Site Partnership with Merck Sharp & Dohme. A team of researchers, led by A/Prof Zarnie Lwin, was a finalist in the 2022 Metro North Research Excellence Awards. The nominated project “The Impact of COVID on the Cancer Care Workforce Across the Royal Brisbane and Women’s Hospital and the Sunshine Coast University Hospital”. Another highlight was the presentation of results of 2 significant Australian studies that Medical Oncology at RBWH played a major role in. Both were presented in oral sessions at the American Society of Clinical Oncology annual meeting in June. The Department was successful in obtaining a 2021 MNHHS SEED Innovation Grant for the project “Reducing severe toxicity and hospitalisations related to 5-Fluorouracil (5-FU) chemotherapy”. Departmental output included over 40 publications in 2022, including a number in high impact journals.
- In the year 2022 the **Cancer Care Nursing** Research team continued to pursue research activities through presentations, publication and progressing grant funded projects. Dr Natasha Roberts graduated from her Doctor of Philosophy, with an outstanding thesis award and Mrs Robyn Matthews graduated from her Master of Philosophy. We congratulate Natasha and Robyn on these wonderful achievements. Cancer Care services was well represented at national conferences and symposiums, with four oral presentations and two poster presentations at the Blood Conference, two oral presentations and six posters at the Herston Health Symposium. Dr Nicole Gavin presented a pre-congress symposium and Brigid Scanlon gave an oral presentation on COVID-19 vaccine hesitancy at the Cancer Nursing Society of Australia Conference. Brigid Scanlon was also awarded the *Professor Lawrie Powell AC Early Career Research Award* at the Herston Symposium. Dr Natasha Roberts represented Cancer Care Services with presentations at the Brisbane Cancer Conference and the National Ethics Conference. Robyn Matthews has continued to develop her collaborative grant funded research project with an aim of commencing in the first quarter of 2023. Brigid Scanlon has continued to grow her body of work relating to health equity in cancer care. Dr Nicole Gavin has continued to supervise higher-degree research students, with both PhD and MPhil students. Pleasingly, the nursing research team were able to recommence the Evidence Based Practice program, with multiple nursing staff taking part throughout the year.
 - ❖ Across 2022 **Allied Health Professions** have continued to strengthen and expand our research program in cancer care services. Over 2022 Allied Health Professions have been recognised for our contribution of high quality and translational cancer care research through a series of awards and achievements. Key highlights are as follows: Dr Teresa Brown (Nutrition & Dietetics) was awarded a Metro North Clinician Research Fellowship. Dr Jasmine Foley and Dr Shana Taubert (Speech Pathology) had their degrees conferred by The University of Queensland. Allied Health Professions-led research teams were awarded RBWH QuARRIES awards for their research incorporating cancer care services titled, “Co-designing a person-centred PREMS framework” and “Developing a speech pathology-led videofluoscopic swallow study referring model” 15 research studies were led by Allied Health clinician researchers and 21 in collaboration with other teams. 24 peer reviewed publications and 2 international keynote presentations were delivered. 6 research higher degree students with a focus on cancer care were supervised by Allied Health staff.

Clinical Research



Professor Steven Lane
Director of Clinical Research CCS
Clinical Haematologist CCS RBWH

Metro North Cancer Care Services integrates clinical and translational research as fundamental values that are essential to providing world leading clinical care to patients. We are particularly proud of the many research achievements in 2022 despite the numerous waves of COVID infections that pressured clinical care and staffing resources. I would encourage you to read the individual reports from each of our clinical service lines and I congratulate all the staff for their collective efforts over the last 12 months.

Medical Oncology has been recognised as a global leader in clinical trial recruitment and this recognition has helped to grow our clinical trial program. Our researchers in medical oncology have presented at international meetings such as the American Society of Clinical Oncology and have published in many top international journals. The unit received recognition as a finalist in the Metro North Research Awards (Assoc. Prof. Zarnie Lwin and team). Another outstanding achievement was the Outstanding Research Award from the Australasian Gastrointestinal Trials Group (AGITG) for more than 25 years effort in this field.

Haematology and Bone Marrow Transplantation has successfully launched an academic CAR-T cellular therapy program, supported by a Qld Health Development Grant, and this synergises with the commercial CAR-T Statewide clinical service, all based at RBWH. We are the national lead for a genetic sequencing and targeted therapy clinical trials program (MoST-LLY, funded by the MRFF and also by a NHMRC Investigator Grant). The department has had numerous awards and recognition including Siok Tey (QIMR Lawrie Powell Clinical Translation Award) and high-profile publications in journals such as Nature Medicine, Nature Communications, Blood, Blood Advances, Leukaemia and have been involved in numerous national clinical guidelines. The Statewide Haemophilia Service has been a national leader in gene therapy haemophilia studies. Both these and the CAR-T studies would not be possible without the exceptional skills and hard work from the Cellular Therapy and BMT laboratory.

Radiation Oncology and Radiation therapy have numerous ongoing research projects. Notable achievements include the Metro North Research Excellence Discovery and Innovation Award and Dr Samuel Peet who completed his PhD in 2022. Associate Professor Tanya Kairn was appointed as the first female Director of Radiation Oncology Medical Physics, and I note Tanya's many research achievements throughout the year.

Cancer Nursing remains a highly active academic department with numerous publications and presentations. I particularly would like to recognise Dr Natasha Roberts and Ms Robyn Matthews on their achievement of research higher degrees, and Brigid Scanlon for winning the Early Career Research Award at the Herston Symposium.

Our clinical service lines work closely with the Allied Health Professions and Pharmacy, and we recognise their fundamental roles in much of the clinical trial and supportive care research that is performed in the Division.

Finally, I'd like to acknowledge our clinical trial coordinators and managers. They are the glue that holds together our program, and their hard work forms the foundations of everything we do. Also, I'd like to recognise the tireless efforts of Tracey Gilbert, our research support officer, for coordinating the Research Advisory Group and ensuring that research administration continues seamlessly.

Allied Health Professions

Research highlights for the year (1 January – 31 December 2022)



Dr Clare Burns
Advanced Speech Pathologist (Cancer Care)
Speech Pathology Department

Across 2022 Allied Health Professions have continued to strengthen and expand our research program in cancer care services. Our research is dedicated to improving patient outcomes and enhancing service delivery. We achieve this by leading a diverse range of studies where we engage our consumers, clinicians, and other stakeholders in the key aspects of care, incorporating the co-design of cancer service frameworks, developing, and evaluating new clinical practices, education programs, models of care, and utilising technology to optimise the delivery of supportive care.



Allied Health Professions research is embedded within the multidisciplinary teams of radiation oncology, medical oncology, haematology/BMT. We value our ongoing collaboration with services such as QIMR, QLD PET Service, Gastroenterology, ENT, and others who form part of our research teams. This year we have continued to strengthen our research collaborations with major academic and clinical centres of excellence across Australia as well as the partnerships with teams in Europe, and the USA.

Over 2022 Allied Health Professions have been recognised for our contribution of high quality and translational cancer care research through a series of awards and achievements. Key highlights are as follows:

- ❖ Dr Teresa Brown (Nutrition & Dietetics) was awarded a Metro North Clinician Research Fellowship. Over the next four years, Teresa's research program will focus on optimising nutrition outcomes and care pathways for patients undergoing surgical resection for head and neck cancer.
- ❖ Dr Jasmine Foley and Dr Shana Taubert (Speech Pathology) had their degrees conferred by The University of Queensland. Jasmine's PhD program examined head and neck cancer outcomes and healthcare access by remoteness and established ways of improving speech pathology services for people with head and neck cancer living rurally within Queensland. Shana's PhD involved the development, implementation, and evaluation of a speech pathology-led videofluoroscopic swallow study referring model which enhanced safety and streamlined access for cancer care patients to this instrumental assessment.
- ❖ Allied Health Professions-led research teams were awarded RBWH QuARRIES awards for their research incorporating cancer care services titled, "Co-designing a person-centred PREMS framework" and "Developing a speech pathology-led videofluoroscopic swallow study referring model"
- ❖ Allied Health clinicians were awarded 4 research grants totalling \$225,618.
- ❖ 15 research studies were led by Allied Health clinician researchers and 21 in collaboration with other teams.
- ❖ 24 peer reviewed publications and 2 international keynote presentations were delivered.

6 research higher degree students with a focus on cancer care were supervised by Allied Health staff. These research programs are embedded within RBWH cancer care services to support research translation and provide optimal patient and service benefits.

Successful PhD candidates in 2022

Name	PhD Title	Month Completed	Affiliated University	Summary
Dr Jasmine Foley	Enhancing understanding of, and access to, speech pathology head and neck cancer services in rural areas	August 2022	The University of Queensland	This thesis examined head and neck cancer (HNC) outcomes and healthcare access by remoteness and ways of improving speech pathology (SP) services for people with HNC living rurally within Queensland. Five studies were conducted of mixed methodology incorporating: quantitative analysis of a state-wide database; journey mapping of healthcare access for metropolitan and rural patients; exploration of patient and staff experiences of HNC services; concept mapping to prioritise areas of SP service improvement; and enacting service change. Overall, this thesis demonstrated multiple inequities for rural people with HNC however change is possible when SP services are supported to evaluate and implement service enhancements.
				
Dr Shana Taubert	Enhancing speech pathology practice in videofluoroscopic swallow studies	November 2022	The University of Queensland	This thesis used mixed methods to evaluate a newly developed videofluoroscopy swallow study (VFSS) eLearning training program for speech pathologists (SPs) and to examine implementation outcomes of an enhanced scope practice model of Speech Pathology-led VFSS referring across RBWH including Cancer Care Services. Results indicate that eLearning was a viable method of delivering VFSS training which increased SPs' access to training, enhanced training processes, and delivered service benefits. The Speech Pathology-led VFSS referring model improved radiation safety of referrals, and multiple contextual factors, including adequate resources, were critical for implementation and sustainability. These findings provide evidence to inform innovations that improve VFSS service provision.
				

Research Awards and Achievements

Recipient (RBWH staff in bold)	Award	Event
Kelsey Pateman (CAHR) , Anja Christoffersen (Consumer representative) Aideen Hanley-Platz (Safety and Implementation Service), Meredith Kropp (Safety and Implementation Service), Cory Williams (Surgery and Perioperative Services), Danielle Heffernan (Internal Medicine Service), Alison Alexander (Cancer Care Services), Colette Barnbrook (Surgery and Perioperative Services), Elizabeth Ryan (Women's and Newborn Services), Dale Trevor (Consumer representative), Adrienne Young (Nutrition & Dietetics) , Christine Petrie (Metro North Engage), Merrilyn Banks (Nutrition & Dietetics)	Allied Health Professions Service Line Award "Co-designing a Person-Centred PREMS Framework"	RBWH QUARRIES Awards December 2022

Recipient (RBWH staff in bold)	Award	Event
Kelsey Pateman (CAHR) , Anja Christoffersen (Consumer representative), Aideen Hanley-Platz (Safety and Implementation Service), Meredith Kropp (Safety and Implementation Service), Cory Williams (Surgery and Perioperative Services), Danielle Heffernan (Internal Medicine Service), Alison Alexander (Cancer Care Services), Colette Barnbrook (Surgery and Perioperative Services), Elizabeth Ryan (Women's and Newborn Services), Dale Trevor (Consumer representative), Adrienne Young (Nutrition & Dietetics) , Christine Petrie (Metro North Engage), Merrilyn Banks (Nutrition & Dietetics)	Consumer Focus Award "Co-designing a Person-Centred PREMS Framework"	RBWH QUARRIES Awards December 2022
Shana Taubert, Clare Burns , Liz Ward, Lynell Bassett , Linda Porter, Andrew Groundwater, Ben Keir	Fostering Innovation Project Award "Implementation and evaluation of a speech pathology-led referring model for videofluoroscopy swallow studies"	RBWH QUARRIES Awards December 2022
Shana Taubert, Clare Burns , Liz Ward, Lynell Bassett, Linda Porter, Andrew Groundwater, Ben Keir	People's Choice Award "Implementation and evaluation of a speech pathology-led referring model for videofluoroscopy swallow studies"	2022 AH-TRIP Showcase
Shana Taubert, Clare Burns , Liz Ward, Lynell Bassett, Linda Porter, Andrew Groundwater, Ben Keir	CAHRLI 2021 Local Award – Highly Commended "Implementation and evaluation of a speech pathology-led referring model for videofluoroscopy swallow studies"	Collaborative for Allied Health Research, Learning and Innovation (CAHRLI) Local Awards 2022

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
Clare Burns	Speech Pathology	Enhancing speech pathology dysphagia services through telepractice	MNHHS Clinician Fellowship	\$175,000	2019-2022
Sarah Andersen	Nutrition and Dietetics	Investigating the role of prebiotics in optimising the microbiome and patient outcomes post allogeneic stem cell transplantation	CAHRLI – ECR fellowship	\$25,000	2022
Teresa Brown	Nutrition and Dietetics	Optimising nutrition outcomes and care pathways for patients undergoing surgical resection for head and neck cancer	MNHHS Clinician Research Fellowships	\$175,000	2022-2025
Teresa Brown	Nutrition and Dietetics	Investigating the Impact of Skull Base Surgery on Nutrition Outcomes to Optimise Nutrition Care Pathways for Patients Undergoing Surgical Resection for Head and Neck Cancer	Skull-Base Research Funding, RBWH	\$25,618	2022-2023

Current RBWH Department / Research Group Led Research Activity

Lead Investigator Name (RBWH staff in bold)	Other Study Investigators (RBWH staff in bold)	Research Project Title	Number of RBWH Patients Recruited in 2022
Alice Rogers	Claire Blake, Teresa Brown	Complications following gastrostomy placement in patients with head and neck cancer: A Systematic Literature Review	NA
Claire Blake	Teresa Brown , Anita Pelecanos (QIMR), Laura Moroney, Jennifer Helios , Brett Hughes, Liz Kenny	Enteral nutrition support and treatment toxicities in patients with head and neck cancer receiving helical intensity-modulated radiotherapy with concurrent chemotherapy or surgery	0
Claire Blake	Elise Treleaven, Ally di Bella, Teresa Brown, Adrienne Young , Jenni Leutenegger, David Wyld	Implementation of patient-led malnutrition screening in the cancer care ambulatory setting	0
Claire Blake	Rainbow Lai (UQ), Teresa Brown , Anita Pelecanos (QIMR), Laura Moroney, Jennifer Helios , David Smith (QIMR), Brett Hughes, Liz Kenny, Benjamin Chua, Judith Bauer	Nutrition outcomes and treatment toxicities in patients with head and neck cancer receiving helical intensity-modulated radiotherapy	0
Clare Burns	Liz Ward (CFAHR; UQ), Jasmine Foley (UQ), Rebecca Nund (UQ), Laurelie Wall (Metro South HHS), Dr Maurice Stevens, Dr Lizbeth Kenny	Understanding the Regional and Remote Head and Neck Cancer (HNC) Patient Services Journey	N/A
Clare Burns	Annie Hill (UQ), Liz Ward (CFAHR; UQ), Lynell Bassett ; Kate Hacking (MNHHS); Michelle Slee (MNHHS); Brooke Cowie (MNHHS); Wendy Luttrell (MNHHS)	Examining stakeholder perceptions of an asynchronous telepractice program for the delivery of dysphagia rehabilitation	N/A
Clare Burns	Annie Hill (UQ), Liz Ward (CFAHR; UQ), Sanjeeva Kularatna (AusHSI QUT)	Pilot trial of an integrated speech pathology telepractice service for dysphagia rehabilitation.	N/A
Clare Burns	Annie Hill (UQ), Liz Ward (CFAHR; UQ), Sanjeeva Kularatna (AusHSI QUT); Joshua Byrnes (Griffith University)	Evaluation of two speech pathology service models for swallowing rehabilitation post head and neck cancer treatment	20
Emilie Croisier	Teresa Brown , Alice Grigg, Phillip Chan, Jeffrey Goh, Judy Bauer (Monash)	Dietary counselling to increase soluble fibre in patients with gynaecological cancers undergoing pelvic radiotherapy: a feasibility study	0
Heidi White	Rebecca Fichera, Elise Treleaven, Claire Blake , Leonie Naumann	Implementing sarcopenia screening in the oncology day therapy unit	0
Kyla Stableford	Leonie Naumann, Kirsty Quince, Julie Adsett	Increasing exercise participation in the cancer care wards at Royal Brisbane and Women's Hospital	25
Lauren Rae	Emma Foley, Elizabeth Allen, Kirsten Turner	RBWH Occupational Therapy Cancer Care Outpatient Service Evaluation	N/A
Leonie Naumann	Jennifer Paratz, Michelle Cottrell, Hildegard Reul Hirche, Kirsty Quince, Clare Burns , Tracy Comans (UQ), Anna Finnane (UQ), Trevor Russell (UQ)	A telehealth model for education and monitoring for early lymphoedema detection and shoulder dysfunction in patients after breast cancer surgery: A pilot cohort study	0

Lead Investigator Name (RBWH staff in bold)	Other Study Investigators (RBWH staff in bold)	Research Project Title	Number of RBWH Patients Recruited in 2022
Leonie Naumann	Hildegard Ruel-Hirche , Amanda Pigott (UQ), Jodie Nixon (PAH)	Advanced lymphedema course quality evaluation	0
Michelle Cottrell	Perry Judd, Sue Laracy , Cate Carter (RDH), Jacqueline Nix (RDH), Leonie Naumann, Robyn Scheer, Jennifer Strong, Sonia Sam	Prospective surveillance and early intervention for lymphoedema (SAIL) in Breast Cancer patients: an evaluation of a standardised model of care in Metro North Hospital and Health Service.	0
Rebecca Fichera	Teresa Brown, Sarah Andersen , Glen Kennedy, David Williams	New Model of Care for autologous stem cell transplant patients (AutoCare): adherence and clinical outcomes	0
Sarah Andersen	Rebecca Fichera, Teresa Brown , Glen Kennedy, David Williams	Audit of new nutrition support protocol for allogeneic transplantation	NA
Sarah Andersen	Teresa Brown , Glen Kennedy, Frederik Steyn (Neurology & UQ), Rebecca Fichera	Energy expenditure in patients undergoing allogeneic stem cell transplantation	0
Sarah Andersen	Teresa Brown, Bronwyn Segon , Judy Bauer (Monash)	Systematic review of vitamin requirements during stem cell transplantation	NA
Sarah Andersen	Jiani Xu (UQ), Glen Kennedy, Judy Bauer (Monash)	Nutrition support and clinical outcomes after allogeneic stem cell transplantation	NA
Sarah Andersen	Andrea Henden (QIMR), Heidi Staudacher (Deakin), Glen Kennedy, Nicole Gavin	Fibre intake during treatment for haematological malignancies: a scoping review	NA
Sarah Andersen	Andrea Henden (QIMR), Glen Kennedy, Merrilyn Banks	Prebiotics, the gastrointestinal microbiome and clinical outcomes post allogeneic stem cell transplantation	17
Sarah Andersen	Teresa Brown, Claire Blake, Rachel Willims, Helen MacLauglin Dannielle McCormack, (QUT), Christine Johnson (QUT)	Micronutrient requirements during graft versus host disease post allogeneic stem cell transplantation: a systematic review	NA
Scott Russell	Peter Window, Simon Whitehart , Jane Mason	Does the use of video-conferencing in physiotherapy consultations of adult patients with haemophilia change clinical recommendations when compared to audio-conferencing?	0
Sarah Wilson	Clare Burns , Bena Brown (Metro South HHS; UQ)	Development of clinical and videofluoroscopic assessment tools for the evaluation of dysphagia following laryngectomy: An e-Delphi process	N/A
Shana Taubert	Clare Burns , Liz Ward (CFAHR; UQ), Lynell Bassett	Videofluoroscopic Swallow Study referral processes at RBWH	N/A
Teresa Brown	Merrilyn Banks , Brett Hughes, Charles Lin, Liz Kenny, Louise Campbell (Qld PET Service), Judy Bauer (Monash)	Assessment of sarcopenia and malnutrition in patients with head and neck cancer undergoing treatment of curative intent – implications for practice	0
Teresa Brown	Daniel Hwang (UQ), Elise Treleaven , Brett Hughes, Liz Kenny, Charles Lin, Penny Webb (QIMR), Anita Pelecanos (QIMR), Judy Bauer (Monash)	A feasibility study to investigate taste changes post treatment in patients with head and neck cancer and their association with genes and dietary behaviour	0

Collaborative Research Activity Involving RBWH Department / Research Group

Lead Investigator Name (RBWH staff in bold)	Other Study Investigators (RBWH staff in bold)	Research Project Title	Number of RBWH Patients Recruited in 2022
Eg. Alvin Wong	Merrilyn Banks , Judy Bauer	Cost effectiveness of nutrition support services	20
Elise Gane (PAH)	Shaun O'Leary , Caroline Speksnijder (Uni Medical Centre Utrecht)	Neck rehabilitation after neck dissection for head and neck cancer: a pilot intervention study	N/A
Heshani Mediwake, Glen Kennedy, Siok Tey	Ada Lo, Harriet Bodimeade	NCA in CARTs: Neurocognitive assessment in patients undergoing chimeric antigen receptor therapy	1
Laurie Wennerholm (White Plains Hospital New York, UQ)	Clare Burns , Liz Ward (CFAHR/UQ),	Laryngectomy care pathways: Examining patient and clinician perspectives	N/A
Liz Ward (CFAHR/UQ)	Clare Burns , Laurie Wennerholm (White Plains Hospital New York, UQ)	Examining international laryngectomy care during the COVID-19 pandemic: Informing a consensus-driven pathway for speech language pathology management	N/A
Liz Ward (CFAHR/UQ),	Jasmine Jones (UQ), Clare Burns , Laurelie Wall (UQ), Rebecca Nund (UQ), Nicky Graham (QH), Wendy Comben (THHHS), Emily Missenden (NWHHS))	Enhancing Speech Pathology Workforce and Service Capabilities to Deliver Services to Patients with Head and Neck Cancer	N/A
Liz Ward (CFAHR/UQ)	Clare Burns , Kellie Hancock (PAH), Jenny Boxall (PAH), Rachelle Robinson (Prince of Wales Hospital), Molly Barnhart (Prince of Wales Hospital), Penny Stabler (Gold Coast University Hospital)	Changes in pulmonary outcomes of implementing a day and night regimen with heat and moisture exchangers (HMEs) and their adhesives	N/A
Marissa Ryan (PAH),	Christine Carrington (PAH), Liz Ward CFAHR/UQ), Centaine Snoswell (UQ), Clare Burns , Mhairi Mackinnon (PAH)	Development, implementation and evaluation of a Cancer Pharmacy Service for adult patients at the Princess Alexandra Hospital	N/A
Nicole Gavin (Cancer Care)	Glen Kennedy, David Patterson (Infectious Diseases), Claire Rickard (Griffith Uni), Sarah Andersen , Elise Button, Rebecca Lippiatt	Exploring changes in gastrointestinal tract microbiome and their influence on mucosal barrier injury laboratory confirmed bloodstream infection in patients diagnosed with high risk features of acute myeloid leukaemia	0

Research Publications Authors

Investigator	ORCID ID
Ann-Louise Spurgin	https://orcid.org/0000-0001-7799-9703
Belinda Lehn	https://orcid.org/0000-0001-8635-9417
Clare Burns	https://orcid.org/0000-0002-9752-1739
Emilie Croisier	https://orcid.org/0000-0002-2304-6840
Laura Moroney	https://orcid.org/0000-0002-4320-907X
Michelle Cottrell	https://orcid.org/0000-0001-7300-1467
Sarah Andersen	https://orcid.org/0000-0002-9200-8186

Shana Taubert	https://orcid.org/0000-0002-1514-6833
Shaun O'Leary	https://orcid.org/0000-0002-2574-129X
Teresa Brown	https://orcid.org/0000-0002-5127-1631

Publications in 2022

Journal Articles (RBWH staff in bold)

Ahern E, **Brown T**, Cambell L, Hughes B, **Banks M**, Lin C, Kenny L, Bauer J. Impact of sarcopenia and myosteatosis on survival outcomes for patients with head and neck cancer undergoing curative-intent treatment. *Br J Nutrition* 2022. Accepted 01/02/2022.

Blake C, Brown T, Pelecanos A, Moroney L, Helios J, Hughes B, Chua B, Kenny L. (2022). Enteral nutrition support and treatment toxicities in patients with Head and Neck Cancer receiving definitive or adjuvant Helical Intensity-Modulated Radiotherapy with concurrent chemotherapy. *Head and Neck*.

Blake C, Edwards A, Treleaven E, Brown T, Hughes B, Lin C, Kenny L, **Banks M**, Bauer J. Evaluation of a novel pre-treatment model of nutrition care for patients with head and neck cancer receiving chemotherapy. *Nutrition and Dietetics* 2022, 79(2), 206-216.

Burns CL, Cottrell M, Jones A, Foley J, **Rahmann A, Young A**, et al. Prioritising enhancements across allied health telehealth services in a metropolitan hospital: Using a concept mapping approach. *Journal of Telemedicine and Telecare*. 2022 Nov 8;28(10):740–9.

Daly LK, de Looze JWM, Forrestal DP, Wagels M, **Spurgin A-L, Hoey JD**, et al. 3D printing for respiratory physiotherapy: a tale of three disciplines. *Annals of 3D Printed Medicine*. 2023 Feb;9:100096.

Edwards A, **Brown T**, Hughes B, Bauer J. The changing face of head and neck cancer: are patients with human papillomavirus-positive disease at greater nutritional risk? A systematic review. *Supportive Care in Cancer*. 2022.

Edwards A, Hughes B, **Brown T**, Bauer J. Prevalence and impact of sarcopenia on survival in patients with human papillomavirus-positive oropharyngeal cancer: a systematic review. *Advances in Nutrition: an International Review Journal* 2022.

Foley J, Ward EC, **Burns CL**, Nund RL, Wishart LR, Graham N, et al. Enhancing speech-language pathology head and neck cancer service provision in rural Australia: Using a plan, do, study, act approach. *International Journal of Speech-Language Pathology*. 2022 May 9;1–14.

Foley J, **Burns CL**, Ward EC, Nund RL, Wishart LR, Kenny LM, et al. Post-acute health care needs of people with head and neck cancer: Mapping health care services, experiences, and the impact of rurality. *Head & Neck*. 2022 Mar 23;44(6):1377–92

Foley J, Nund RL, Ward EC, **Burns CL**, Wishart LR, Graham N, et al. Clinician and consumer perceptions of head and neck cancer services in rural areas: Implications for speech pathology service delivery. *Australian Journal of Rural Health*. 2022 Jan 22;

Hayes SC, Singh B, **Reul-Hirche H**, Bloomquist K, Johansson K, Jönsson C, Plinsinga ML. The Effect of Exercise for the Prevention and Treatment of Cancer-related Lymphedema: A Systematic Review with Meta-analysis. *Med Sci Sports Exerc*. 2022;54(8):1389-1399.

Hiatt J, Young A, Brown T, Banks M, Bauer J. Exploring dyadic management of nutrition care throughout and beyond head and neck cancer treatment. *Journal of Clinical Nursing* 2022, 31 (19-20) 2774-2783.

Hiatt J, Young A, Brown T, Banks M, Bauer J. Improving patient and carer access to information and support through head and neck cancer treatment and survivorship using experience-based co-design. *J Hum Nutr Diet* 2022. Accepted 12/8/2022

Hiatt J, Young A, Brown T, Banks M, Bauer J. Patient and carer experience of nutrition care throughout and beyond treatment for head and neck cancer: a qualitative longitudinal study. *Supportive Care in Cancer* 2022, 30(1), 813-824.

Hiatt J, Young A, Brown T, Banks M, Segon B, Bauer J. A qualitative comparison of the nutrition care experiences of carers supporting patients with head and neck cancer throughout surgery and radiation treatment and survivorship. *J Supportive Care Cancer* 2022.

Lee SF, **Brown T**, Wyld D, Edwards A, Eastgate M. Investigating the dietary knowledge, attitudes, and beliefs of Australian patients with cancer, *J Hum Nutr Diet* 2022.

Nakagaki M, Gavin NC, Hayes T, Fichera R, Stewart C, **Naumann L**, et al. Implementation and evaluation of a nurse-allied health clinic for patients after haematopoietic stem cell transplantation. *Support Care Cancer*. 2022;30(1):647-57.

Ryan M, Ward EC, **Burns CL**, Carrington C, Cuff K, Mackinnon M, et al. An evaluation of telephone versus videoconference consults for pre-treatment medication history taking by cancer pharmacists. *Journal of Telemedicine and Telecare*. 2022 Nov 8;28(10):750–6.

Segon B, Lam L, Chan HY, **Andersen S, Brown T**, Kenway D, Bauer J. Vitamin requirements during stem cell transplant – a systematic review. *J Supportive Care Cancer* 2022.

Taubert ST, Burns CL, Ward EC, **Bassett L**. Evaluation of the implementation of a speech and language therapist-led referring model for VFSS using the Consolidated Framework for Implementation Research (CFIR). *International Journal of Language & Communication Disorders*. 2022 May 17;

Journal Articles (RBWH staff in bold)

Taubert ST, Burns CL, Ward EC, **Bassett L**. Implementation of a speech and language therapy-led referring model for videofluoroscopic swallow studies: An evaluation of service outcomes. *International Journal of Language & Communication Disorders*. 2022 Feb 9;

Ward EC, Raatz M, Marshall J, Wishart LR, **Burns CL**. Telepractice and Dysphagia Management: The Era of COVID-19 and Beyond. *Dysphagia*. 2022 Apr 15;

Waters, Martine, **de Jersey, Susan**, Brebner, Neil and Reeves, Marina Michelle (2022). Understanding workforce needs of allied health staff in regional cancer care centres: Informing recruitment and succession planning. *The Australian journal of rural health*.

Book Chapters (RBWH staff in bold)

Ward, E.C. & **Cameron A.E**. Telepractice in adult speech-language pathology during COVID-19. In: L Cummings editor. *COVID-19 and speech-language pathology*. New York: Routledge; 2022. p.181-197. <https://doi.org/10.4324/9781003257318>

Keynote or Plenary Lectures given in 2022

Date	Title
August 26-28 2022	Burns, C.L. Session Chair – Functional Futures. <i>Australian and New Zealand Head and Neck Cancer Society 23rd Annual Scientific Meeting, August 26-28, 2022. Gold Coast, Australia.</i>
September 30 - October 2	Burns, C.L. Invited presentation – Options of various TEP voice prostheses – Protocol, selection and evidence. <i>Tata Laryngectomy Rehabilitation Course, September 30 – October 2, 2022. Mumbai, India</i>
September 30 - October 2	Burns, C.L. Invited presentation – Telehealth service models to support laryngectomy management. <i>Tata Laryngectomy Rehabilitation Course, September 30 – October 2, 2022. Mumbai, India</i>

Cancer Care Nursing Research

Research highlights for the year (1 January – 31 December 2022)



Michael Smith
Director Cancer Nursing

In the year 2022 the Cancer Care Nursing Research team continued to pursue research activities through presentations, publication and progressing grant funded projects.

Dr Natasha Roberts graduated from her Doctor of Philosophy, with an outstanding thesis award and Mrs Robyn Matthews graduated from her Master of Philosophy. We congratulate Natasha and Robyn on these wonderful achievements.

Cancer Care services was well represented at national conferences and symposiums, with four oral presentations and two poster presentations at the Blood Conference, two oral presentations and six posters at the Herston Health Symposium. Dr Nicole Gavin presented a pre-congress symposium and Brigid Scanlon gave an oral presentation on COVID-19 vaccine hesitancy at the Cancer Nursing Society of Australia Conference. Brigid Scanlon was also awarded the *Professor Lawrie Powell AC Early Career Research Award* at the Herston Symposium. Dr Natasha Roberts represented Cancer Care Services with presentations at the Brisbane Cancer Conference and the National Ethics Conference.


Robyn Matthews has continued to develop her collaborative grant funded research project with an aim of commencing in the first quarter of 2023. Brigid Scanlon has continued to grow her body of work relating to health equity in cancer care. Dr Nicole Gavin has continued to supervise higher-degree research students, with both PhD and MPhil students.

Pleasingly, the nursing research team were able to recommence the Evidence Based Practice program, with multiple nursing staff taking part throughout the year.

The nursing research team look forward to progressing their research projects and continuing to supporting staff in 2023.

Successful PhD candidates in 2022

Name	PhD Title	Month Completed	Affiliated University	Summary
Dr Natasha Roberts	Patient Reported Outcomes in a Medical Oncology Setting	Graduated July 2022	Queensland University of Technology	This program of research aimed to implement routine self-reporting of symptom during cancer treatment. Patients with a cancer diagnosis often struggle with the burden of symptoms. Before this program of work, systematic reporting of symptoms had been reported in clinical research as promising to improve quality of life and

Name	PhD Title	Month Competed	Affiliated University	Summary
				<p>survival, however it was unknown if this could also be done in the very complex setting of routine cancer care. Doctors, nurses, allied health professionals and patients were interviewed and surveyed to make this intervention useful and usable. This intervention was then successfully integrated into the allocated clinics and improved how well the healthcare teams addressed patients' symptoms.</p>

Research Awards and Achievements

Recipient (RBWH staff in bold)	Award	Event
Natasha Roberts	Metro North Clinical Research Fellow	2021 – 2025 Metro North
Brigid Scanlon	Professor Lawrie Powell AC Early Career Research Award.	Herston Health Symposium
Natasha Roberts	Best of the Best Nursing and Allied Health 2022	Australia and New Zealand Urogenital and Prostate Cancers Collaborative Group Annual Scientific Meeting 2022

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
Scanlon B, Wyld D, Durham J, Roberts, N, Toloo, S	CCS Nursing Research	Equity across the cancer care continuum for culturally and linguistically diverse migrants living in Australia	RBWH Foundation Post Graduate Scholarship	\$38, 871	2021-2022
Boyte F, Gavin NC, Smith M, Hayes T, Fenton M, Partridge G, Kennedy G, Eastgate M, Alexander A, Egan E, Jones L, Button E	CCS Nursing Research	The Priming Practice Study: will priming intravenous tubing with monoclonal antibodies reduce chair time in the outpatient setting?	2021 Metro North Cancer Care Services Research Project Grants	\$30, 267.12	2021-2022
Curtis K, Gavin NC , Fuller F	CCS Nursing Research	Cancer Nurses' Society of Australia Vascular Access Devices: Evidence-Based Clinical Practice Guidelines	ICU Medical Educational Grant	\$41, 000	2021-2022

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
Virdun C, Button E (mat leave), Matthews R, Mudge A, Yates P, Singh G, Phillips J, Carter H, Moran P, Douglas C, Wyld D, Alexander A, Richter K, Fielding D, Ratanjee S, Palamuthusingam D	CCS Nursing Research	Improving the quality of hospital care for people with serious illness through patient experience measurement and feedback informing facilitated ward-based improvement: an implementation pilot study (The PREM-QUAL study)	Metro North Collaborative Research Grant (QUT and MN) QH Nursing and Midwifery Research fellowship	\$49,392.67 \$46 176.16	(2022 – 2023) (2022 – 2023)
Robyn Matthews, Toby Pavey, Nicole Gavin, Melissa Eastgate, Bronwyn Clark, Greg Merlo, Brigid Scanlon	CCS Nursing Research	A randomised controlled trial exploring the administration of intravenous antibiotics and fluids via intravenous pole and pump versus portable CADD pump to improve mobility in patients diagnosed with cancer (The Active Trial)	Metro North Collaborative Research Grant (QUT and MN)	\$49,964.25	2022 - 2024

Current RBWH Department / Research Group Led Research Activity

Lead Investigator Name (RBWH staff in bold)	Other Study Investigators (RBWH staff in bold)	Research Project Title	Number of RBWH Patients Recruited in 2022
Justine Leach	Raymond Chan, Elise Button , Patsy Yates	Understanding the effects of nurse-led care on symptom distress and local patient data to inform structured nurse-led services for patients with cancer and selected non-malignant conditions	200
Nicole Gavin and Veronica Percival	Elise Button, Jenni Leutenegger, Cameron Curley, Grant Partridge	Post-dural puncture headache following lumbar puncture with/without intrathecal chemotherapy, how long should patients remain recumbent? A pilot randomised controlled trial (The PLANE Study)	100
Elise Button, Josh Byrnes, James Hughes, Patsy Yates, Brigid Scanlon, Michael Smith, Nicole Gavin, David Wyld	Glen Kennedy, Cameron Curley, John Burke, Mercedes Ray, Susanne Chaffey, Paul Moran, Eileen Fennelly, Kieren Barker, Therese Hayes, Kristen Lorrimer	Cancer Care Services Emergent Care project	700
Francesca Boyte	Robyn Matthews, Nicole Gavin, Glen Kennedy, Grant Partridge, Therese Hayes, Elise Button	Will priming intravenous administration sets with monoclonal antibodies reduce the incidence of hypersensitivity reactions? A randomised Controlled Trial	128
Brigid Scanlon, David Wyld and Natasha Roberts	Jo Durham (QUT), Sam Toloo (QUT)	Equity across the cancer care continuum for culturally and linguistically diverse migrants living in Australia	523
Mary-Ellen Yarker	Carol Windsor (QUT) Jennifer Fox (QUT) Pauline Gillan (QUT)	The role of oncology nurse in shared decision making for patients undergoing radiation and/or chemotherapy treatment	Ongoing

Lead Investigator Name (RBWH staff in bold)	Other Study Investigators (RBWH staff in bold)	Research Project Title	Number of RBWH Patients Recruited in 2022
Judy Avery	Sonya Osborne (USQ), Aletha Ward (USQ), Catriona Brooker (USQ)	Nurse-led debriefing with hospital nurses in the workplace	Ongoing
Natasha Roberts, Michael Smith, David Wyld, Teresa Brown, Leonie Naumann, Erin Molloy, Suzette Fox, Greg Lewis, Mandy Fairclough, Maree Gier, Kieren Barker, Therese Hayes, Jenni Leutenegger, Nicole Gavin and Elise Button.	Gary Power (RBWH Consumer) and Helene Jacmon (Consumer representative)	A co-designed implementation science strategy with clinicians, consumers and researchers to structure improved nurse-led symptom management in medical oncology care	Ongoing
Viridun C, Button E (mat leave), Matthews R , Mudge A, Yates P, Singh G, Phillips J, Carter H, Moran P, Douglas C, Wyld D, Alexander A, Richter K, Fielding D, Ratanjee S, Palamuthusingam D		Improving the quality of hospital care for people with serious illness through patient experience measurement and feedback informing facilitated ward-based improvement: an implementation pilot study (The PREM-QUAL study)	Ongoing
Nicole Gavin	Robyn Matthews, Karen Dobeli, Nicole Marsh, Samantha Keogh (QUT)	First time PIVC success in patients undergoing computerised tomography with intravenous contrast (retrospective study)	Ongoing
Brigid Scanlon, David Wyld and Natasha Roberts	Jo Durham (QUT), Sam Toloo (QUT)	Exploring facilitators and barriers to the provision of cancer care services for Culturally and Linguistically Diverse populations	21

Collaborative Research Activity Involving RBWH Department / Research Group

Lead Investigator Name (RBWH staff in bold)	Other Study Investigators (RBWH staff in bold)	Research Project Title	Number of RBWH Patients Recruited in 2022
Claudia Viridun	Matthews R , Mudge A, Yates P, Singh G, Phillips J, Carter H, Moran P, Douglas C, Wyld D, Alexander A, Richter K, Fielding D, Ratanjee S, Palamuthusingam D	Improving the quality of hospital care for people with serious illness through patient experience measurement and feedback informing facilitated ward-based improvement: an implementation pilot study (The PREM-QUAL study)	0
Nicole Gavin	Keogh S, Marsh N, Marquart L, Matthews R , Southam K, Dobelli K, O'Brien C	First-time peripheral intravenous catheter success in patients undergoing computerised tomography with intravenous contrast	0
Brigid Scanlon, Natasha Roberts and David Wyld	Jo Durham (QUT), Sam Toloo (QUT)	Equity across the cancer care continuum for culturally and linguistically diverse migrants living in Australia: Retrospective cohort study	523

Lead Investigator Name (RBWH staff in bold)	Other Study Investigators (RBWH staff in bold)	Research Project Title	Number of RBWH Patients Recruited in 2022
Brigid Scanlon, Natasha Roberts and David Wyld	Jo Durham (QUT), Sam Toloo (QUT)	Exploring facilitators and barriers to the provision of cancer care services for Culturally and Linguistically Diverse populations	21
Penelope Comans Inglis (QUT)	Inglis P (QUT), Gavin N , Miller Y (QUT)	Infertility and cancer: quality of decision support for women (survey)	0

Research Publications

Authors

Investigator	ORCID ID
Nicole Gavin	https://orcid.org/0000-0002-0828-9852
Elise Button	https://orcid.org/0000-0001-8240-8699
Brigid Scanlon	https://orcid.org/0000-0002-9190-8721
Veronica Percival	https://orcid.org/0000-0001-7821-8710
Francesca Boyte	NA
Patsy Yates	https://orcid.org/0000-0001-8946-8504
Glen Kennedy	https://orcid.org/0000-0002-7171-0435
David Wyld	https://orcid.org/0000-0001-9523-4333
Natasha Roberts	https://orcid.org/0000-0003-0534-8084
Robyn Matthews	https://orcid.org/0000-0003-3828-5278

Publications in 2022

Include peer-reviewed journal articles, book and book chapters where an RBWH researcher is a named co-author

Journal Articles (RBWH staff in bold)

Scanlon B, Wyld D, Firman P, Nakagaki M, Durham J, Kennedy G, Moran, P, Smith, M, Gavin, NC. COVID-19 vaccine hesitancy, acceptance and informational needs in an Australian cancer population: a cross-sectional survey. *Aust Health Rev.* 2022.

Nakagaki, M., Kennedy, G.A., Gavin, N.C., Clavarino, A., Whitfield, K. The incidence of severe oral mucositis in patients undergoing different conditioning regimens in haematopoietic stem cell transplantation. *Support Care Cancer* **30**, 9141–9149 (2022).

Roberts NA, Dhillon H, Paterson C, Schubach K, McJannett M. Australia New Zealand Prostate and Urogenital Cancers Collaborative Group. The impact of coronavirus 2019 on Urogenital and prostate cancer care and clinical trials: A qualitative exploration of the Australian Experience. *Asia Pacific Journal of Clinical Oncology* 2022; 1-10.

Journal Articles (RBWH staff in bold)

Mazariego, C., Jefford, M., Chan, R.J., **Roberts, N.A.**, Millar, L., Anazodo, A., Hayes, S., Brown, B., Saunders, C., Webber, K., Vardy, J., Girgis, A., Koczwara, B., on behalf of the COSA PRO Working Group. (2022). Priority recommendations for the implementation of patient-reported outcomes in clinical cancer care: a Delphi study. *Journal of Cancer Survivorship* 16,33-43.

Roberts, N.A., Cubitt, A., Lindsay, D., Bury, K., Dixon, J., Gebbie, C., Hawkins, C., Major, T., Jenkins-Marsh, S., Morris-Smith, B., Poxton, M., Richmond, S., Smith, D., Stoneley, A., Thaker, D.A., Wilson, E., Woollett, A., Underhill, C., Sabesan, S. (2022). Teletrials, the new norm? Expert recommendations for teletrials into the future: Findings from the Clinical Oncology Society of Australia Clinical Trial Research Professionals Group Workshop. *Asia-Pacific Journal of Clinical Oncology* 2022, 1-10.

Nakagaki, M., Kennedy, G.A., Gavin, N.C., Clavarino, A., Whitfield, K. The incidence of severe oral mucositis in patients undergoing different conditioning regimens in haematopoietic stem cell transplantation. *Supportive Care in Cancer*. 2022.

Button, E., Cardona, M., Huntley, K., **Gavin, N.C.**, LeBlanc, T.W., Olsen, A., Smith, M., Yates, P. (2022) Clinicians' Understanding of Preferences and Values of People with Hematological Malignancies at the End of Life. *Journal of Palliative Medicine*. 25(9) DOI: 10.1089/jpm.2021.0490

Nakagaki, M., Gavin, N.C., Hayes, T., Fichera, R., Stewart, C., Naumann, L., Brennan, J., Perry, N., Foley, E., Crofton, E., Brown, C., Leutenegger, J., Kennedy, G.A. (2022) Implementation and evaluation of a nurse-allied health clinic for patients after haematopoietic stem cell transplantation. *Supportive Care in Cancer*. 30, 647-657. DOI: 10.1007/s00520-021-06461-w

Nakagaki, M., Gavin, N.C., Clavarino, A., **Kennedy, G.A.**, Whitfield, K. (2022) A real-world accuracy of oral mucositis grading in patients undergoing hematopoietic stem cell transplantation. *Supportive Care in Cancer*. 30, 2705-2712. DOI: 10.1007/s00520-021-06654-3

You KA, Ahern E, **Wyld D, Lwin Z, Roberts NA**. (2022). Mapping disparities in oncology clinical trials: A scoping review protocol. *BMJ Open*; 12:e057675.

You KH, Ahern E, Wyld D, Lwin Z, **Roberts NA**. (2022). Scoping to analyse oncology trial participation in Australia. *Seminars in Oncology* 49(2); 178-181.

Keynote or Plenary Lectures given in 2022

Date	Title
22/02/22	Australia and New Zealand Urological Society Meeting (virtual) "Integrating Clinical Research into Prostate Cancer Care". NA Roberts
04/03/22	Nursing Research Grand Round, Metro North COVID-19 Vaccine Hesitancy, Acceptance, and Informational needs among cancer care populations. B. Scanlon and R. Matthews
03/05/22	CCS Research forum COVID-19 Vaccine Hesitancy, Acceptance, and Informational needs among cancer care populations B. Scanlon and R. Matthews
05/05/22	Nursing Research Grand Round, Metro North Examining the factors influencing self-efficacy of healthcare professionals towards end-of-life care in acute care settings. R. Matthews
16/06/22	Pre-congress symposium CNSA Stop the clot. Patency prevention and management – N. Gavin
17/06/22	CNSA congress COVID-19 Vaccine Hesitancy, Acceptance, and Informational needs among cancer care populations B. Scanlon
26/06/22	Enabling access to urology clinical research: The key role of specialist nurses Australia New Zealand Urology Nurses Society. Natasha A Roberts
10/07/22	Genito-urinary nursing research Australia New Zealand Urogenital and Prostate Cancers Collaborative Group Annual Scientific Meeting 10-12 July. Natasha A Roberts (Session Chair)
11/07/2022	Patient experience of participating in a clinical trial. Australia New Zealand Urogenital and Prostate Cancers Collaborative Group Annual Scientific Meeting 10-12 July. Natasha A Roberts
06/09/22	Herston Symposium. COVID-19 Vaccine Hesitancy, Acceptance, and Informational needs among cancer care populations B. Scanlon
08/09/22	Herston Symposium.

	Rethinking cancer prevention for Culturally and Linguistically Diverse migrant populations living in Queensland, Australia: A retrospective cohort study. B. Scanlon
11/09/22	Blood. Commercial CAR-T in Queensland: Royal Brisbane and Women's Hospital Nursing Review. S. Easton
11/09/22	Blood. To lay flat for one hour or two after a lumbar puncture? That is the question. Preliminary results of a pilot randomised control trial. V. Percival
11/09/22	Blood. Redesigning outpatient cancer care services to deliver care to COVID-19 positive haematology patients. T. Hayes
11/09/22	Blood. Experience in implementing a Shared Model of Care (MOC) between haematologists and general practitioners (GP) for patients with low risk haematology conditions. A. Barnes
24/11/22	Brisbane Cancer Conference. Patient reported outcomes in prostate cancer. NA Roberts.
25/11/22	National Ethics Conference [Online]. Partnering with consumers in research. NA Roberts.

Haematology & BMT / Cancer Care Services

Research highlights for the year (1 January – 31 December 2022)



Dr Cameron Curley
Deputy Director Clinical
Haematology & BMT

The Department of Haematology and BMT continues to strive to provide exceptional care for patients with blood disorders and cancers through a comprehensive research program which includes translational, correlative, collaborative and investigator initiated clinical trials across a diverse group of haematological malignancies.

A number of notable funding grants were attained in 2022 including:

- NHMRC investigator grant - 2021-2025 (\$1.9 million)
- MRFF clinical trials activity – 2021-2025 (\$2.69 million)
- SERTA project grant - \$ 75k
- MNHHS collaborative research grant – 2022-2024 - \$ 50k

There were a number of notable publications from the department in 2022 in the areas of novel diagnostics and consequences of gastrointestinal graft versus host disease and the impacts of nutrition on outcomes post transplantation.

We are very grateful for the efforts of the whole Haematology/BMT research team for their contributions in 2022 to further drive research within our department and would like to specifically recognise Professor Steven Lane as the Metro North 2022 Researcher of the Year and Dr Siok Tey for being the recipient of the prestigious QIMR B Lawrie Powell Clinical Translation Award.

Research Awards and Achievements

Recipient (RBWH staff in bold)	Award	Event
Professor Steven Lane	Researcher of the Year Award	2022 Metro North Research Excellence Awards
Dr Siok Tey	2022 Lawrie Powell Clinical Translation Award	2022 Annual QIMR Berghofer 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
Professor Steven Lane	Haematology/BMT Cancer Care Services	Translation of genetic findings to improve outcomes for patients with blood cancers.	NHMRC Investigator Grant, L1.	\$1,913,403	2021-2025
Professor Steven Lane	Haematology/BMT Cancer Care Services	Rare Cancers and Unmet Need: MoST-LLy, Molecular Screening and Therapeutics Leukaemia and Lymphoma	MRFF Clinical Trials Activity	\$2,688,736.40	2021-2025
Dr Ashleigh Scott	Haematology/BMT Cancer Care Services	Immune cell profiling using spatial transcriptomics in gastrointestinal graft versus host disease.	MNHHS Collaborative Research Grant (CRG)	\$50,000	2022-2024
Dr Glen Kennedy	Haematology/BMT Cancer Care Services	QCOG Cancer Clinical Trial Data Manager Grant 2022	Queensland Clinical Oncology Group	\$21-32,000	Annually based on activity
A/Prof Andrea Henden	Haematology/BMT Cancer Care Services	Solving problems in Chimeric Antigen Receptor T cell Immunotherapy	2023 SERTA Project Grant	\$75,000	2023

Current RBWH Department / Research Group Led Research Activity

Lead Investigator Name (RBWH staff in bold)	Other Study Investigators (RBWH staff in bold)	Research Project Title	Number of RBWH Patients Recruited in 2022
Andrea Henden	Cameron Curley, Siok Tey, Elango Subramonia Pillai, Ashleigh Scott, Steven Lane, Cheryl Hutchins, Glen Kennedy, Jason Butler, Heshani Mediwake, Kirk Morris	Chimeric Antigen Receptor-T cell Observational Study - CARTOS	6
Andrea Henden	Cameron Curley, Siok Tey, Patrick Harris, Robert Bird, Adam Stewart, David Paterson	COVID-19 Vaccine Efficacy in patients with Haematological Malignancy - COVEM	0
Andrea Henden	Ashleigh Scott;Caroline McNamara;Glen Kennedy;Kirk Morris;Siok Tey;Stewart Hunt;	T2 - Performance of emerging microbiological techniques for the diagnosis of severe infections in neutropenic patients with haematological malignancies.	0

Lead Investigator Name (RBWH staff in bold)	Other Study Investigators (RBWH staff in bold)	Research Project Title	Number of RBWH Patients Recruited in 2022
Ashleigh Scott	Antiopi Varelias, Andrea Henden , Quan Nguyen, Glen Kennedy , Sunil Lakhani, Joshua Satchwell	Immune cell profiling using spatial transcriptomics in gastrointestinal graft versus host disease.	0
Ashleigh Scott	Andrea Henden , Cameron Curley , Elango Subramonia Pillai , Glen Kennedy , Jason Butler , Siok Tey	Takeda GRAPHITE - Vedolizumab-3035 - A Randomized, Double-Blind, Placebo-Controlled, Multicenter Study to Evaluate the Efficacy and Safety of Vedolizumab in the Prophylaxis of Intestinal Acute Graft-Versus-Host Disease in Subjects Undergoing Allogeneic Hematopoietic Stem Cell Transplantation	0
Glen Kennedy	Simon Durrant , Jason Butler , James Morton , Ashish Misra , Siok Tey , Elango Subramonia Pillai , Cameron Curley	TCZ II - A phase II study of humanized anti-IL-6 receptor antibody Tocilizumab (TCZ) to prevent development of acute graft versus host disease (GVHD) post HLA-mismatched allogeneic haematopoietic progenitor cell transplantation (HPCT)	0
Glen Kennedy	Sanjoy Paul, David Ritchie, David Gottlieb, John Moore, Julian Cooney, Simon Durrant , Jason Butler , James Morton , Ashish Misra , Siok Tey , Elango Subramonia Pillai , Cameron Curley	TCZ III - A phase III randomized study of humanized anti-IL-6 receptor antibody Tocilizumab (TCZ) to prevent development of acute graft versus host disease (GVHD) post HLA-matched allogeneic haematopoietic progenitor cell transplantation (HPCT)	0
Glen Kennedy	Andrea Henden , Ashleigh Scott , Cameron Curley , Elango Subramonia Pillai , Jason Butler , Siok Tey	NKARTA - A Phase 1 Study of NKX019, a CD19 Chimeric Antigen Receptor Natural Killer (CAR NK) Cell Therapy, in Subjects with B-cell Malignancies	3
Heshani Mediwake	Glen Kennedy , Siok Tey	Patient reported outcomes (PROs) in patients undergoing chimeric antigen receptor T cell therapies (CAR Ts)	0
Heshani Mediwake	Glen Kennedy , Siok Tey	Neurocognitive assessment in patients undergoing chimeric antigen receptor therapy (NCA's in CarTs)	0
Jane Mason	Nick Weber , Michelle Spanevello	BioMarin BMN 270-301 - A Phase 3 Open-Label, Single-Arm Study To Evaluate The Efficacy and Safety of BMN 270, an Adeno-Associated Virus Vector-Mediated Gene Transfer of Human Factor VIII in Hemophilia A Patients with Residual FVIII Levels = 1 IU/dL Receiving Prophylactic FVIII Infusions.	0
Jane Mason	Nicholas Weber , Michelle Spanevello , Sally Campbell	BMN 270-303: A Phase 3b, Single Arm, Open-Label Study to Evaluate the Efficacy and Safety of BMN 270, an Adeno-Associated Virus Vector-Mediated Gene Transfer of Human Factor VIII, with Prophylactic Corticosteroids in Hemophilia A Patients.	0
Jane Mason	Sally Campbell , Nicholas Weber , Michelle Spanevello , Beryl Zeissink , Alex Connolly	Roche HAVEN4 : A Study to Evaluate the Efficacy, Safety Pharmacokinetics, and Pharmacodynamics of Emicizumab Given Every 4 Weeks in Participants With Hemophilia A.	0

Lead Investigator Name (RBWH staff in bold)	Other Study Investigators (RBWH staff in bold)	Research Project Title	Number of RBWH Patients Recruited in 2022
Jason Butler	Cameron Curley, Glen Kennedy, Elango Subramonia Pillai, Siok Tey, Nicholas Weber, Kirk Morris, Ashleigh Scott	Novartis E2202 ELARA - A Phase II, single arm, multicenter open label trial to determine the efficacy and safety of tisagenlecleucel (CTL019) in adult patients with refractory or relapsed follicular lymphoma	0
Jason Butler	Ashleigh Scott, Nicholas Weber, Cameron Curley, Elango Subramonia Pillai, Kirk Morris	PMCC PLIMATH - A multi-centre Phase II study to determine the response kinetics, safety and efficacy of pembrolizumab as frontline treatment of patients with Hodgkin Lymphoma considered unsuitable for ABVD	0
Jason Butler	Cameron Curley, Simon Durrant, Kirk Morris, Elango Subramonia Pillai, Siok Tey, Nicholas Weber, Glen Kennedy	Acerta 308 ECHO – A Phase 3, Randomized, Double blind, Placebo controlled, Multicenter Study of BR alone Versus in Combination with Acalabrutinib (ACP 196) in Subjects with Previously Untreated Mantle Cell Lymphoma	1
Jason Butler	Cameron Curley, Simon Durrant, Elango Subramonia Pillai, Siok Tey, Nicholas Weber, Kirk Morris	Amgen Candor 275 – Randomized, Open-label, Phase 3 Study Comparing Carfilzomib, Dexamethasone, and Daratumumab to Carfilzomib and Dexamethasone for the Treatment of Patients With Relapsed or Refractory Multiple Myeloma	0
Jason Butler	Andrea Henden, Ashleigh Scott, Cameron Curley, Elango Subramonia Pillai, Glen Kennedy, Siok Tey	Janssen CARTITUDE 4 - A Phase 3 Randomized Study Comparing JNJ-68284528, a Chimeric Antigen Receptor T cell (CAR-T) Therapy Directed Against BCMA, vs Pomalidomide, Bortezomib and Dexamethasone (PVd) in Subjects with Relapsed and Lenalidomide-Refractory Multiple Myeloma	0
Jason Butler	Andrea Henden, Ashleigh Scott, Cameron Curley, Elango Subramonia Pillai, Glen Kennedy, Siok Tey	Janssen CARTITUDE 5 - A Phase 3 Randomized Study Comparing Bortezomib, Lenalidomide and Dexamethasone (VRd) followed by Ciltacabtagene Autoleucel, a Chimeric Antigen Receptor T cell (CAR-T) Therapy Directed Against BCMA versus Bortezomib, Lenalidomide and Dexamethasone (VRd) followed by Lenalidomide and Dexamethasone (Rd) Therapy in Participants with Newly Diagnosed Multiple Myeloma for Whom Hematopoietic Stem Cell Transplant is Not Planned as Initial Therapy	4
Jason Butler	Ashleigh Scott; Cameron Curley; Elango Subramonia Pillai; Kirk Morris; Nicholas Weber	A Phase 1/2, Open-Label, Dose-Escalation Trial of GEN3013 in Patients with Relapsed, Progressive or Refractory B-Cell Lymphoma	0
Nicholas Weber	Jason Butler, Ashish Misra, Kirk Morris, Cameron Curley, Elango Subramonia Pillai	Beigene 304 - An International, Phase 3, Open-label, Randomized Study of BGB 3111 Compared with Bendamustine plus Rituximab in Patients with Previously Untreated Chronic Lymphocytic Leukemia or Small Lymphocytic Lymphoma	0
Nicholas Weber	Jason Butler, Kirk Morris	DREAMM 7 - A Multicenter, Open-Label, Randomized Phase III Study to Evaluate the Efficacy and Safety of the Combination of Belantamab Mafodotin, Bortezomib, and Dexamethasone (B-Vd) Compared with the Combination of Daratumumab, Bortezomib and Dexamethasone (D-Vd) in Participants with Relapsed/Refractory Multiple Myeloma	0

Lead Investigator Name (RBWH staff in bold)	Other Study Investigators (RBWH staff in bold)	Research Project Title	Number of RBWH Patients Recruited in 2022
Sally Campbell	Jane Mason	An Open-Label, Non-Investigational Product, Multi-Center, Lead-In Study To Evaluate Prospective Efficacy And Selected Safety Data Of Current Factor IX (FIX) Or Factor VIII (FVIII) Prophylaxis Replacement Therapy In The Usual Care Setting Of Moderately Severe To Severe Adult Hemophilia B Participants (FIX:C≤2%) Who Are Negative For Neutralizing Antibodies To Adeno-Associated Virus Vector-Spark100 (Benegene-1) And Moderately Severe To Severe Hemophilia A Adult Participants (FVIII:C≤1%) Who Are Negative For Neutralizing Antibodies To Adeno-Associated Virus Vector 6 (AAV6), Prior To The Respective Therapeutic Phase 3 Gene Therapy Studies	3
Siok Tey	Glen Kennedy, Cameron Curley, Jason Butler, Elango Subramonia-Pillai, Ashleigh Scott, Simon Durrant, James Morton	CSL Behring MODULAATE - A Phase 2/3, Multicenter, randomized, Double-blind, placebo-controlled, study to evaluate the safety and efficacy of Alpha-1 Antitrypsin for the prevention of graft-versus-host disease in patients receiving hematopoietic cell transplant	2
Siok Tey	Glen Kennedy, Cheryl Hutchins	TREG Apheresis - Developing a method to generate regulatory T cells from healthy donors	0
Siok Tey	Glen Kennedy, Simon Durrant, James Morton, Jason Butler, Elango Subramonia-Pillai, Cameron Curley, Ashish Misra	IR Auto – Observational study of immune reconstitution in patients undergoing autologous stem cell transplantation	0
Siok Tey	Glen Kennedy, Simon Durrant, James Morton, Jason Butler, Elango Subramonia-Pillai, Cameron Curley, Ashish Misra	HAPLO - A Phase I Study of Haploidentical Haematopoietic Stem Cell Transplantation with Add-Back of Donor T Cells Transduced with Inducible Caspase 9 Suicide Gene in Patients with Poor Risk Haematological Malignancies	0
Siok Tey	Glen Kennedy, Cheryl Hutchins	Generating Chimeric Antigen Receptor (CAR T) cells from healthy volunteers	0
Siok Tey	Andrea Henden, Ashleigh Scott, Cameron Curley, Cheryl Hutchins, Elango Subramonia Pillai, Glen Kennedy, Heshani Mediwake, James Morton, Jason Butler, Kari Mudie;	Phase I Clinical Trial of MB.CART19.1 CD19 Chimeric Antigen Receptor (CAR) T Cells in Relapsed or Refractory CD19-Positive Haematological Malignancy	7
Siok Tey	Ashleigh Scott; Cameron Curley; Elango Subramonia Pillai; Jason Butler	A randomised trial of most closely HLA-matched third-party donor-derived virus-specific cytotoxic T-lymphocytes in patients with untreated viral infection post-allogeneic stem cell transplantation (R3ACT Randomised (R3R))	2
Steven Lane	Glen Kennedy	P1382 - Examination of genes that control the growth and survival of blood cancers	0
Steven Lane	Elango Subramonia Pillai, Cameron Curley, Nicholas Weber, Kirk Morris, Caroline McNamara.	IMAGO - IMG-7289-CTP-201 A Phase 2 Multi-Center, Open Label Study to Assess the Safety, Efficacy and Pharmacodynamics of IMG-7289 in Patients with Essential Thrombocythemia	0

Collaborative Research Activity Involving RBWH Department / Research Group

Lead Investigator Name (RBWH staff in bold)	Other Study Investigators (RBWH staff in bold)	Research Project Title	Number of RBWH Patients Recruited in 2022
Glen Kennedy ALLG -The Australasian Leukaemia & Lymphoma Group	Nicholas Weber, Cameron Curley, Jason Butler, Kirk Morris, Elango Subramonia Pillai, Simon Durant, Steven Lane	ALLG AML M16 – Sorafenib in Combination with Intensive Chemotherapy for Previously Untreated Adult FLT3-ITD Positive AML: A Phase 2 Randomised Double-Blind Placebo Controlled Multi-Centre Study	
Caroline McNamara ALLG	Cameron Curley, Jason Butler, Elango Subramonia Pillai, Steven Lane, Kirk Morris, Nicholas Weber,	ALLG AML M24 - A phase 3, multicenter, open-label, randomized, study of gilteritinib versus midostaurin in combination with induction and consolidation therapy followed by one year maintenance in patients with newly diagnosed Acute Myeloid Leukemia (AML) or Myelodysplastic syndromes with excess blasts-2 (MDS-EB2) with FLT3 mutations eligible for intensive chemotherapy	2
Glen Kennedy ALLG	Cameron Curley, Jason Butler, Elango Subramonia Pillai, Steven Lane, Kirk Morris, Nicholas Weber, Simon Durant	ALLG NBCR – Australasian Leukaemia and Lymphoma Group Acute Myeloid Leukaemia National Blood Cancer Registry	2
Jason Butler ALLG	Cameron Curley, Simon Durant, Glen Kennedy, Steven Lane, Kirk Morris, James Morton, Elango Subramonia Pillai, Nicholas Weber	ALLG NHL 29 – A Phase II study of Ibrutinib, Rituximab and mini-CHOP therapy in very elderly patients with newly diagnosed DLBCL	0
Steven Lane ALLG	Cameron Curley, Jason Butler, Nicholas Weber, Elango Subramonia Pillai	ALLG APML5: A phase 1 pharmacokinetic evaluation of oral arsenic trioxide in previously untreated patients with acute promyelocytic leukaemia	0
Steven Lane ALLG	Cameron Curley, Jason Butler, Kirk Morris, Nicholas Weber, Elango Subramonia Pillai, Simon Durrant, Glen Kennedy	ALLG AML M21: A phase Ib/II clinical evaluation of Ponatinib in combination with 5-azacitidine in FLT3-ITD positive acute myeloid leukaemia	0
Steven Lane ALLG	Caroline McNamara;Elango Subramonia Pillai;Kirk Morris;Nicholas Weber;	ALLG CML 13 ASCEND - A single arm phase II study to evaluate the efficacy of asciminib in newly diagnosed patients with chronic phase chronic myeloid leukaemia	2
Steven Lane ALLG	Cameron Curley, Jason Butler, Kirk Morris, Nicholas Weber, Elango Subramonia Pillai	LS17 REGALLIA: Studies to delineate the molecular and genomic basis of high risk ALL (Registry of Acute Lymphoblastic Leukaemia in Australasia and Associated Correlative Studies)	0
Siok Tey ALLG	Jason Butler, Cameron Curley, Simon Durrant, Glen Kennedy, Ashleigh Scott, James Morton, Elango Subramonia Pillai, Andrea Henden	ALLG BM12 CAST: Study of using Cyclophosphamide After Sibling-donor allogeneic stem-cell Transplantation (CAST) in patients with acute leukaemia and myelodysplasia: a randomised study comparing cyclosporin and methotrexate to cyclosporin and post-transplantation cyclophosphamide for graft-versus-host disease prophylaxis.	2
Kirk Morris St Vincent's Health Network		Lymphoma in pregnant patients: The Australian Experience	0

Glen Kennedy ALLG -The Australasian Leukaemia & Lymphoma Group	Nicholas Weber, Cameron Curley, Jason Butler, Kirk Morris, Elango Subramonia Pillai, Simon Durant, Steven Lane	ALLG AML M16 – Sorafenib in Combination with Intensive Chemotherapy for Previously Untreated Adult FLT3-ITD Positive AML: A Phase 2 Randomised Double-Blind Placebo Controlled Multi-Centre Study	
Nicholas Weber The Myeloma and Related Diseases Registry	Jason Butler	MRDR - Myeloma and Related Diseases Registry	16
Nicholas Weber AMaRC (Australasian Myeloma Research Consortium)	Cameron Curley, Jason Butler, Ashleigh Scott	AMaRC – A randomized phase 2 study of bortezomib, cyclophosphamide and dexamethasone induction (VCD) compared with VCD and daratumumab induction followed by daratumumab maintenance (VCDD) for the initial treatment of transplant ineligible patients with multiple myeloma	0
Nicholas Weber AMaRC (Australasian Myeloma Research Consortium)	Kirk Morris; Jason Butler; Caroline McNamara;	AMaRC 19-02 BelaCarD - A phase I/II single arm study of combination Belantamab Mafodotin, Carfilzomib, Dexamethasone in patients with early relapsed multiple myeloma	2
Andrea Henden QMGP - Queensland Myeloid Genomics Program	Cameron Curley, Nicholas Weber, Louisa Gordon	To demonstrate the value of routine genomic testing in patients presenting with acute myeloid leukaemia (AML), myelodysplastic syndrome (MDS) & myeloproliferative neoplasms (MPN) in informing the need for stem cell transplantation.	0
Nicholas Weber	Leonie Naumann	The MyeEx Study: The Effect of an Individualised Exercise Intervention on Functional, Biological and Quality of Life Outcomes in Patients with Multiple Myeloma	0
Kirk Morris	Janine Deevey	National Projects with CanTeen - The Youth Cancer Service Experience of Care Survey	0
Glen Kennedy, Siok Tey, Rajiv Khanna	Dr's Geoff Hill, James Morton, Jason Butler, Simon Durrant	P992: Immune monitoring of stem cell transplant patients	0
Steven Lane South Australian Health and Medical research Institute	Nicholas Weber, Cameron Curley, Kirk Morris, Andrea Henden, Caroline McNamara	Precision Medicine for Chronic Myelomonocytic Leukaemia: A phase II Trial Studying the Efficacy of Lenzilumab and High Dose Ascorbate with Azacitidine Based on Molecular Profiling (PREACH-M).	3
Steven Lane Australian Genomic Cancer Medicine Group, OMICO, NHMRC	Andrea Henden, Cameron Curley, Caroline McNamara, Kirk Morris, Nicholas Weber	MoST LLY 15 AZ - A single arm, open label, signal seeking, phase II trial of the activity of Durvalumab in combination with Acalabrutinib in patients with high-grade B cell lymphoma	3
Steven Lane The University of Sydney	Nicholas Weber, Cameron Curley, Kirk Morris	MoST Framework - The Cancer Molecular Screening and Therapeutics (MoST) Program - A framework protocol for multiple, parallel, signal-seeking clinical studies of novel molecularly targeted therapies for patients with advanced cancer and unmet clinical need.	6
Steven Lane Australian Genomic Cancer Medicine Group, OMICO, NHMRC	Andrea Henden, Cameron Curley, Caroline McNamara, Kirk Morris, Nicholas Weber	MoST LLY 16 BGB - AZ - A Single arm, open label, signal seeking, phase II trial of pamiparib in patients with relapsed/ refractory myeloid haematological malignancy with aberrant germline or somatic DNA repair pathway function	1

Glen Kennedy ALLG -The Australasian Leukaemia & Lymphoma Group	Nicholas Weber, Cameron Curley, Jason Butler, Kirk Morris, Elango Subramonia Pillai, Simon Durant, Steven Lane	ALLG AML M16 – Sorafenib in Combination with Intensive Chemotherapy for Previously Untreated Adult FLT3-ITD Positive AML: A Phase 2 Randomised Double-Blind Placebo Controlled Multi-Centre Study	
Jason Butler PMCC (Peter MacCallum Cancer Centre)	Cameron Curley;Elango Subramonia Pillai;Kirk Morris;Ashleigh Scott;Siok Tey;Andrea Henden;	PMCC COALITION - A multicentre, parallel arm, open-label trial of frontline R-CHOP/Pola-RCHP and glofitamab in younger, higher risk patients with diffuse large B cell lymphoma (DLBCL)	4
Elango Subramonia Pillai Monash University Peter MacCallum Cancer Centre	Michelle Spanevello, Jason Butler, Cameron Curley, Kirk Morris, Nicholas Weber, Ashleigh Scott	TREATT: A double blind, randomised controlled trial evaluating the safety and efficacy of tranexamic acid in patients with haematological malignancies with severe thrombocytopenia	0

Research Publications

Authors

Investigator	ORCID ID
Sally Campbell	0000-0002-1421-745X
Andrea Henden	0000-0003-2261-169X
Siok Tey	0000-0001-9567-382X
Ashleigh Scott	0000-0001-5574-6713
Nicholas Weber	0000-0001-6341-2537
Michelle Spanevello	0000-0003-1498-7822
Steven Lane	0000-0002-8050-6209
Jane Mason	0000-0002-8320-2884
Heshani Mediwake	0000-0002-4521-7970
A/Prof Glen Kennedy	0000-0002-7171-0435
Jason Butler	0000-0002-6422-4404

Publications in 2022

Journal Articles (RBWH staff in bold)

Salmon JM, Todorovski I, Stanley KL, Bruedigam C, Kearney CJ, Martelotto LG, Rossello FJ, Semple T, Mir Arnau G, Zethoven M, Bots M, Bjelosevic S, Cluse LA, Fraser PJ, Litalien V, Vidacs E, McArthur K, Matthews AY, Gressier E, deWeerd NA, Lichte J, Kelly MJ, Hogg SJ, Hertzog PJ, Kats LM, Vervoort SJ, DeCarvalho DD, Scheu S, Bedoui S, Kile BT, **Lane SW**, Perkins AC, Wei AH, Dominguez PM, Johnstone RW. Epigenetic activation of plasmacytoid DC drives IFNAR-dependent therapeutic differentiation of AML. *Cancer Discovery* 2022. Doi: 10.1158/2159-8290.CD-20-1145

Leung B, Beggs J, **Mason J**. Fibrinogen Longmont: A Clinically Heterogeneous Dysfibrinogenemia with Discrepant Fibrinogen Results Influenced by Clot Detection Method and Reagent. *Thrombosis and Haemostasis Open*. 2022 Jan 24;6(1):e18-e20.

Salmon JM, Todorovski I, Stanley KL, Bruedigam C, Kearney CJ, Martelotto LG, Rossello FJ, Semple T, Mir Arnau G, Zethoven M, Bots M, Bjelosevic S, Cluse LA, Fraser PJ, Litalien V, Vidacs E, McArthur K, Matthews AY, Gressier E, deWeerd NA, Lichte J, Kelly MJ, Hogg SJ, Hertzog PJ, Kats LM, Vervoort SJ, DeCarvalho DD, Scheu S, Bedoui S, Kile BT, Lane SW , Perkins AC, Wei AH, Dominguez PM, Johnstone RW. Epigenetic activation of plasmacytoid DC drives IFNAR-dependent therapeutic differentiation of AML. <i>Cancer Discovery</i> 2022. Doi: 10.1158/2159-8290.CD-20-1145
Schnoeder T, Schwarzer A, Jayavelo AK, Hsu C, Kirkpatrick J, Doehner K, Perner F, Eifert T, Huber N, Arriba-Tutusa P, Dolnik A, Assi S, Nafria M, Jiang L, Dai Y, Chen Z, Chen S, Kellaway S, Ptasinska A, Ng E, Stanley E, Elefanta A, Buschbeck M, Bierhoff H, Brodt S, Matziolis G, Fischer K, Hochhaus A, Chen C, Heidenreich O, Mann M, Lane SW , Bullinger L, Ori A, Eyss B, Bonifer C, Heidel FHH. PLCG1 is required for AML1-ETO leukemia stem cell self-renewal. <i>Blood</i> 2022. 139(7): 1080-97.
Enjeti AK, Agarwal R, Blombery P, Chee L, Chua CC, Grigg A, Hamad N, Iland H, Lane SW , Perkins A, Singhal D, Tate C, Tiong IS, Ross DM. Panel-based gene testing in myelodysplastic/myeloproliferative neoplasm- overlap syndromes: Australasian Leukaemia and Lymphoma Group (ALLG) consensus statement. <i>Pathology</i> 2022, advanced online
Anderson NR, Lane SW , Eltrombopag in Front-line Therapy for Severe Aplastic Anaemia: A RACE against Time. <i>The Hematologist</i> , Jun 2022
Bywater M, Lane SW . Paving the way to improve therapy for Myeloproliferative Neoplasms, <i>Nature Communications</i> . 2022. Accepted
Iland H, Russell N, Dillon R, Schuh R, Tedjaseputra A, Wei A, Khwaja A, Knapper S, Lane SW , Reynolds J, McMullin MF, artin A, Tan P, Taussig DC, Wong A, Taper J, Fraga C, Kelly R, Tawana K, Mehta P, Mina A, Altman J, Molle I, Tauro S, Tholouli E. Characteristics and outcomes of patients with acute promyelocytic leukemia and extreme hyperleukocytosis at presentation. <i>Blood Advances</i> 2022, Accepted
Minnie SA, Waltner OG, Ensbey KS, Nemychenkov NS, Schmidt CR, Bhise SS, Legg SRW, Campoy G, Samson LD, Kuns RD, Zhou T, Huck JD, Vuckovic S, Zamora D, Yeh A, Spencer A, Koyama M, Markey KA, Lane SW , Boeckh M, Ring AM, Furlan SN, Hill GR. Depletion of exhausted alloreactive T cells enables targeting of stem-like memory T cells to generate tumor-specific immunity. <i>Science Immunology</i> , 2022 In Press.
Ling V, Straube J, Godfrey W, Haldar R, Janardhanan Y, Cooper L, Bruedigam C, Baell J, Huang F, Jin J, Zhao Y, Bullinger L, Bywater M, Lane SW . Targeting cell cycle and apoptosis to overcome chemotherapy resistance in acute myeloid leukemia. <i>Leukemia</i> 2022, in Press
Nelles R, Morris K, Scott A, Kennedy G . Dose-adjusted EPOCH-R is a safe and well tolerated outpatient treatment regimen in double-hit lymphoma. <i>Intern Med J</i> . 2022 Mar 15. doi: 10.1111/imj.15747. Epub ahead of print. PMID: 35289474
Scott AP , Thomas P, Pattison DA, Francis L, Ridge P, Tey SK, Kennedy GA . [18F]GE-180 PET/CT assessment of enterocytic translocator protein (TSPO) over-expression: a pilot study in gastrointestinal GVHD. www.nature.com/bmt . <i>Bone Marrow Transplantation</i> ; https://doi.org/10.1038/s41409-022-01571-3
Yin Yuan, Philip Wong, Jason P Butler, Andrea Henden, Cameron Curley, Simon Durrant, Heshani Mediwake, A James Morton, Caroline Stewart, Elango Subramoniapillai, Nicholas Weber, Siok-Keen Tey, Glen A Kennedy, and Ashleigh P Scott . High incidence of resistant breakthrough invasive fungal infections (IFD) in patients treated for acute gastrointestinal graft-versus-host disease (GI GVHD) following allogeneic haematopoietic cell transplantation. <i>Bone Marrow Transplantation</i> (2022) 15 Aug, doi: 10.1038/s41409-022-01773-9
Nicol, J.L.; Woodrow, C.; Cunningham, B.J.; Mollee, P.; Weber, N. ; Smith, M.D.; Nicol, A.J.; Gordon, L.G.; Hill, M.M.; Skinner, T.L. An Individualized Exercise Intervention for People with Multiple Myeloma—Study Protocol of a Randomized Waitlist-Controlled Trial. <i>Curr. Oncol.</i> 2022, 29, 901–923. https://doi.org/10.3390/currenconcol29020077
Jefferis M, Anderson S, Brown T, Curley C , Bauer J. Malnutrition and clinical outcomes post allo-SCT. <i>J Hum Nutr Diet</i> , 2022: doi: 10.1111/jhn.13124
Kliman D, Tran S, Kennedy G, Curley C , McLean A, Gottlieb D, Kwan J, Ritchie D, Chee L, Spencer A, Purtill D, Bardy P, Larsen S, Chien N, Perera T, Greenwood M, Hamad N, Moore J. The improvement in overall survival from unrelated donor transplantation in Australia and New Zealand is driven by a reduction in non-relapse mortality: A study from the ABMTRR; <i>Bone Marrow Transplant.</i> 2022 Jun;57(6):982-989.

Conference Presentations – Invited Speaker, Oral and Poster

Invited Speaker (RBWH staff in bold)

Butler J; EHA 2022 Game Changers – Brisbane - Update on Lymphoma - 30th June

Butler J; CAR-T v autologous transplant for relapsed Lymphoma - Lymphoma Australia HCP conference - 28th July

Butler J; Ibrutinib in Mantle -cell lymphoma: 10 year update - Lymphoma Australia HCP Conference - 29th July

Poster Presentations (RBWH staff in bold)

Real-world outcomes of CD19 CAR-T cell therapy for B-cell malignancies in Rural/Regional Australia: results from the Queensland statewide CAR-T program **Nilu Perera, Scott AP, Hunt S, Curley C, Henden AS, Tey SK, Butler J, Hutchins C, Mudie K, Kennedy GA, Subramonia Pillai E**.ASH 2022

Poster Presentations (RBWH staff in bold)

Using bacteria to modulate immune function: Faecal Microbial Transplantation in Graft-versus-Host Disease. **Dr A Scott1, A/Prof G Kennedy**, Dr K Hajkowicz, Dr A Stewart, **Dr S Tey, Dr C Curley, Dr J Butler, Dr E Subramoniapillia, Dr A Henden.** Herston Health Precinct Symposium, 5-8 Sept 2022

Mason J, Amy L Dunn, Andrew D Leavitt, Flora Peyvandi, Hervé Chambost, Erin Cockrell, Rashid Kazmi, Robert Klamroth, Gillian Lowe, Johnny Mahlangu, Elaine Majerus, Brian O'Mahony, Margareth C Ozelo, Mark W Skinner, Chee Wee Tan, Huyen Tran, Jiaan-Der Wang, Hua Yu, Tara M Robinson, Jennifer Quinn, Wing Yen Wong, Steven W Pipe. "Health-related quality of life over 2 years following valoctocogene roxaparvovec adeno-associated virus gene transfer for severe haemophilia A: Results from GENER8-1" Blood 2022, Sydney September 11-14th 2022

QLD Haemophilia Centre

Research highlights for the year (1 January – 31 December 2022)



Dr Jane Mason
Director of Haemophilia
Queensland Haemophilia Centre

2022 was another exciting year for the Queensland Haemophilia Centre (QHC) working in collaboration with the Clinical Research Unit Cancer Care Services and the Cellular Therapy/ BMT Laboratory. We built further on our experience with AAV5-FVIII gene therapy, having dosed 8 patients in total across the two trials. We have commenced another phase II/III clinical trial in AAV5-FIX gene therapy and have recruited 3 patients to this initial observational study, with subsequent dosing to begin in early 2023. There remains much to be understood about vector transduction, intracellular trafficking and transgene expression in the Haemophilia gene therapy space. The QHC also finished the HAVEN-4 study, evaluating the efficacy of a factor VIII mimetic (Emicizumab) given via monthly subcutaneous injection.

Medical Oncology Cancer Care Services



Dr David Wyld
Director of Medical Oncology

Research highlights for the year (1 January – 31 December 2022)

The Department of Medical Oncology's research program remained very active throughout 2022, with the unit continuing to undertake research with a wide variety of collaborators. Clinical trial patient numbers remained high despite the ongoing challenges of COVID, and at times reduced research staff numbers.

I would like to highlight several of the departments 2022 achievements.

- ❖ Firstly, recognition of the exceptional quality of research undertaken within the Department in two different ways
 - 1 The RBWH Medical Oncology unit was recently awarded the 2022 Australasian Gastrointestinal Trials Group (AGITG) Outstanding Metropolitan Site Award, an award that recognises a clinical trial site that has shown exceptional enthusiasm, performance, and dedication to conducting AGITG trials. The unit has been contributing to AGITG research for more than 25 years and this award is recognition for all those who have contributed over that time.
 - 2 The RBWH Medical Oncology Department has received global recognition as a “high-performing” clinical trial site, by being one of only 2 sites in Australia to be offered a Clinical Site Partnership with Merck Sharp & Dohme. This offer was based on the units demonstrated high level of performance across a range of research metrics. This collaboration with MSD has grown significantly throughout 2022, and the partnership provides Metro North Cancer Care patients with early access to new, innovative treatment studies. This partnership, which began in Cancer Care, is now resulting in MSD now offering new clinical trials to several other non-cancer research groups throughout RBWH and Metro North
- ❖ A team of researchers, led by A/Prof Zarnie Lwin, was a finalist in the 2022 Metro North Research Excellence Awards. The nominated project “The Impact of COVID on the Cancer Care Workforce Across the Royal Brisbane and Women’s Hospital and the Sunshine Coast University Hospital” was a local investigator-initiated study, devised, undertaken, and completed during COVID, without any additional funding or support. The results have already been presented in several forums, including The Qld Clinical Excellence Showcase.
- ❖ Another highlight was the presentation of results of 2 significant Australian studies that Medical Oncology at RBWH played a major role in. Both were presented in oral sessions at the American Society of Clinical Oncology annual meeting in June.
 - The first study looked at Circulating Tumour DNA Analysis Guiding Adjuvant Therapy in Stage II Colon Cancer. It was simultaneously published in New England Journal of Medicine. Matthew Burge was the PI for this study at RBWH.
 - The second compared ¹⁷⁷Lu-PSMA-617 versus cabazitaxel in metastatic castration-resistant prostate cancer, with Jeff Goh as the RBWH PI. This study was conducted as a collaboration between the Medical Oncology and Nuclear Medicine departments and demonstrates the strength of the Theranostics program at RBWH.

- ❖ The Department was successful in obtaining a 2021 MNHHS SEED Innovation Grant for the project “Reducing severe toxicity and hospitalisations related to 5-Fluorouracil (5-FU) chemotherapy”. The project, led by Mark Nalder, has progressed very well throughout 2022 despite several challenges, and is now close to completing recruitment. The results of the study, if positive, have the potential to change standard practice for such patients in Qld.
- ❖ Research publications. Departmental output included over 40 publications in 2022, including a number in high impact journals.
- ❖ Finally, I would like to acknowledge Annette Cubitt, who in 2022 stepped down from the role as Nurse manager of the Medical Oncology Clinical Research team. Annette played a major role in the development of the Medical Oncology Department’s clinical research program, and we thank her for the enormous contribution she has made to Cancer Services at RBWH and wish her well in her retirement.

Research Awards and Achievements

Recipient (RBWH staff in bold)	Award	Event
Medical Oncology Trials Unit, CCS	Outstanding Site, Metropolitan 2022	Australasian Gastrointestinal Trials Group Annual Scientific 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
Hao-Wen Sim, Helen Wheeler, Zarnie Lwin , Kathryn Field, Benjamin Chua , David Espinoza, Michael Buckland, Kimberley Kaufman	CCS Medical Oncology, CCS Radiation Oncology	PICCOG: PARP and Immune Checkpoint inhibitor Combination for relapsed IDH-mutant high-grade Glioma	NHMRC (National Health and Medical Research Council)	\$1,391,472	4 years, 2019-2023
Penelope Webb, Raymond Chan, Bena Brown, David Wyld , Sabe Sabesan, Louisa Gordon, Gunter Hartel, Melissa Eastgate , Laurelie Wishart, Rebecca Nund	CCS Medical Oncology	PROMISE: patient-Reported Outcome Measures in cancer care: a hybrid effectiveness-Implementation trial to optimise symptom control and health service experience	Cancer Council Queensland Accelerating Collaborative Cancer Research (ACCR) Grant, QIMR Grant	\$2,000,000	4 years, 2020-2023
Nicola Waddell, Andreas Moller, Michele Teng, Harsha. Gowda, John Pearson, Tobias Bald, Peter Simpson, Elizabeth Ahern, David Fielding, Brett Hughes .	CCS Medical Oncology	LUCKISTARS. Lung cancer knowledge in immunogenomics to stratify therapeutic resistance and sensitivity	Cancer Council of Queensland, AACR-0000000027, QIMR Grant	\$2,000,000	4 years, 2020-2023

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
Chee Khoon Lee, Michael Friedlander, Clare Scott, Sherene Loi, Tarek Meniawy, Jeffrey Goh , Anna deFazio, Alicia Jenkins, Alison Davis, Rachel O'Connell	CCS Medical Oncology	PARAGON-II: Phase 2 basket study of an ARomatase inhibitor plus PI3KCA inhibitor or CDK4/6 inhibitor in women with hormone receptor positive recurrent/metastatic Gynaecological Neoplasms	MRFF Clinical Trials Activity (Rare Cancers, Rare Diseases and Unmet Need) –2019 Reproductive Cancers Grant Opportunity	\$1,995,422	4 years, 2020-2023
Niall Tebbutt, Jeanne Tie, Chris Karapetis, Steve Ackland, Connie Diakos, Matthew Burge , Naureen Starling, Tony Dhillon, Christine Bishop, David Church, David Lau, Kate Mahon, Sonia Yip, Sophia Frentzas, Yoko Tomita, Kate Wilson	CCS Medical Oncology	POLEM Trial, a phase III randomised study of Avelumab plus fluoropyrimidine-based chemotherapy as adjuvant treatment for stage III dMMR or POLE exonuclease domain mutant colon cancer	MRFF International Clinical Trials Collaborations Grant	\$981,313	5 years, 2020-2024
Hayes S, Obermair A, Janda M, Eakin E, Shannon C, Goh J , Beesley V, Vagenas D, Spence R	CCS Medical Oncology, Surgery	A Phase II trial evaluating feasibility, safety and efficacy of an individually-tailored exercise intervention during chemotherapy for recurrent ovarian cancer	NHMRC MRFF EPCDR Ovarian Cancer Grant	\$884,172	4 years, 2020-2023
Paul Thomas, John Hooper, Trent Munro, David Wyld , Luke Perrin, Rohan Lourie, Stephen Rose, Simon Puttick	CCS Medical Oncology, Nuclear Medicine	A new radio-imaging agent to guide targeted therapy for epithelial ovarian cancer	NHMRC MRFF – Emerging Priorities and Consumer Driven Research - 2019 Ovarian Cancer Research Grant. (APP1199422)	\$1,893,306	5 years, 2020-2024
Sunil Lakhani, Amy Reed, Christopher Pyke, Cameron Snell, Nicole McCarthy, Ken O'Byrne, Valentine Hyland, Owen Ung, Natasha Woodward, Euan Walpole, Peter Simpson, Stephen Rose, Fares Al-Ejeh, Po-Ling Inglis , Ben Green	CCS Medical Oncology, Pathology QLD, Surgery	High risk breast cancer genomic sequencing project platform Queensland wide	MRFF Genomics grant	\$2,800,000	3 years, 2020-2022

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
Vanessa Beesley, Rachel Neale, Jane Turner, Patsy Yates, David Wyld , Raymond Chan, Louisa Gordon	CCS Medical Oncology	PRoCESS: Pancreatic cancer Relatives Counselling and Education Support Service trial. Assessing the effect of nurse-led counselling, compared with information alone, on participant-reported outcomes and use of medical services	NHMRC MRFF – Research Grant (APP1200326)	\$801,229	5 years, 2020-2024
Linda Mileskin, Yeh Chen Lee, Martin Stockler, Yoland Antill, Pearly Khaw, Pamela Pollock, Elizabeth Barnes, Paul Cohen, Michelle Wilson, Elizabeth Christie, Jeffrey Goh	CCS Medical Oncology	Adjuvant Tislelizumab plus chemotherapy after post-operative pelvic chemoradiation in high risk endometrial cancer: the ADELE study	NHMRC MRFF – Research Grant	\$1,633,241	3 years, 2020-2022
Arutha Kulasinghe, Brett Hughes , Lizbeth Kenny, Ken O'Byrne, Chamindie Punyadeera	CCS Medical Oncology, CCS Radiation Oncology	Identification of predictive biomarkers for immune checkpoint blockade in head and neck cancer	The Garnett Passe and Rodney Williams Memorial Foundation	\$367,500	4 years, 2020-2023
J Zalberg, K Sjoquist, N Tebbutt, D Yip, J Desai, T Price, L Lipton, C Diakos, S Ananda, C Kin Law, C Bishop, S Ackland, S Yip, R Morton, D Wyld , D Goldstein, J Mumford	CCS Medical Oncology	SSG XXII: International randomised phase III multicenter study of 3 v 5 years of adjuvant imatinib as treatment of patients with operable GIST with high risk for recurrence	NHMRC MRFF 2020 International Clinical Trial Collaborations	\$1,036,125	6 years, 2021-2026
Medical Oncology Clinical Trials Unit	CCS Medical Oncology	CCQ- Clinical Trials Data Management Grant. Medical Oncology	Cancer Council Queensland	\$134,000	1 year, 2022

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
K Fong, I Yang, H Marshall, R Bowman, R O'Rourke, P Valery, E Stone, R Manser, K Canfell, M Weber, G Garvey, S Lam, M Tammemagi, S Sabesan, Z Otty, F Brims, A McWilliams, B Page, J De Laat, S Hambleton, G Pratt, P Chan, M Windsor, R Naidoo, B Hughes, Z Lwin , K Hopcraft, M Toombs, P Fogart, P Tobias, B Bartholmai, F Maldonado, F Martignano, S Conticello, P Grogan, L Passmore, A Dent, G Olive, B Parris, H O'Farrell, K Chee	CCS Medical Oncology, CCS Radiation Oncology	Improving outcomes for people with and at risk of lung cancer.	Australian Cancer Research Foundation	\$2,000,000	4 years, 2022-2025
Mark Nalder, Matthew Burge, Melissa Eastgate, David Wyld	CCS Medical Oncology	Reducing severe toxicity and hospitalisations related to 5-Fluorouracil (5-FU) chemotherapy	2021 MNHHS SEED Innovation Funding	\$88,488	2 years, 2021-2022
Raymond Chan, Jon Emery, Michael Jefford, Nicolas Hart, Gillian Harvey, David Wyld (CI F), David Chan, Michelle Miller, Sanjeeva Kularatna, Lee Jones	CCS Medical Oncology	Implementing a Nurse-Enabled, Shared-Care Model to Address Unmet Needs of People with Neuroendocrine Tumours: the AUS-NET Trial	NHMRC 2021 MRFF Rare Cancers, Rare Diseases and Unmet Need	\$2,374,220	5 years, 2022-2026
Arutha Kulasinghe, Rahul Ladwa, Ken O'Byrne, Scott Coman, Ben Wallwork, Gabrielle Belz, Kirsten Russell, Duncan Lambie, Brett Hughes	CCS Medical Oncology	Astronomy meets pathology: an interdisciplinary effort to develop a head and neck cancer cellular atlas for immunotherapy	MSH SERTA	\$100,000	3 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
Sudha Rao, Corey Smith, Gunter Hartel, Maciej Trzaskowski, Zarnie Lwin , Jane Dahlstrom, Melissa Eastgate , Vladimir Andelkovic, Sayed Ali	CCS Medical Oncology	Epigenetic checkpoint blockade: a new approach to enhance immune-mediated control	NHMRC Ideas Grant 2022	\$1,280,076	5 years, 2023-2027
Vicki Whitehall, Eric Shifrut, Ann-Marie Patch, Catherine Bond, Bianca Nowlan, Jennifer Borowsky, Juan Dubrot, Matthew Burge , David Clark	CCS Medical Oncology	New Approaches for Sensitising Metastatic Colorectal Cancer to Immunotherapy	NHMRC Ideas Grant 2022	\$1,419,345	5 years, 2023-2027

Current RBWH Department / Research Group Led Research Activity

Lead Investigator Name (RBWH staff in bold)	Other Study Investigators (RBWH staff in bold)	Research Project Title	Number of RBWH Patients Recruited in 2022
David Wyld	Julie Moore, Mark Wan	Neuroendocrine Tumours: Epidemiologic trends in Queensland	N/A
Brett Hughes	Elizabeth Ahern , Bill Dougall	Pharmacodynamics of Pre-Operative PD1 Checkpoint Blockade and Receptor Activator of NF-κB Ligand (RANKL) Inhibition in Non-Small Cell Lung Cancer (NSCLC) – a phase 1B/2 trial. POPCORN	0 (in follow-up)
Melissa Eastgate	Anna Kuchel , Kathryn Hine	Financial planning concerns in patients with advanced melanoma – a research study into patient and clinician perspectives	0
David Wyld	Julie Moore, Nancy Tran, Michael Wyld	Neuroendocrine Neoplasms in the Paediatric, Adolescent and Young Adult Population in Queensland, Australia	N/A
Melissa Eastgate	Geoffrey Bryant, Mathew Burge , Darshit Thaker , David Wyld , Cameron Curley, Michele Grogan, Jemma Byth	Cancer patient reported outcomes: putting theory into practice	N/A
Brett Hughes Elizabeth Ahern	Martin Batstone and Bill Dougall (QIMR)	Expression of novel immune markers in mucosal head and neck squamous cell carcinoma (HNSCC) specimens	N/A
Melissa Eastgate Elizabeth Ahern Anna Kuchel	Ailin Lepetier, Jason Madore	Multiplex immunofluorescence assessment of melanoma biopsies and response to immunotherapy	N/A
Brett Hughes , Elizabeth Ahern	Martin Batstone, Bill Dougall	Immune Biomarker Evaluation in Oral Mucosal Squamous Cell Carcinoma: a prospective tissue collection	N/A

Lead Investigator Name (RBWH staff in bold)	Other Study Investigators (RBWH staff in bold)	Research Project Title	Number of RBWH Patients Recruited in 2022
Zarnie Lwin	Alexander Broom (UNSW), Claire Wakefield, Emma Kirby (UNSW), Barbara Prainsack, Mustafa Khasraw, Katherine Kenny, Stephanie Raymond	Precision and the Person: A sociological study of therapeutic innovation in cancer care	N/A
Melissa Eastgate	Rosalind Jeffrey (Neurosurgery), Margaret Cummings (Pathology), Elizabeth Ahern, Anna Kuchel , Shu Lee (Medical Oncology Ipswich), Michael Colditz (Neurosurgery)	Clinicopathologic feature predicting survival after brain metastasectomy in melanoma	N/A
Wessling C, Gavin N,	Russell E, Glynn T, Eastgate M, Hajkowicz K, Klages P, Leutenegger J, Sandler C, Clark B, Hutchinson E, Sutherland A,	A Randomised Controlled Trial exploring the administration of intravenous antibiotics and fluids via intravenous pole and pump versus portable CADD pump to improve mobility in patients diagnosed with cancer (The Active Trial)	N/A
Melissa Eastgate, Elizabeth Ahern, Harry Gasper, Sudha Rao	Sumudu Britton (RBWH IDBrett Hughes, Glen Kennedy, Zarnie Lwin, Jasmine Brady, Robert McCuaig (QIMRb), Wenjuan Tu (QIMRb), Michelle Melino (QIMRb), Amanda Bain QIMRb)	Immune correlates of CoVID-19 in cancer patients: Biobank	N/A
Elizabeth Ahern, Harry Gasper, Natasha Roberts, Zarnie Lwin	David Wyld, Melissa Eastgate, Brett Hughes, Glen Kennedy	CoVID-19 in cancer patients: Health Services Research and Qualitative Research Arm	N/A
Po-Ling Inglis	Quan Tran, Anna Kuchel, Sean Stephens (Neurosurgery)	Pineal germinoma: A 13 year Queensland experience	N/A
Darshit Thacker, Elizabeth Ahern, Harry Gasper, Hermione Wheatly	David Wyld, Melissa Eastgate, Glen Kennedy, Andrea Henden, Peter McGuire	Socio-Psychological and Physical Impact of Covid-19 Pandemic on Elderly Oncology Patients: A Comprehensive Study at North Lakes Cancer Care Services	Not applicable
Lucy Corke	Matthew Burge	Pembrolizumab in previously treated microsatellite instability-high/deficient mismatch repair metastatic colorectal cancer	Not applicable
Lucy Corke	Brett Hughes, Chiyan Lau, David Fielding, David Fairbairn, Ben Lundie	Rebiopsy rates and outcomes at diagnosis and at progression on first line EGFR TKI therapy in advanced non-small cell lung cancer	Not applicable
Laura Tam, Melissa Eastgate	Marcin Dzienis	A retrospective audit examining the feasibility and durability of response following re-challenge with immune checkpoint inhibitor post grade 3-4 immune-related adverse event	Not applicable
Mark Flower, Brett Hughes	Melissa Eastgate, Anna Kuchel, Elizabeth Ahern, Yong Yeung	Immune checkpoint inhibitor hepatotoxicity rates, associations and clinical management audit	Not applicable
Melissa Eastgate	Lindy Jeffree, Margaret Cummings (PathQLD) Elizabeth Ahern, Anna Kuchel, Shu Fen Lee, Michael Colditz	Audit of outcomes of melanoma patients undergoing neurosurgery	Not applicable
Matthew Burge, Victoria Whitehall	David Wyld, Melissa Eastgate, Alison Hadley, Brett Hughes, Po-ling Inglis, Zarnie Lwin, Jeff Goh, Darshit Thaker, Bahram Forouzes, Sudhakar Vemula, Elizabeth Ahern, Jennifer Borowsky	The Royal Brisbane and Prince Charles Hospital metastatic Colorectal Cancer database: A prospective observational cohort study examining clinical and molecular biomarkers	12
Matthew Burge, Fiona Paxton-Hall	David Wyld	Outcome and toxicity of salvage therapy with 177 Lu-dotatate in patients with metastatic neuroendocrine tumours	Not applicable

Lead Investigator Name (RBWH staff in bold)	Other Study Investigators (RBWH staff in bold)	Research Project Title	Number of RBWH Patients Recruited in 2022
Melissa Eastgate	Sudha Rao, David Wyld , Kathy You , Robert McCuaig, Haidar Al-Saig , Harry Gasper , Jeff Goh , Brett Hughes , Po Inglis , Anna Kuchel , Zarnie Lwin , Darshit Thaker	Immunotherapy STARS (Stratifying Therapeutic Resistance and Sensitivity) - immunotherapy treatment cohort	18
Harry Gasper	Melissa Eastgate , David Wyld , Matthew Burge	What are the patterns of referral, diagnosis, treatment and outcomes for patients with small bowel adenocarcinoma within our Hospital and Healthcare Service, and how do they compare to accepted international standards?	Not applicable
Harry Gasper , Melissa Eastgate	Michele Teng, Bill Dougall, Margaret Cummings, Rosalind Jeffree, Shu Lee , Anna Kuchel , Elizabeth Ahern	MISTY trial (Melanoma Immunotherapy Stratification and Treatment Sensitivity) Cutaneous Malignancies Group	2
David Wyld	Laura Tam , David Pattison (Nuc Med) John Younger (Cardiology) Stuart Ramsay (Nuc Med), Matthew Burge , Louise McCormack (Cardiology)	A retrospective quality assurance audit examining the utility of three different modalities of imaging to define intracardiac metastases in neuroendocrine neoplasms	Not applicable
Mark Nalder	David Wyld	Retrospective audit of outcomes of treatment of metastatic neuroendocrine tumours treated with PRRT Lutitium-177 at Royal Brisbane and Women's Hospital	Not applicable
David Wyld	Danica Cossio, Julie Moore, Phillipa Youl, Nancy Tran, Michael Wyld	Patterns of care for patients diagnosed with neuroendocrine cancer in Queensland	Not applicable
Zarnie Lwin , Harry Gasper	Zarnie Lwin , Elizabeth Ahern, Natasha Roberts , Bryan Chan	COVID-19 and the Multi-disciplinary team meeting: An audit of modifications in response to the pandemic.	Not applicable
Mark Nalder	Matthew Burge , David Wyld , Melissa Eastgate , Sarah Steinke	Pre-treatment dihydropyrimidine dehydrogenase (DPYD) genotyping to individualise fluoropyrimidine-based chemotherapy: An evaluation of clinical implementation in a tertiary cancer centre.	118
Tivya Kulasegaran	Mark Nalder , Melissa Eastgate , Matthew Burge	Retrospective review of fluoropyrimidine-based chemotherapy toxicity in patients with any solid organ malignancy. A multi-centre analysis in Queensland, Australia	Not applicable
Arutha Kulasinghe	Brett Hughes	Identification of predictive biomarkers for immune checkpoint blockade in head and neck cancer	Not applicable
Melissa Eastgate	Michelle Wykes, Rebecca Faleiro, Deshapriya Karunaratne	INVITE: In vitro testing of a novel immunotherapy for advanced cancer	22
Kyung You	Zarnie Lwin , Natasha Roberts	Multifactorial determinants that influence clinical trial participation by cancer patients in Australia.	Not applicable
Kyung You	Zarnie Lwin , Natasha Roberts , David Wyld , Mark Nalder	Retrospective audit: reviewing recruitment and screening at the RBWH Medical Oncology Clinical Trials Unit	Not applicable
Mark Nalder	Nikita Allen, Marianne Kirrane, David Wyld	Characteristics and outcomes of cancer patients requiring admission to intensive care – a single centre retrospective review	Not applicable
Brett Hughes	Cassie Turner	Outcomes for patients with radioactive iodine-refractory thyroid cancer treated within the Royal Brisbane and Women's Hospital	Not applicable

Collaborative Research Activity Involving RBWH Department / Research Group

Lead Investigator Name (RBWH staff in bold)	Other Study Investigators (RBWH staff in bold)	Research Project Title	Number of RBWH Patients Recruited in 2022
Australasian Gastrointestinal Trials Group	Matthew Burge (Cancer Care Services)	ACTICCA-1 study: Adjuvant Chemotherapy With Gemcitabine and Cisplatin Compared to Observation After Curative Intent Resection of Cholangiocarcinoma and Muscle Invasive Gall Bladder Carcinoma (ACTICCA-1 Trial)	0 (in follow-up)
Australasian Gastrointestinal Trials Group	Matthew Burge (Cancer Care Services)	ASCEND: Randomized, phase 2 study of gemcitabine and nab-paclitaxel with CEND-1 or placebo in patients with untreated metastatic pancreatic ductal adenocarcinoma.	3
Australasian Gastrointestinal Trials Group	Melissa Eastgate (Cancer Care Services)	ASCOLT: Aspirin for Dukes C and high risk Dukes B Colorectal Cancers: An international, multi-centre, double blind, randomised placebo controlled Phase III trial (AGITG)	0 (in follow-up)
Australasian Gastrointestinal Trials Group	Matthew Burge (Cancer Care Services)	INTEGRATE II Randomised Phase III Double Blind Placebo Controlled Study of regorafenib in Refractory Advanced GastroOesophageal Cancer	4
Australasian Gastrointestinal Trials Group	Matthew Burge (Cancer Care Services)	MONARCC: A randomised phase 2 study of Panitumumab monotherapy versus fluoropyrimidine and bevacizumab as first line therapy for RAS wild type metastatic colorectal cancer	0 (in follow-up)
Australasian Gastrointestinal Trials Group	David Wyld (Cancer Care Services)	SSG XXII GIST: Three versus five years of adjuvant imatinib as treatment of patients with operable GIST with a high risk for recurrence: A randomised phase III multicentre study by the Scandinavian Sarcoma Group	0
Breast Cancer Trials	Po-Ling Inglis (Cancer Care Services)	BRCA-P: A Randomized, Double-Blind, Placebo-Controlled, Multi-Center, International Phase 3 Study to determine the Preventive Effect of Denosumab on Breast Cancer in Women carrying a BRCA1 Germline Mutation	2
Breast Cancer Trials	Po-Ling Inglis (Cancer Care Services)	FINER: A double-blind placebo controlled randomized Phase III trial of fulvestrant and ipatasertib as treatment for advanced HER-2 negative and estrogen receptor positive (ER+) breast cancer following progression on first line CDK 4/6 inhibitor and aromatase inhibitor	1
Breast Cancer Trials	Po-Ling Inglis (Cancer Care Services)	DECRESCENDO: De-escalation of adjuvant chemotherapy in HER2-positive, estrogen receptor-negative, node-negative early breast cancer subjects who achieved pathological complete response after neoadjuvant chemotherapy and dual HER2-blockade.	0
Australia New Zealand Breast Cancer Trials Group	Michelle Nottage (Cancer Care Services)	PALLAS: PALbociclib CoLLaborative Adjuvant Study: A Randomized Phase III Trial of Palbociclib With Standard Adjuvant Endocrine Therapy Versus Standard Adjuvant Endocrine Therapy Alone for Hormone Receptor Positive (HR+) / Human Epidermal Growth Factor Receptor 2 (HER2)-Negative Early Breast Cancer	0 (in follow-up)

.Lead Investigator Name (RBWH staff in bold)	Other Study Investigators (RBWH staff in bold)	Research Project Title	Number of RBWH Patients Recruited in 2022
Australia New Zealand Breast Cancer Trials Group	Po-Ling Inglis (Cancer Care Services)	Penelope B: Phase III study evaluating palbociclib (PD-0332991), a Cyclin-Dependent Kinase (CDK) 4/6 Inhibitor in patients with hormone-receptor-positive, HER2-normal primary breast cancer with high relapse risk after neoadjuvant chemotherapy	0 (in follow-up)
Australia New Zealand Breast Cancer Trials Group/Breast International Group	Michelle Nottage (Cancer Care Services)	TEXT-Bone: A substudy of the TEXT trial to evaluate serial bone markers for bone remodeling, serial growth factors, and bone mineral density	0 (in follow-up)
Australia New Zealand Breast Cancer Trials Group/Breast International Group	Michelle Nottage (Cancer Care Services)	TEXT: A Phase III Trial Evaluating the Role of Exemestane plus GnRH analogue as Adjuvant Therapy for premenopausal women with endocrine responsive breast cancer	0 (in follow-up)
Australia New Zealand Gynaecological Oncology Group	Jeffrey Goh (Cancer Care Services)	ADELE: Adjuvant Tiselimuzab plus chemotherapy after post-operative pelvic chemoradiation in high risk endometrial cancer	2
Australia New Zealand Gynaecological Oncology Group	Jeffrey Goh (Cancer Care Services)	AtTend: Phase III Double-Blind Randomized Placebo Controlled Trial of Atezolizumab in Combination with Paclitaxel and Carboplatin in Women With Advanced/Recurrent Endometrial Cancer	0 (in follow-up)
Australia New Zealand Gynaecological Oncology Group	Jeffrey Goh (Cancer Care Services)	EMBRACE: Phase II clinical trial of the PARP inhibitor, olaparib, in HR-deficient metastatic breast and relapsed ovarian cancer in patients without germline mutations in BRCA1 and BRCA2	0 (in follow-up)
Australia New Zealand Gynaecological Oncology Group	Jeffrey Goh (Cancer Care Services)	ICON 9: to assess the efficacy, safety and tolerability of maintenance cediranib in combination with olaparib therapy compared to single agent cediranib maintenance in women with relapsed platinum sensitive ovarian, fallopian tube or primary peritoneal cancer	0
Australia New Zealand Gynaecological Oncology Group	Jeffrey Goh (Cancer Care Services)	iPRIME: A phase II study of durvalumab and tremilumumab in combination with carboplatin and paclitaxel, as neoadjuvant treatment for newly diagnosed, advanced high grade serous ovarian cancer	0 (in follow-up)
Australia New Zealand Gynaecological Oncology Group	Jeffrey Goh (Cancer Care Services)	MOCCA: A Multicentre Phase II randomised trial of MEDI4736 versus physician's choice chemotherapy in recurrent ovarian clear cell adenocarcinomas.	0 (in follow-up)
Australia New Zealand Gynaecological Oncology Group	Aneta Suder (Cancer Care Services)	OUTBACK - A PHASE III trial of adjuvant chemotherapy following chemoradiation as primary treatment for locally advanced cervical cancer compared to chemoradiation alone	0 (in follow-up)
Australia New Zealand Gynaecological Oncology Group	Jeffrey Goh (Cancer Care Services)	VELIA: A Phase 3 Placebo Controlled Study of Carboplatin/Paclitaxel With or Without Concurrent and continuous Maintenance Veliparib in Subjects with Previously Untreated Stages III or IV High Grade Serous Epithelial Ovarian, Fallopian Tube, or Primary Peritoneal Cancer	0 (in follow-up)

.Lead Investigator Name (RBWH staff in bold)	Other Study Investigators (RBWH staff in bold)	Research Project Title	Number of RBWH Patients Recruited in 2022
Australia New Zealand Gynaecological Oncology Group	Jeffrey Goh (Cancer Care Services)	PARAGON-II: Phase II basket study of an Aromatase inhibitor plus PI3KCA inhibitor or CDK4/6 inhibitor in women with hormone receptor positive recurrent/metastatic Gynaecological Neoplasms	2
Australia and New Zealand Melanoma Trials Group	Melissa Eastgate (Cancer Care Services)	STOP-GAP: A randomised phase III study of duration of Anti-PD-1 therapy in metastatic melanoma	0
Australia New Zealand Urogenital and Prostate Cancer Trials Group	David Wyld (Cancer Care Services)	BEP: A randomised phase 3 trial of accelerated versus standard BEP chemotherapy for participants with intermediate and poor-risk advanced germ cell tumours	0
Australia New Zealand Urogenital and Prostate Cancer Trials Group	Aneta Suder (Cancer Care Services)	ENZAMET Trial: A randomised phase 3 trial of enzalutamide in first line androgen deprivation therapy for metastatic prostate cancer	0 (in follow-up)
Australia New Zealand Urogenital and Prostate Cancer Trials Group	Jeffrey Goh (Cancer Care Services)	ENZA-p: A phase 2 open label randomised trial of enzalutamide versus enzalutamide+ Lu PSMA 617, in the early mCRPC setting prior to chemotherapy (stratified for hormone sensitive chemo) in men at high risk of early treatment failure on enzalutamide alone. (ANZUP)	1
Australia New Zealand Urogenital and Prostate Cancer Trials Group	Jeffrey Goh (Cancer Care Services)	KEYPAD: Proposed phase 2 trial of pembrolizumab and denosumab in advanced clear-cell renal cell carcinoma (ccRCC) progressing after a VEGF-TKI	0
Australia New Zealand Urogenital and Prostate Cancer Trials Group	Jeffrey Goh (Cancer Care Services)	TheraP: A randomised phase 2 trial of 177 Lu-PSMA617 theranostic versus cabazitaxel in men with progressive metastatic castration resistant prostate cancer	0 (in follow-up)
Australia New Zealand Urogenital and Prostate Cancer Trials Group	Jeffrey Goh (Cancer Care Services)	UNICAB: A phase II trial of single agent cabozantinib in patients with locally advanced or metastatic non-clear cell renal cell carcinoma post immunotherapy or who are unsuitable for immunotherapy	0
Australia New Zealand Urogenital and Prostate Cancer Trials Group	Jeffrey Goh (Cancer Care Services)	UNISoN - anzUp Nivo->Ipi+Nivo Sequential Non-clear cell - Proposed Phase II Sequential Cohort Trial Of Single Agent Nivolumab, Then Combination Ipilimumab + Nivolumab In Metastatic Or Unresectable Non-Clear Cell Renal	0 (in follow-up)
Australia New Zealand Urogenital and Prostate Cancer Trials Group	Aneta Suder (Cancer Care Services)	UpFront PSMA: A Randomised Phase 2 Study of Sequential 177Lu-PSMA617 and Docetaxel versus Docetaxel in Metastatic Hormone-Naïve Prostate Cancer	6
Australia New Zealand Urogenital and Prostate Cancer Trials Group	Jeffrey Goh (Cancer Care Services)	EVOLUTION: Phase II Study of Radionuclide 177Lu-PSMA Therapy versus 177Lu-PSMA in Combination with Ipilimumab and Nivolumab for Men with Metastatic Castration Resistant Prostate Cancer (mCRPC)	8
BioGrid Australia	Jeffrey Goh (Cancer Care Services)	ePAD: Analyzing Treatment Patterns and Outcomes from Real-World Patients with Castrate-Resistant Prostate Cancer (CRPC)	14
BioGrid Australia	Matthew Burge (Cancer Care Services)	TRACC: Study of Clinical Outcomes and Analysis of Bevacizumab use in Metastatic Colorectal Cancer	11

Lead Investigator Name (RBWH staff in bold)	Other Study Investigators (RBWH staff in bold)	Research Project Title	Number of RBWH Patients Recruited in 2022
Canadian Cancer Trials Group	Matthew Burge (Cancer Care Services)	CHALLENGE: A Phase III study of the impact of a Physical Activity program on Disease-Free Survival in patients with high risk Stage II or Stage III Colon Cancer: a randomised controlled trial	5
Cooperative Trials Group for Neuro-oncology	Zarnie Lwin (Cancer Care Services)	LUMOS: Low & Intermediate Grade Glioma Umbrella Study of Molecular Guided Therapies – Pilot Study. (COGNO)	0 (in follow-up)
Cooperative Trials Group for Neuro-oncology	Zarnie Lwin (Cancer Care Services)	MAGMA Trial: The Multi-Arm Glioblastoma Australasia Trial (COGNO)	9
Cooperative Trials Group for Neuro-oncology	Zarnie Lwin (Cancer Care Services)	NUTMEG: A Randomized Phase II Study of Nivolumab and Temozolomide vs Temozolomide in newly diagnosed Elderly Glioblastoma	0 (in follow-up)
Cooperative Trials Group for Neuro-oncology	Zarnie Lwin (Cancer Care Services)	VERTU - Veliparib, Radiotherapy and Temozolomide trial in Unmethylated MGMT Glioblastoma: A Randomised Phase II study of veliparib + radiotherapy (RT) with adjuvant temozolomide (TMZ) + veliparib versus standard RT + TMZ followed by TMZ in newly diagnosed glioblastoma (GBM) with unmethylated O (6)-methylguanine-DNA methyltransferase	0 (in follow-up)
Melanoma and Skin Cancer Trials Limited	Melissa Eastgate (Cancer Care Services)	CHARLI: A Phase Ib/II Trial of Ipilimumab-Nivolumab-Denosumab and Nivolumab-Denosumab in Patients with Unresectable Stage III and IV Melanoma	0 (in follow-up)
Melanoma and Skin Cancer Trials Limited	David Wyld (Cancer Care Services),	GoTHAM: A Merkel Cell Carcinoma (MCC) study testing the immunotherapy drug Avelumab in combination with either radionuclide therapy or external beam radiotherapy	0
Melanoma and Skin Cancer Trials Limited	Melissa Eastgate (Cancer Care Services)	I-MAT: - A randomised, placebo-controlled, phase II trial of adjuvant Avelumab in patients with stage I-III Merkel cell carcinoma	1
Metro South HHS	Brett Hughes (Cancer Care Services)	DESQUAMATE: A phase 2 study of de-escalation in resectable, locally advanced cutaneous squamous cell carcinoma with the use of neoadjuvant Pembrolizumab.	2
NeuroEndocrine Cancer Australia	David Wyld (Cancer Care Services)	An Observational, Multi-centre, Non-Interventional Programme to Register Patients Diagnosed With Neuroendocrine Neoplasms (NENs) and Monitor their Patterns of Care in Australian Hospitals. Planet Registry	1
Olivia Newton-John Cancer Research Institute	Po-Ling Inglis (Cancer Care Services)	A phase I safety and bioimaging trial of KB004 in patients with glioblastoma	0 (in follow-up)
Peter MacCallum Cancer Centre	David Wyld (Cancer Care Services)	NET SANGUIS: The potential role of circulating DNA in the management of neuroendocrine tumours.	0
Peter MacCallum Institute	Anna Kuchel (Cancer Care Services)	SUPER-NEXT: Complete Whole Genome Sequencing for Cancer of Unknown Primary	2
Queensland University of Technology	Brett Hughes (Cancer Care Services)	Liquid lung Biopsy: Laboratory Based Study of Circulating Tumour Cells in Human Blood	0 (in follow-up)

.Lead Investigator Name (RBWH staff in bold)	Other Study Investigators (RBWH staff in bold)	Research Project Title	Number of RBWH Patients Recruited in 2022
Southern Adelaide Local Health Network Incorporated	Matthew Burge (Cancer Care Services)	NEO-CREATE: Neoadjuvant Immune-Chemo-Radiotherapy in operable oEsophageal and gastro-oesophageal junction cancers with Carboplatin Paclitaxel Radiotherapy and Avelumab - a Trial assessing feasibility and preliminary Efficacy	5
University of New South Wales	David Wyld (Cancer Care Services), Robert Henderson (Neurology)	IN FOCUS: Peripheral Neuropathy in Chemotherapy-treated Patients: Predictors, Assessment strategies and Functional Outcomes	0 (in follow-up)
University of New South Wales	David Wyld (Cancer Care Services), Robert Henderson (Neurology)	IN FOCUS Duloxetine: The use of duloxetine for the treatment of chemotherapy-induced peripheral neuropathy	0
Walter and Eliza Hall Institute	Michelle Nottage (Cancer Care Services)	Advanced Hormone Receptor Positive Breast Cancer Registry in Australia (ARORA)	9
Walter and Eliza Hall Institute	Matthew Burge (Cancer Care Services)	Evaluation of temporal dynamics of RAS Mutation emergence in Cell Free DNA (cfDNA) in response to first-line cetuximab anti-EGFR therapy in Patients with Metastatic Colorectal Cancer	0 (in follow-up)
Walter and Eliza Hall Institute	Matthew Burge (Cancer Care Services)	DYNAMIC: Circulating Tumour DNA Analysis Informing Adjuvant Chemotherapy in Stage II Colon Cancer	0 (in follow-up)
Walter and Eliza Hall Institute	Matthew Burge (Cancer Care Services)	DYNAMIC III: Circulating Tumour DNA Analysis Informing Adjuvant Chemotherapy in Stage III Colon Cancer: A Multicentre Phase II/III Randomised Controlled Study (AGITG, WEHI)	8
Walter and Eliza Hall Institute	Matthew Burge (Cancer Care Services)	DYNAMIC-Pancreas: Circulating Tumour DNA Analysis Informing Adjuvant Chemotherapy in Early Stage Pancreatic Cancer: A Multicentre Randomised Study (WEHI, AGITG)	2
Walter and Eliza Hall Institute	Zarnie Lwin (Cancer Care Services)	EX-TEM: Phase III Trial of Extended Temozolomide in Newly Diagnosed Glioblastoma (WEHI)	0
Walter and Eliza Hall Institute	Anna Kuchel (Cancer Care Services)	iTestis: Bioinformatics for Testis Cancer	3
Walter and Eliza Hall Institute	Matthew Burge (Cancer Care Services)	PURPLE: Pancreatic cancer: Understanding Routine Practice and Lifting End results; A Prospective Pancreatic Cancer clinical registry	4
Walter and Eliza Hall Institute	Michelle Nottage (Cancer Care Services)	TABITHA: Study of the clinical outcomes and analysis of anti-HER2 therapy in treatment of metastatic HER2 positive breast cancer	0
Bryan Day QIMR Berghofer Medical Research Institute	Po Ling Inglis , (Cancer Care Services), Rosalind Jeffree (Neurosurgery)	Novel Therapies for Brain Cancer	Not available
Manoj Bhatt	David Wyld, Matthew Burge , (Cancer Care Services), Rahul Ladwa (PAH) Peter Garcia, David Pattison, Kevin Lee, Samuel Kyle, Nicholas Dowson, Jye Smith (Nuclear Medicine), Steven Goodman, Stephen Rose (CSIRO).	Pilot project to assess liver metastases by comparing novel, dynamic and static functional imaging, and also morphological imaging with standard of care in WHO Grade I and Grade II Neuroendocrine Tumour (NET).	Not applicable

Lead Investigator Name (RBWH staff in bold)	Other Study Investigators (RBWH staff in bold)	Research Project Title	Number of RBWH Patients Recruited in 2022
Kate Roberts (Princess Alexandra Hospital), Ken O'Byrne (Queensland University of Technology),	Brett Hughes, Zarnie Lwin	A multi-institutional retrospective audit of patients with metastatic malignancy treated with nivolumab through the Open Access Scheme at the Princess Alexandra Hospital, the Royal Brisbane and Womens' Hospital, and The Prince Charles Hospital	Not applicable
Amanda Love (Endocrinology) Marianne Elston (NZ), Richard Carrol (NZ), Eva Segelov (Monash)	David Wyld (Cancer Care Services)	Assessment of hypopituitarism rates following peptide receptor radionuclide therapy for neuroendocrine tumours.	0 (in follow-up)
John Clouston (DMI) Roger Bain (DMI)	Melissa Eastgate (CCS) , Nigel Mott (DMI), Ken Mitchell (DMI), Karin Steinke (DMI), Sam Davis (DMI)	The Metro North Interventional Oncology database: a prospective observational cohort study examining outcomes for interventional oncology procedures.	Not available
Sunil Lakhani (University of Queensland) Amy Reed (UQCCR), Christopher Pyke (Mater), Cameron Snell (Mater), Nicole McCarthy (Wesley), Ken O'Byrne (PAH), Valentine Hyland (Pathology), Owen Ung (Surgery), Natasha Woodward (Mater), Euan Walpole (PAH), Peter Simpson (UQ), Stephen Rose (CSIRO), Fares Al-Ejeh (QIMR)	Po-Ling Inglis , Ben Green (Cancer Care Services)	High risk breast cancer genomic sequencing project platform Queensland wide	Not available
Patsy Yates (Palliative Care)	David Wyld (Cancer Care Services), Kimberly Alexander, Christine Miaskowski, Raymond Chan, Alexandra McCarthy, Steven McPhail, Helen Skerman	A sequential multiple assignment randomised trial (SMART) of nursing interventions to reduce pain associated with chemotherapy induced peripheral neuropathy	Not available
Teresa Brown (Nutrition and Dietetics)	Judy Bauer (University of Queensland), Brett Hughes (Cancer Care Services) Elizabeth Ahern (Cancer Care Services)	"Sarcopenia in HNSCC patients undergoing definitive concurrent CRT and associations with clinical outcomes"	Not available
Hao-Wen Sim, Helen Wheeler, Kathryn Field, David Espinoza, Michael Buckland, Kimberly Kaufman	Zarnie Lwin, Benjamin Chua (Cancer Care Services)	PICCOG: PARP and Immune Checkpoint inhibitor COmbination for relapsed IDH-mutant high-grade Glioma	Not available
Alex Broom (UNSW)	Zarnie Lwin (CCS) Emma Kirby (UNSW), David Wyld (CCS) Renata Kokanović (Monash University), Jonathan Adams (UTS), Eng-Siew Koh (Liverpool Hospital), Paul de Souza (Liverpool Hospital) Lisa Woodland (Multicultural Health Service)	Cultural biographies, medical knowledges: A sociological study at the intersection of cancer and culture	Not available

Lead Investigator Name (RBWH staff in bold)	Other Study Investigators (RBWH staff in bold)	Research Project Title	Number of RBWH Patients Recruited in 2022
Queensland University of Technology	Jeffrey Goh (CCS), Aneta Suder (CCS), Natasha Roberts (CCS)	IRONMAN: International registry for men with advanced prostate cancer	Not available
William McGahan (Surg)	Matthew Burge (CCS)	A retrospective review of outcomes of patients who participated in the PET/CT pancreas study	Not applicable
William McGahan (Surg)	Matthew Burge (CCS)	A retrospective review of the patterns of care in patients with pancreatic cancer in the Metro-North Health District	Not applicable
Wessling C, Gavin N,	Russell E, Glynn T, Eastgate M , Hajkowicz K, Klages P, Leutenegger J, Sandler C, Clark B, Hutchinson E, Sutherland A,	A Randomised Controlled Trial exploring the administration of intravenous antibiotics and fluids via intravenous pole and pump versus portable CADD pump to improve mobility in patients diagnosed with cancer (The Active Trial)	Not available
Cooperative Trials Group for Neuro-oncology	Po-Ling Inglis	Outcomes and patterns of care in adult medulloblastoma	Not available
Connor O'Leary, (PAH),	Ken O'Byrne (PAH), Derek Richard (QUT), Elizabeth McCaffrey (PAH), Mark Adams (QUT), Arutha Kulasinghe (QUT), Brett Hughes (CCS) , Rahul Ladwah (PAH), Josh Burges (QUT)	Identification and clinical validation of potential cancer biomarkers	Not available

Research Publications

Authors

Investigator	ORCID ID
David Wyld	https://orcid.org/0000-0001-9523-4333
Melissa Eastgate	https://orcid.org/0000-0002-7560-5026
Haidar Al-Saig	
Matthew Burge	
Chun Loo Gan	https://orcid.org/0000-0003-2576-9310
Jeffrey Goh	https://orcid.org/0000-0003-3103-146X
Brett Hughes	https://orcid.org/0000-0002-1811-0537
Po-Ling Inglis	
Anna Kuchel	https://orcid.org/0000-0001-8580-2974
Zarnie Lwin	
Michelle Nottage	https://orcid.org/0000-0002-1620-1961
Aneta Suder	
Darshit Thaker	
Elizabeth Ahern	https://orcid.org/0000-0002-2062-5695
Harry Gasper	https://orcid.org/0000-0003-0290-5762
Kathy (Kyung) You	https://orcid.org/0000-0001-7583-5502
Mark Nalder	https://orcid.org/0000-0002-9310-1489
Cassie Turner	https://orcid.org/0000-0003-2201-3921

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Keynote or Plenary Lectures given in 2022

Date	Title
26 March 2022	Keynote & Scientific Session 11 QOL, Epidemiology Chair Zarnie Lwin . World Federation of Neuro-oncology Societies (WFNOS 2022) 6 th Quadrennial Meeting. Virtual. Coex, Seoul, Korea.
24 March 2022	Education Session 15 Quality of Life and More Among Brain Tumor Patients. Why should we assess quality of life in adult brain tumor patients? Zarnie Lwin . World Federation of Neuro-oncology Societies (WFNOS 2022) 6 th Quadrennial Meeting. Virtual .Coex, Seoul, Korea.
17 November 2022	Immunotherapy in gastroesophageal cancers - Keynote Breakfast Session. Chairs Melissa Eastgate , Michael Allen. Australasian Gastro-Intestinal Trials Group Annual Scientific Meeting
24 November 2022	Consortium for Neuro-Oncology Excellence (CNE) Workshop. Chair Zarnie Lwin . Brisbane Cancer Conference
24 November 2022	Recent Advances in Targeted Therapies in NSCLC. Chair Zarnie Lwin . Brisbane Cancer Conference
24 November 2022	The Queensland Collaborative for Cancer Survivorship: Building on the First Five Years. Chairs David Wyld , Patsy Yates. Brisbane Cancer Conference.

Radiation Oncology

Research highlights for the year (1 January – 31 December 2022)



Dr Graeme Dickie
Director Radiation Oncology

The culture of inter-disciplinary collaboration and advancing technology in research remained strong for radiation oncology in 2022. The aim and focus of the Radiation Oncology Research group is to promote, support and drive innovation, promote quality initiatives and ensure quality improvement projects deliver evidence-based practice, to ensure safe treatment delivery.

As new and emerging technologies are rapidly being assimilated into daily practice, the focus of research outcomes is to implement new technology in a scientific manner. Quality assurance and research into new technology is important to ensure, precision radiotherapy is delivered in a safe, efficient, and cost-effective manner.

Some of the departments 2022 achievements include:

Professor Lizbeth Kenny and team were awarded a 2022 Garnett Passe & Williams grant for \$375 000 to allow investigation of the use of a novel assay for early detection of minimal residual disease in head and neck cancer patients.

Associate Professor Tanya Kairn was appointed as the first female Director of Radiation Oncology Medical Physics in Queensland Health. Tanya's clinical career started 12 years ago, following two post-doctoral research fellowships at the Queensland University of Technology (QUT). Tanya started at RBWH in 2017, and since then, has published more than 50 papers (taking her career total to more than 130). Tanya's research has covered a broad range of topics, including radiation dosimetry, 3D printing, treatment planning and delivery, and stereotactic radiosurgery. In Tanya's new role, she will continue a legacy of support for medical physics, multidisciplinary and inter-departmental collaborative research.



The Cancer Care Services 3D printing research team were awarded the Metro North Research Excellence Discovery and Innovation award for: Safer, more accurate and more comfortable radiotherapy through 3D printing. Through the work of this team, Metro North was the first clinical site to be included on the Australian Register of Therapeutic Goods as a manufacturer and supplier of radiotherapy boluses that are 3D-printed at point-of-care.

Associate Professor Tanya Kairn, Director of Medical Physics, was a finalist in the Metro North Research Excellence awards in the Clinical Research Excellence award category.

Dr. Samuel Peet, a medical physicist with the radiation oncology team, successfully completed his PhD on out-of-field dose in contemporary radiation therapy. In the same month, he also secured a CAHRLI early-career fellowship to support the development of a secondary cancer risk evaluation tool. Sam was supervised by two colleagues in the department, Prof. Scott Crowe and Prof. Tanya Kairn, and supported by RBWH and RBWH Foundation scholarships.

A team of Radiation Therapists led by Brianna McCoola have been awarded the Consumer Focus Project QuARRIES Award for their project titled "AYA multimedia patient education in Radiotherapy". This project utilises multimedia to enhance Adolescents and Young Adults with cancers patient experience.

Successful PhD candidates in 2022

Name	PhD Title	Month Completed	Affiliated University	Summary
Samuel Peet	Out-of-field dose in contemporary radiation therapy	Sep 2022	QUT	By characterising and providing recommendations to reduce out-of-field dose, this project improved the safety of radiation therapy for several vulnerable cohorts: pregnant patients, patients with electronic implants such as pacemakers, and young people at risk of developing secondary cancers later in life.
				
Trent Aland	Quality assurance of complex radiotherapy treatments	March 2022	QUT	Supervised by Jamie Trapp and Tanya Kairn
				
Timothy Liu	Oral Squamous Cell Carcinoma with intermediate risk factors	Jan 2022	UQ	Supervised by Martin Batstone and Benjamin Chua

Research Awards and Achievements

Recipient (RBWH staff in bold)	Award	Event
Brianna McCoola, Yi Chin Andy Huang, Luke Smith, Yovanna Funnell, Emilie Eadie, Jenna Luscombe	QuARRIES Award: Winner Consumer Focus Project, "AYA multimedia patient education in Radiotherapy".	QuARRIES presentation Metro North, 14th December 2022
Tanya Kairn	Clinical Research Award Highly Commended	Metro North Research Excellence Award 2022
Tanya Kairn, Scott Crowe, Rachael Wilks, Paul Charles, Tania Poroa, Jenna Luscombe, Elise Obereigner, Susannah Cleland, Alex Livingstone, Emily Simpson-Page, and others.	Research Excellence Discovery and Innovation Award Winner	Metro North Research Excellence Award 2022

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
K Fong, I Yang, H Marshall, R Bowman, R O'Rourke, P Valery, E Stone, R Manser, K Canfell, M Weber, G Garvey, S Lam, M Tammemagi, S Sabesan, Z Otty, F Brims, A McWilliams, B Page, J De Laat, S Hambleton, G Pratt, P Chan , M Windsor, R Naidoo, B Hughes, Z Lwin, K Hopcraft, M Toombs, P Fogart, P Tobias, B Bartholmai, F Maldonado, F Martignano, S Conticello, P Grogan, L Passmore, A Dent, G Olive, B Parris, H O'Farrell, K Chee	MNH, DRO, DM	Improving outcomes for people with and at risk of lung cancer	Australian Cancer Research Foundation (ACRF)	\$2,000,000	2022-2025
Hao-Wen Sim, Helen Wheeler, Zarnie Lwin , Kathryn Field, Benjamin Chua , David Espinoza, Michael Buckland, Kimberley Kaufman.	CCS DRO, DMO	PICCOG: PARP and Immune Checkpoint inhibitor Combination for relapsed IDH-mutant high-grade Glioma	NHMRC	\$1,391,472.20	2019-2023
Punyadeera C, Kenny L, Sriram S, Hughes B, Leo P	CCS DRO, DMO	Multi-analyte liquid biopsy-based biomarkers for oropharyngeal cancer	NHMRC	\$763,417.40	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
Scott Crowe, Paul Charles, Elise Obereigner, Rachael Wilks, Lee Heseltine, Graeme Dickie, Catherine Bettington, Philip Chan, Steven Sylvander, Tanya Kairn, Glen Kennedy	CCS DRO	Improving radiation oncology with 3D printing and Biofabrication	Herston Biofabrication Institute program grant	\$515,000	2019-2025
Chamindie Punyadeera, Lizbeth Kenny	CCS DRO	A novel assay for early detection of minimal residual disease in head and neck cancer patients	Garnett Passe & Williams	\$375,000	2022-2025
Arutha Kulasinghe, Brett Hughes, Lizbeth Kenny, Ken O'Byrne, Chamindie Punyadeera	CCS DRO, DMO	Identification of predictive biomarkers for immune checkpoint blockade in head and neck cancer	Garnette Passe and Rodney Williams Memorial Foundation	\$367,500	2020-2023
Charles Lin	CCS DRO	A prospective study investigating the efficacy and toxicity of definitive chemoradiation and immunotherapy (CRIO) in locally and / or regionally advanced cutaneous squamous cell carcinoma	Astra Zeneca	\$211,000	2017-2024
Rachael Wilks	CCS DRO	Improving brachytherapy treatments with 3D printing	Royal Brisbane and Women's Hospital (Post Graduate Scholarship)	\$118,899	2020-2022
Brown T, Hwang L, Treleaven E, Hughes B, Kenny L, Lin C, Webb P, Pelecanos A, Bauer J	CCS DRO	A feasibility study to investigate taste changes and their association with genes and dietary behaviour in patients with head and neck cancer - fellowship application	Royal Brisbane and Women's Hospital	\$91,576	2020-2022
Dickie G	CCS DRO	QCOG Cancer Clinical Trial Data Manager Grant 2022	Queensland Clinical Oncology Group	\$44 000	2022
Jemma Blyth, Veronica Tippet, Michelle Grogan, Emily Simpson-Page, Naasiha Cassim, Cathy Hargrave, Scott Crowe	CCS DRO	Evaluation of a commercially available treatment bra during radiation therapy for breast cancer patients with large or pendulous breasts	CCS Trust Management Committee	\$5,000	2021-2022

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
Rachael Wilks, Scott Crowe, Tanya Karin, Philip Chan, Robyn Cheuk	CCS DRO	Design of a patient-matched vaginal applicator for brachytherapy treatments	HIRF Project Support Scheme	\$3,000	2021-2022

Current RBWH Department / Research Group Led Research Activity

Lead Investigator Name (RBWH staff in bold)	Other Study Investigators (RBWH staff in bold)	Research Project Title	Number of RBWH Patients Recruited in 2022
Benjamin Chua	Rosalind Jeffree, Jacqui Keller, Chamindie Punyadeera, Zarnie Lwin, Juliana Muller Bark, Lucas Trevisan Franca de Lima, Xi Zhang, Nuwan Tharanga Karunathilaka Wicramasingiha Arachchilage, Bryan Day (QIMR)	The use of non-invasive biomarkers in glioblastoma: A pilot study	3
Graeme Dickie	Philip Chan, Rachael Wilks	Pulse Dose Rate Brachytherapy for cervix cancer, Royal Brisbane and Women's Hospital review	0
Charles Lin	Benjamin Chua, Lizbeth Kenny, Michelle Nottage, Brett Hughes, Michele Teng, Paul Thomas	A prospective study investigating the efficacy and toxicity of definitive chemoradiation and immunotherapy (CRIO) in locally and / or regionally advanced cutaneous squamous cell carcinoma	0
Jemma Walsh (nee Devereaux)	Jemma Blyth, Elena Blyth, Gregory Rattray, Catriona Hargrave, Lisa Nissin, Julie Burbery	DIBH (Deep Inspiration Breath Hold)-BREaST Trial. Breath Hold Respiratory Endurance & Spirometry Training	40
Emilie Crosier	Alice Grigg, Teresa Brown, Judy Bauer, Jeffrey Goh, Phillip Chan	Dietary counselling to increase soluble fibre in patients with gynaecological cancer undergoing pelvic radiotherapy: a feasibility study	9
Jemma Blyth, Veronica Tippet	Michelle Grogan, Emily Simpson-Page, Naasiha Cassim, Cathy Hargrave, Scott Crowe	Evaluation of a commercially available treatment bra during radiation therapy for breast cancer patients with large or pendulous breasts	0
Scott Crowe	Tanya Kairn, Katie McMahon, Louise Campbell, Clare Berry	Characterisation of anatomical variations in the central nervous system	0
Scott Crowe	Paul Charles, Elise Obereigner, Tania Poroa, Jenna Luscombe, Rachael Wilks, Lee Heseltine, Graeme Dickie, Catherine Bettington, Philip Chan, Steven Sylvander, Tanya Kairn	Improving radiation oncology with 3D printing and Biofabrication	N/A
Scott Crowe	Susie Cleland, Sarah Maxwell, Tania Poroa, Paul Charles, Tanya Kairn	Evaluation of 3D scanning systems for radiotherapy use	N/A

Lead Investigator Name (RBWH staff in bold)	Other Study Investigators (RBWH staff in bold)	Research Project Title	Number of RBWH Patients Recruited in 2022
Scott Crowe	Liting Yu, Alex Livingstone, Samuel Peet, Tanya Kairn	Characterising the relationship between radiotherapy treatment plan parameters and routine quality assurance test results	N/A (retrospective)
Tanya Kairn	Philip Chan, Benjamin Chua, Scott Crowe, Jodi Dawes, Lizbeth Kenny, Charles Lin, Rob McDowall, Tania Poroa	Anatomical displacements from oral positioning stents	N/A (1 healthy volunteer)
Liting Yu	Tanya Kairn, Alex Livingstone, Scott Crowe, Jamie Trapp	Structure based dose distribution comparison	N/A (retrospective)
Charles Lin	Charles Lin, Megan Carroll, Ryan Somerville, Sarah Grigg	Carcinoma of Head and Neck with Perineural spread: Outcomes After Skull Base Surgery and Adjuvant Radiotherapy	N/A (retrospective)
Rachael Wilks	Scott Crowe, Tanya Kairn, Philip Chan, Robyn Cheuk	Design of a patient-matched vaginal applicator for brachytherapy treatments	2
Kate Stewart	Izaak Millen, Crispen Chamunyonga, Neil O'Brien	Evaluation of patient position on heart and lung doses in breast cancer radiation therapy	N/A (retrospective)
Anthony Pagidas, Adrian Celati	Jemma Blyth, Michelle Grogan, Allison Dry, Catriona Hargrave	A Retrospective examination of changes in breast seroma volume and the feasibility of implementing simultaneous integrated boost in the treatment of breast cancer	
Teague Moloney	Allison Dry, Kate Stewart, Cathy Hargrave	Clinical considerations for Computed Tomography (CT) acquisition and treatment verification for patients with Gastrointestinal/Endobiliary stents	0
Kate Stewart	Amelia Brinks, Catriona Hargrave	Comparison of Dose Estimation Methods utilising Cone Beam CT images of patients receiving Radiation Therapy to Prostate and Head& Neck regions	0
Brianna McCoola, Julie-Anne Outhwaite	Cathy Hargrave	An Evaluation of a Paediatric Oncology model of Care to decrease anaesthesia rates	0
Emilie Eadie	Jenna Luscombe, Andy Huang, Brianna McCoola	AYA Patient Treatment Education Material development	N/A
Lili Nguyen, Michelle Parkinson	Michael Gray, Teague Moloney, Stacey Cooke, Brianna McCoola	Retrospective analysis of motion management strategies for patients receiving abdominal or thoracic radiation therapy treatment and addressing its feasibility to guide standard practice	N/A (retrospective)
Emma Liddy, Brodie Millsom	Christopher Walsh, Kate Stewart	Retrospective dosimetric comparison of Helical TomoTherapy and VMAT gated DIBH treatment techniques for patients receiving LT/RT sided breast radiotherapy with nodal involvement	N/A (retrospective)

Collaborative Research Activity [Involving RBWH Department / Research Group](#)

Lead Investigator Name (RBWH staff in bold)	Other Study Investigators (RBWH staff in bold)	Research Project Title	Number of RBWH Patients Recruited in 2022
Jarad Martin	Charles Lin Philip Chan Robyn Cheuk Rachel Effeney Michelle Grogan Gary Pratt	NINJA TROG 18.01 Novel Integration of New prostate radiation schedules with adJuvant Androgen deprivation	
Fiona Day Jarad Martin	Melissa Eastgate Graeme Dickie	PALEO Phase II clinical trial of chemoradioimmunotherapy for the ALleviation of oEsOphageal cancer complications	
Eric Hau	Catherine Bettington	TROG 20.01 A phase II study of platinum and etoposide chemotherapy, durvalumab with thoracic radiotherapy in the first line treatment of patients with extensive-stage small-cell lung cancer (CHEST RT)	0
Andrew Scott Eng-Siew Koh	Benjamin Chua	TROG 18.06 Prospective, multicentre trial evaluating FET-PET in Glioblastoma (FIG)	4
Steven David	Robyn Cheuk	Stereotactic Ablative Radiotherapy for Oligoprogressive ER-positive Breast Cancer (AVATAR)	0
Alison Brand	Philip Chan	A phase II pilot study of the use of vaginal oestriol to prevent vaginal stenosis in patients treated with radiotherapy for gynaecological, rectal and anal malignancies (VESPA)	1
Christopher Sweeney, Tamim Niazi	Philip Chan	DASL-HiCaP: Darolutamide Augments Standard Therapy for Localized High-Risk Cancer of the Prostate (ANZUP1801). A randomized phase 3 trial of adding darolutamide to androgen deprivation therapy and definitive or salvage radiation in high risk, clinically localized prostate cancer	8
Danny Rischin	Charles Lin	A Randomized, Placebo-Controlled, Double-Blind Study of Adjuvant Cemiplimab Versus Placebo after Surgery and Radiation Therapy in Patients with High Risk Cutaneous Squamous Cell Carcinoma (C-POST)	1
Stephen Ackland	Mathew Burge (CSS MO) Graeme Dickie	A randomised, placebo-controlled phase II trial of simvastatin in addition to standard chemotherapy and radiation in preoperative treatment for rectal cancer (SPAR)	1
Sherene Loi	Robyn Cheuk Michelle Grogan	TROG 17.05 A randomised phase II trial comparing the efficacy of single fraction or multi-fraction SABR (Stereotactic ablative body radiotherapy) with Atezolizumab in patients with advanced Triple nEgative breast Cancer (AZTEC)	0
Michael Jenkinson	Catherine Bettington	TROG 15.02 Radiation versus Observation following surgical resection of Atypical Meningioma: a randomised controlled trial (ROAM)	0
Vincent Grégoire	Lizbeth Kenny	TROG 14.03 (EORTC-1219-ROG-HNCG) A blind randomized multicenter study of accelerated fractionated chemo-radiotherapy with or without the hypoxic cell radiosensitizer nimorazole (Nimoral), using a 15 gene signature for hypoxia in the treatment of squamous cell carcinoma of the head and neck	0

Lead Investigator Name (RBWH staff in bold)	Other Study Investigators (RBWH staff in bold)	Research Project Title	Number of RBWH Patients Recruited in 2022
Danny Rischin	Lizbeth Kenny	TROG 12.01 A randomised trial of Weekly Cetuximab And Radiation Versus Weekly Cisplatin and Radiation in Good Prognosis Locoregionally Advanced HPV-Associated Oropharyngeal Squamous Cell Carcinoma	0
Chamindie Punyadeera	Lizbeth Kenny	A simple saliva test to diagnose head and neck cancer at an early stage - head and neck cancer detection is a spitting distance away	3
Rajiv Khanna	Lizbeth Kenny	P2191 Development of an Adoptive T Cell Therapy for HPV-Associated Malignancies	1
Boon Chua	Lizbeth Kenny	TROG 07.01 A randomised phase III study of radiation doses and fractionation schedules in non-low risk ductal carcinoma in situ (DCIS) of the breast	0
David Pryor	Charles Lin	TROG 16.03: A multi stage multi centre international randomised trial of Conventional care Or Radioablation (stereotactic body radiotherapy) for Extra-cranial oligometastatic disease in lung, breast and prostate cancer (CORE)	0
Shankar Siva	Charles Lin	TROG 15.03 Focal Ablative STereotactic RADiosurgery for Cancers of the Kidney - A Phase II Clinical Trial (FASTRACK II)	0
Maria Pearse	Charles Lin	TROG 08.03 Radiotherapy Adjuvant versus Early Salvage. A phase III multi-centre randomised trial comparing adjuvant radiotherapy (RT) with early salvage RT in patients with positive margins or extraprostatic disease following radical prostatectomy (RAVES)	0
Scott Williams Paul Nguyen	Philip Chan	Randomised phase 3 trial of enzalutamide in androgen deprivation therapy with radiation therapy for high risk, clinically localised, prostate cancer: ENZARAD	0
Peter Graham	Robyn Cheuk	TROG 08.06 A randomised comparison of anastrozole commenced before and continued during adjuvant radiotherapy for breast cancer versus anastrozole and subsequent anti-oestrogen therapy delayed until after radiotherapy. (STARS - Study of Anastrozole and Radiotherapy Sequencing)	0
Katie McMahon	Briley Devenport, Cathy Hargrave, Kate Stewart , Julie Burbery	The feasibility of utilising total body photography in superficial radiation therapy to assist in target volume definition planning and documentation.	N/A (HREA to be submitted)
Crispen Chamunyonga	Cathy Hargrave, Kerrie Mengersen, Kate Stewart, Gregory Rattray	Development of a framework for systematic contour evaluation in radiation therapy	

Research Publications

Authors

Investigator	ORCID ID
Catherine Bettington	0000-0002-8227-6320
Naasiha Cassim	0000-0002-8671-5909
Philip Chan	0000-0002-6596-5570
Robyn Cheuk	0000-0001-9516-5526
Benjamin Chua	0000-0002-0377-9844
Scott Crowe	0000-0001-7028-6452
Graeme Dickie	0000-0003-4151-2670
Rachel Effeney	0000-0002-6684-2601
Kirby Francis	0000-0002-4285-1255
Michelle Grogan	
Tanya Kairn	0000-0002-2136-6138
Lizbeth Kenny	0000-0002-7556-0542
Craig Lancaster	0000-0002-8797-9586
Charles Lin	0000-0001-5589-4775
Alexander Livingstone	0000-0002-3701-2756
Sarah Maxwell	0000-0003-4817-4256
Samuel Peet	0000-0003-4817-4256
Tania Poroa	0000-0002-8636-5793
Emily Simpson-Page	0000-0002-5262-6465
Kate Stewart	0000-0001-8676-6565
Rachael Wilks	0000-0002-2110-9676
Liting (Nancy) Yu	0000-0002-1264-9996

Journal Articles (RBWH staff in bold)

- Ahern E, Brown TE, Campbell L, **Hughes BGM**, Banks MD, **Lin CY**, **Kenny LM**, Bauer J. Impact of sarcopenia and myosteatosis on survival outcomes for patients with head and neck cancer undergoing curative-intent treatment. *r J Nutr*. 2023 Feb 14;129(3):406-415. doi: 10.1017/S0007114522000435. Epub 2022 Feb 14.
- Balakittnen J, Weeramange CE, Wallace DF, Duijf PHG, Cristino AS, **Kenny L**, Vasani S, Punyadeera C. Noncoding RNAs in oral cancer. *Wiley Interdiscip Rev RNA*. 2022 Aug 12:e1754. doi: 10.1002/wrna.1754. Online ahead of print. PMID: 35959932
- Blake CL, Brown TE, Pelecanos A, Moroney LB, Helios J, **Hughes BGM**, **Chua B**, **Kenny LM**. Enteral nutrition support and treatment toxicities in patients with head and neck cancer receiving definitive or adjuvant helical intensity-modulated radiotherapy with concurrent chemotherapy. *Head Neck*. 2023 Feb;45(2):417-430. doi: 10.1002/hed.27249. Epub 2022 Nov 25. PMID: 36433667
- Brink A, **Stewart K**, Hargrave C. Evaluation of dose accumulation methods and workflows utilising cone beam computer tomography images. *J Med Radiat Sci* 2022 Sep 27: doi: 10.1002/jmrs.618 Online ahead of print
- Cleland S, **Crowe SB**, **Chan P**, **Chua B**, **Dawes J**, **Kenny L**, **Lin CY**, **McDowall WR**, **Obereigner E**, **Poroa T**, **Stewart K**, **Kairn T**. Development of a customisable 3D-printed intra-oral stent for head-and-neck radiotherapy. *Technical Innovations & Patient Support in Radiation Oncology*. 2022 Sep;23:1-7. doi: <https://doi.org/10.1016/j.tipsro.2022.06.001>
- Ekanayake Weeramange C, Shu D, Tang KD, Batra J, Ladwa R, **Kenny L**, **Vasani S**, Frazer IH, Dolcetti R, Ellis JJ, Sturm RA, Leo P, Punyadeera C. Analysis of human leukocyte antigen associations in human papillomavirus-positive and -negative head and neck cancer: Comparison with cervical cancer. *Cancer*. 2022 May 15;128(10):1937-1947. doi: 10.1002/ncr.34148. Epub 2022 Feb 17. PMID: 35176174
- Foley J, Burns CL, Ward EC, Nund RL, Wishart LR, **Kenny LM**, Stevens M. Post-acute health care needs of people with head and neck cancer: Mapping health care services, experiences, and the impact of rurality. *Head Neck*. 2022 Jun;44(6):1377-1392. doi: 10.1002/hed.27037. Epub 2022 Mar 23.
- Jangholi A, Müller Bark J, **Kenny L**, Vasani S, Rao S, Dolcetti R, Punyadeera C. Exosomes at the crossroad between therapeutic targets and therapy resistance in head and neck squamous cell carcinoma. *Biochim Biophys Acta Rev Cancer*. 2022 Sep;1877(5):188784. doi: 10.1016/j.bbcan.2022.188784. Epub 2022 Aug 24.
- Kairn T**, **Lathouras M**, **Sylvander SR**, Trapp JV, **Crowe SB**. Adaptive radiotherapy dosimetry in a challenging geometry: A model gas-filled tissue expander in a helical TomoTherapy beam. *J Phys Conf Ser*. 2022;2167(1):012012. DOI 10.1088/1742-6596/2167/1/012012
- Kapeleris J, Ebrahimi Warkiani M, Kulasinghe A, Vela I, **Kenny L**, Ladwa R, O'Byrne K, Punyadeera C. Clinical applications of circulating tumour cells and circulating tumour DNA in non-small cell lung cancer-an update. *Front Oncol*. 2022 Mar 15;12:859152. doi: 10.3389/fonc.2022.859152. eCollection 2022.
- Kelly SM, **Effenev R**, Gaze MN, Bernier-Chastagner V, Blondeel A, Clementel E, Corning C, Dieckmann K, Essiaf S, Gandola L, Janssens GO, Kearns PR, Lacombe D, Lassen-Ramshad Y, Merks H, Miles E, Padovani L, Scarzello G, Schwarz R, Timmermann B, van Rijn RR, Vassal G, Boterberg T, Mandeville HC. QUARTET: A SIOP Europe project for quality and excellence in radiotherapy and imaging for children and adolescents with cancer. *European Journal of Cancer*, Volume 172, Sept 2022, Pages 209-220, ISSN 0959-8049, <https://doi.org/10.1016/j.ejca.2022.05.037>.
- Kenny L**, Gangi A, Adam A. Interventional Oncology. *J Med Imaging Radiat Oncol*. 2022 Dec 2. doi: 10.1111/1754-9485.13493. Online ahead of print.
- McDowell L, Rischin D, King M, **Kenny L**, Porceddu S, Wratten C, Macann A, Jackson JE, Bressel M, Fua T, Lin C, Liu C, Corry J. Patient- and Clinician-Reported Outcomes in Human Papillomavirus-Associated Tonsillar Carcinoma Treated With Unilateral and Bilateral Intensity Modulated Radiation Therapy-A Substudy From TROG12.01 *Int J Radiat Oncol Biol Phys*. 2022 Aug 10:S0360-3016(22)03089-9. doi: 10.1016/j.ijrobp.2022.08.006.
- McDowell LG, Bressel M, King MT, Corry J, **Kenny L**, Porceddu S, Wratten C, Macann AMJ, Jackson JE, Rischin D. Head and Neck Symptom Severity (HNSS) and Health-Related Quality of Life (HRQL) Trajectories during and after Chemoradiotherapy (CRT) for HPV-Associated Oropharyngeal Cancer (HPVOPC): A TROG 12.01 Secondary Analysis. *International Journal of Radiation Oncology Biology Physics*, Nov 2022. doi:10.1016/j.ijrobp.2022.07.381
- Maher D, Dunn D, Aw G, Taheri T, **Kenny L**, Sommerville R, Morrison E. Still a challenging diagnosis: perineural spread of head and neck cutaneous SCC and the limitations of MRI imaging. *ANZ J Surg*. 2022 Oct 12. doi: 10.1111/ans.18110. Online ahead of print.
- Maxwell SK**, **Crowe SB**, **Simpson-Page EM**, **Cassim N**, **Kairn T**. RSC: A 3D printed eyeball phantom for Sr-90 dosimetry measurements. *J Phys Conf Ser*. 2022;2167(1):012018. DOI 10.1088/1742-6596/2167/1/012018
- Nguyen M, Dang T, Deegan L, Henry K, Jones S, Pullar A, **Cheuk R**, Gibbs A, Sim L, Hargrave C. Modified volumetric modulated arc therapy technique with reduced planning and treatment time for craniospinal irradiation utilising two isocentres. *J Med Radiat Sci*. 2022 Apr 22. doi: 10.1002/jmrs.582. Online ahead of print.
- Peet SC**, **Cassim N**, **Kairn T**, Trapp JV, **Crowe SB**. A publicly available dataset of out-of-field dose profiles of a 6 MV linear accelerator. *Physical and Engineering Sciences in Medicine*. 2022 Jun;45(2):613-621. doi: 10.1007/s13246-022-01131-5

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Powers M, Baines J, Crane R, Fisher C, Gibson S, Marsh L, Oar A, Shoobridge A, **Simpson-Page E**, Van der Walt M, de Vine G. et al. Commissioning measurements on an Elekta Unity MR-linac. *Phys Eng Sci Med*. 2022 Jun;45(2):457-473. doi: 10.1007/s13246-022-01113-7. Epub 2022 Mar 2.

Rasheduzzaman M, Murugan AVM, Zhang X, Oliveira T, Dolcetti R, **Kenny L**, Johnson NW, Kolarich D, Punyadeera C. Head and neck cancer N-glycome traits are cell line and HPV status-dependent. *Anal Bioanal Chem*. 2022 Dec;414(29-30):8401-8411. doi: 10.1007/s00216-022-04376-x. Epub 2022 Oct 27.

Rischin D, Mehanna H, Young RJ, Bressel M, Dunn J, Corry J, Soni P, Fulton-Lieuw T, Iqbal G, **Kenny L**, Porceddu S, Wratten C, Robinson M, Solomon BJ, Trans-Tasman Radiation Oncology Group, De-ESCALaTE HPV Trial Group. Prognostic stratification of HPV associated oropharyngeal cancer based on CD103+ immune cell abundance in patients treated on TROG 12.01 and De-ESCALaTE randomised trials. *Annals of Oncology*, May 2022. doi.org/10.1016/j.annonc.2022.04.074

Simpson-Page E, Coogan P, Kron T, Lowther N, Murray R, Noble C, Smith I, **Wilks R, Crowe SB**. Webinar and survey on quality management principles within the Australian and New Zealand ACPSEM Workforce. *Phys Eng Sci Med*. 2022 Jul 14;45:679-685. doi: <https://doi.org/10.1007/s13246-022-01160-0>

Tang KD, Weeramange CE, Vider J, Hartel G, West NP, McMillan NAJ, Batstone MD, Liu Z, Vasani S, **Kenny L**, Punyadeera C. Potential use of salivary mRNA-based biomarkers to predict oral squamous cell carcinoma. *Oral Oncol*. 2022 Dec;135:106215. doi: 10.1016/j.oraloncology.2022.106215. Epub 2022 Oct 20. PMID: 36274347

Zhang X, Weeramange CE, Hughes BGM, Vasani S, Liu ZY, Warkiani ME, Hartel G, Ladwa R, Thiery JP, **Kenny L**, Chamindie Punyadeera. Application of circulating tumour cells to predict response to treatment in head and neck cancer. *Cellular Oncology*, Jun 2022. doi.org/10.1007/s13402-022-00681-w

Book Chapters (RBWH staff in bold)

Bettington C, Chan P, Pratt G. Exposure to thoracic radiation and the risk of cancer. In: Martinez-Garcia MA, Gaga M, Fong KM, eds. *Lung Diseases and Cancer (ERS Monograph)*. Sheffield, European Respiratory Society, 2022; pp 82-90 [<https://doi.org/10.1183/2312508X.10018621>].

Keynote or Plenary Lectures given in 2022

Date	Title
15/11/2022	Scott Crowe, Medical device production and software development at point-of-care: Achieving regulatory conformity", Engineering and Physical Sciences in Medicine Conference, Adelaide, Australia, November 2022.
27/10/2022	Lizbeth Kenny, AI policy and The Royal Australian and New Zealand College of Radiologists (RANZCR) - RANZCR 72 nd Annual Scientific Meeting, Adelaide.
22/10/2022	Lizbeth Kenny, The Importance of locoregional control and why we are so passionate about protons - Australian Society of Medical Imaging and Radiation Therapy (ASMIRT) Conference Mercure Gold Coast. ASMIRT Surfing the Ray conference, Gold Coast
21/08/2022	Lizbeth Kenny, The ethics of not using big data to give analytic and clinical decision support to improve diagnosis, treatment and better care pathways. Briz Brain & Spine GP Education Conference, Sofitel Noosa
2/7/2022	Benjamin Chua, Discussant: SLAM: Short versus Long Course Chemo-rAdiation in GlioblastoMa. Trans-Tasman Radiation Oncology Group (TROG) Annual Scientific Meeting (ASM)
1/7/2022	Charles Lin, Chair Trans-Tasman Radiation Oncology Group (TROG) Annual Scientific Meeting (ASM), Head Neck and Skin Tumour group
1/7/2022	Charles Lin, Head, Neck and Skin working party update. Trans-Tasman Radiation Oncology Group (TROG) Annual Scientific Meeting (ASM),

30/6/2022	Rob McDowall, Chair Trans-Tasman Radiation Oncology Group (TROG) Annual Scientific Meeting (ASM), Technical Research Workshop
22/05/2022	Veronica Tippett, session Chair Australian Society of Medical Imaging and Radiation Therapy (ASMIRT) 2022
27/4/2022	Lizbeth Kenny, Imaging-guided local tumour treatment with curative intent – what lessons from radiation therapy can help us to optimise its planning. European Conference of Interventional Radiology 27 April 2022, Vienna, Austria
Feb 2022 Online	Scott Crowe, 3D printing in radiotherapy: 3D printing of patient specific devices, Medical Physics for World Benefit webinar series