









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

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For more information, contact:

RBWH Research Services, Metro North Hospital and Health Service, Block 7, Level 8, Herston QLD 4006 email RBWH Research ESO@health.qld.gov.au

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Women's and Newborn Services



Peter Buttrum
Service Line Director
Women's and Newborn Services

I am delighted to present the Women's and Newborn Services 2024 Research Report.

Research is critical to contemporary health services and improving outcomes for patients, and this drives commitment to research within Women's and Newborn Services. It is essential to us providing the best possible clinical care, making our contribution to improving health care to make RBWH a world class centre, and it helps us to retain the very best staff. However, research in Women's and Newborn Services confronts unique funding issues. None of the research presented here is funded through commercial or pharmaceutical trials. Research for this vulnerable population is almost entirely dependent on investigator initiated and peer reviewed funding, or philanthropic funding. We are extremely grateful for the support we have from many philanthropic organisations including the RBWH Foundation. We are also very proud of the fact we have NH&MRC and MRFF funded research across all areas of Women's and Newborn Services including midwifery, obstetrics, gynaecology, maternal-fetal medicine, obstetric medicine, and gynaecological oncology.

An emerging focus of our research in Women's and Newborn Services relates to Health Equity for First Nations women and their babies. Our Health Equity research activities across our service line have now included important (or groundbreaking) published work in the area of low birthweight First Nations babies. Our strategic plan will ensure this focus continues to expand this area of research.

In acknowledging some individuals, Prof Andreas Obermair was made a Fellow of the Australian Academy of Health and Medical Sciences for outstanding professional achievements. Janene Douglas won the Sir Ian McFarlane Award at the 2024 RBWH Foundation Grant Awards Ceremony, and Deanne August won the Nursing and Midwifery Research Award at the 2024 Herston Symposium.

The expanding pool of PhD qualified academics across our service line means that we now participate in the vast majority of multi-centre national studies in obstetrics and neonatology, ensuring our staff are at the cutting edge of clinical science and innovation. Many of our staff are now leading national societies and conference programs, not only working to improve care at RBWH, but to improve care nationally and internationally.

We are exceptionally grateful for the ongoing partnerships and collaborations with universities, research institutes and funding bodies. We are also grateful for our patients and consumers who are increasingly helping us to ask good questions and direct our research to priorities that matter to them.

Finally, I would like to congratulate our WNS Director of Research, Professor Leonie Callaway, on being awarded the Metro North Researcher of the Year for 2024. Prof Callaway is the first female recipient of this prestigious award in its several year history, and it is due recognition for her significant contribution to women-focused research activities and improved patient care, as well as research governance within WNS and MNHHS.

Grantley Stable Neonatal Unit

Research Highlights

In 2024 neonatal research team was part of several cutting-edge trials looking at emerging technologies and their use in the neonatal population. With strong clinical research outcomes in its sixth year of establishment (over \$10 million in grants and scholarships including nationally competitive schemes).

The expertise of local researchers has been recognised in a number of local, national and international speaking roles to share their knowledge. The team continues strong multidisciplinary collaborations with other institutions (QIMR, UQCCR, Griffith University, UQ, HBI, CDSD, UTAS, ACNN, ANZNN, COINN) and have been cementing a reputation for considered, high quality work with innovative technology. Including 3D scanning, heatmaps, near infrared visualisation, wireless EEG to further the quality of care and improve long-term outcomes for vulnerable neonates.

Researchers have supported local practice and education in the translation of research into the clinical area's and building on current evidence-based practice. Areas of focus have included CPAP related injuries, developmental delay, IV infiltration, seizure detection and feeding for late preterm neonates.

Research Awards and Achievements

Recipient (RBWH staff in bold)	Award	Event
Janene Douglas	Sir Ian McFarlane Award	2024 RBWH and RBWH Foundation Grant Awards Ceremony
Deanne August	Nursing and Midwifery Research Award Winner- Neonatal Skin Injury Assessment	2024 Nursing and Midwifery Research Awards, Herston Symposium

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
G Noreiks, Dr D August, Dr M Lai, Prof M Davies	Neonatal	Humidification management options for infants delivered extremely premature: when and why	RBWH Foundation Patient Initiative	\$50,000	1 year, 2024
Dr D August, S de Souza, M Takashima, T Kleidon, A/ Prof P Koorts, Linda McLaughlin, Prof F Coyer, Prof R Ware, Prof A Ullman	Neonatal	PEripheral iNtravenous catheter GIUe In Newborns: PENGUIN trial	Intensive care Foundation	\$50,000	1 year, 2024-2025
Dr D August, S de Souza, Karen Walker, Margaret Broome, S Ireland, M Rasavy, M Cambell-Yo, M Visschear, Fiona Coyer, Amanda Ullman	Neonatal	Delphi consensus towards skin integrity and injury assessment by extremely preterm infant experts	Australian College of Neonatal Nurses	\$15,000	1 year, 2024-2025
Nicole Marsh, Deanne August, Catherine O'Brien, Nicole Gavin, Lauren Kearny, Jedd Duff, Emily Larsen	Neonatal	A point prevalence study of Invasive Medical Devices, Usage and Harm	Royal Brisbane and Women's Project Grant	\$14,761	1 year, 2024-2025

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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
Prof A Ullman, Prof N Marsh, Dr D August, Prof M Davies, Prof m Curley, Prof F Coyer, Prof S Keogh,A/Prof L Kearney, A/Prof C McBride, T Kleidon, M Takashima, Dr H Xu, Dr R Cole, Prof R Ware, Prof J Byrnes	Neonatal	Building capacity to prevent healthcare harm for hospitalised infants: A Type 1 Hybrid Randomised Controlled trial-Preventing infusAte injuries throughout Child's Hospitalisation (PATCH)	MRFF Clinician Researcher	\$1.5 Million	3 years, 2023-2025
Prof Fiona M Coyer, Prof Paul Richard Fulbrook, Prof Amanda Judith Ullman, Prof Samantha Jane Keogh, Prof Jed Duff, Assoc Prof Deborah Long, Ms Michelle Barakat- Johnson, Dr Deanne August, Miss Lee Vanessa Jones, Dr Hannah Elizabeth Carter	Neonatal	Eliminating harm from devices across the life span in critical illness: The DEFENCE study. DEFENCE	NHMRC- Partnership Project	\$1,499,947	4 years, 2023-2026
Prof R Boyd, A/Prof P Koorts, P Colditz , Prof I Novak, Prof S Rose, Prof M Fahey, Prof R Hunt, Prof N Badawi, Dr J Fripp, A/Prof L Sakzewski, Dr M Corbett	Neonatal	early Prediction of Infant Neurodevelopmental Outcomes using novel biomarkers (ePINO)	CP Synergy Grant	\$5M	5 years, 2023-2027
Prof Alice Rumbold, Dr Pieter Koorts . Dr Lisa Yelland, A/Prof Carmel Collins, Prof Maria Makrides, Dr Andy McPhee, A/Prof Amy Keir, Dr Laura Klein, A/Prof Dr H Afzali, A/Prof L Grzekowiak	Neonatal	Effect of supplementary pasteurised donor milk compared with standard formula on length of neonatal hospital stay, morbidity, breastfeeding, growth, development and health care costs in moderate and late preterm babies-a randomised controlled trial. Giving donor milk Instead of Formula in moderate and late preTerm infants (GIFT)	NHMRC	\$2,243,377.80	5 years, 2023-2027
Dr K White, S Hall, M McLean, L Cobbald, A Hopkins (IHLO), Dr D August	Neonatal	Welcoming Beds For babies	RBWH Foundation	\$10,000.00	2 years, 2023-2024

RBWH Department / Research Group Led Research Activity

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Number of RBWH Patients Recruited
Dr Melissa Lai	Deanne August, Mark Davies, Jackie Clement, Linda Cobbald, Lyn Chapple, Katherine White, Nathan Stevenson, Kartik Iyer, Mathilde Desselle, David Forrestal, Isabel Byram	Towards custom fitting CPAP devices for premature infants Phase 2	41
Ms Jacqueline Plazina	Ms Li-An Collie, Ms Melissa Melville, Dr Lucy Cooke and Dr Deanne August	Close to me: Cuddle for end-of-life care during transport	13
Dr Melissa Lai	Nathan Stevenson, James Roberts, Kartik Iyer, Katherine White, Corey Forrest, Michaela Waak, Stephen Malone, Lee Jones	Electroencephalography in the Neonate (ELITE): Seizure Detection	4

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Number of RBWH Patients Recruited
Dr Deanne August/Dr Melissa Lai	J Hall S de Souza, S, S Hall, L Chapple, L Cobbald, K McGrory, M McLean, Takashima M, H Hjelemgern, C Olsson Magi, K Hybinette K, K White, S Laurenson, J Clement, I Byram, M Desselle, D Forestell, N Stevenson, M Davies M, M Lai, D August	Exploring neonatal airway devices - workflows, interfaces and anatomical structural implications for injury risk	101

Collaborative Research Activity Involving RBWH Department / Research Group

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Number of RBWH Patients Recruited
Dr Tim Donovan	DL Grzeskowiak, A/Prof L Smithers, Prof W Ingman, Dr E Knight, Prof L Amir, A/Prof S Jacobs, Prof R Grivell	SUpporting Mothers Milk Intervention Trial (SUMMIT). A randomized controlled trial comparing different doses of Domperidone for treating lactation insuffiency in mothers of preterm infants	17
A/Prof P Koorts	Prof R Boyd, Prof I Novak, Prof S Rose, Prof M Fahey, Prof R Hunt, Prof N Badawi, Dr J Fripp, A/Prof L Sakzewski, Dr M Corbett	early Prediction of Infant Neurodevelopmental Outcomes using novel biomarkers (ePINO)	44
Prof A Ullman	Prof N Marsh, Dr D August, Prof M Davies, Prof F Coyer, Prof S Keogh, A/Prof L Kearney, Prof M Curley, A/Prof McBride, Ms T Kleidon, Ms M Takashima, Dr H Xu, Dr R Cole, Prof R Ware, Prof J Byrnes	Building capacity to prevent healthcare harm for hospitalised infants: A Type 1 Hybrid Randomised Controlled Trial-Preventing infusAte injuries Throughout Child's Hospitalisation (PATCH)	62

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

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Number of RBWH Patients Recruited
Dr K White	S. Hall (CN), M. McLean (RN), L. Cobbald (RCN), K. Nagas (IHLO), J. Dunn (IHLO), Dr D August	Welcoming Beds for Babies	N/A

Research Publications

Authors

Investigator	ORCID ID	Investigator	ORCID ID
M Davies	0000-0003-2179-4367	P Koortz	0000-0001-7505-2014
D August	0000-0002-7204-7065	M Lai	0000-0003-1549-9345
S Hall	0000-0003-0007-0044	M McLean	0009-0008-6283-5739
L McKeown	0000-0002-1457-2320	L Kearney	0000-0003-0299-6537

Publications in 2024

Journal Articles (RBWH staff or consumers in bold)

Noreiks G, August D, Lai M, Davies MW. Ceasing or gradually reducing incubator humidity after 7 days for extremely preterm infants: a randomised clinical trial. *European journal of pediatrics*. 2024;184(1):66. doi:10.1007/s00431-024-05893-w

Journal Articles (RBWH staff or consumers in bold)

August D, Byram I, Forrestal D, Desselle M, Stevenson N, Iyer K, Davies MW, White, K, Cobbald L, Chapple L, McGrory K, McLean, M, Hall S, Schoenmaker B, Lai M. Assessing the feasibility of handheld scanning technologies in neonatal intensive care: Trueness, acceptability, and suitability for personalised medical devices. Australian Critical Care. 2024 Dec 11;101127

de Souza S, Takashima M, Silva TL, Nugyen L, Kleidon, T, Jardine L, Dargaville TR, Ullman A, **August D,** Kuerten Rocha P. Use of tissue adhesive for neonatal intravenous access devices: A scoping review. *European journal of pediatrics*. 2024;183(12):5103-5112. doi:10.1007/s00431-024-05800-3

August D, Walker RM, Gibson V, **Marsh N**, Kleidon T, Delaforce A, Mihalopoulous C, Ullman A, Keogh S.. Implementation contexts and strategies for alternative peripherally inserted central catheter material and design selection: A qualitative exploration using CFIR/ERIC approach. Journal of advanced nursing. Published online 2024. doi:10.1111/jan.16342

Nguyen LN, Takashima M, **Cunninghame J, August D,** Ullman A. Extravasation Identification and Management in Neonates and Pediatrics: A Cross Sectional Survey. Hospital pediatrics. 2024;14(12):1026-1034. doi:10.1542/hpeds.2023-007698

Mishra U, **August D**, Walker K, Jani PR, Tracy M. Thermoregulation, incubator humidity, and skincare practices in appropriate for gestational age ultra-low birth weight infants: need for more evidence. *World journal of pediatrics: WJP*. 2024;20(7):643-652. doi:10.1007/s12519-024-00818-x

August D, Hall S, Marsh N, Coyer F. A scoping review and narrative synthesis of neonatal skin injury severity scales. *Nursing in critical care*. 2024;29(6):1687-1705. doi:10.1111/nicc.13018.

Keynote or Plenary Lectures given in 2024

Date	Title
05.09.2024	Janene Douglas: Heel lancing in the special care nursery – point prevalence audits to inform a best-practice bundle, Australian College of Neonatal Nurses, conference presentation
06.05.2024	Deanne August: Innovations in clinical care - vascular access management and practices and What lies beneath skin injury measures- a feasibility study, Council of International Neonatal Nurses, conference presentation
Feb 2024	Deanne August: The Past, Present and Future of Neonatal Skin Injury Assessments; Newborn Care, Royal Hospital For Women, Sydney Webinar

Obstetrics and Gynaecology

Research Highlights

The Department of Obstetrics and Gynaecology delivers excellent patient-centred care and high-quality tertiary and quaternary obstetrics and gynaecology services for MNHHS and QLD and believes that high quality translational research is key to enabling women and babies we treat to access world leading care and exceptional experiences. The department's strategic plan includes an ambitious goal to accelerate our research capabilities, reach and impact. The department is involved in several collaborative research and partnerships in line with the strategic directions, and Metro North Health's Research Strategy 2022 - 2027 to encourage collaboration and excellence across the themes of diagnostics, therapeutics and health services.

Maternity Services collaborate closely with the Perinatal Research Centre, University of QLD and UQCCR for local state and commonwealth grants and multi-centre research projects. The department has been progressive in the enhancement of research activities in the area of antenatal care, general obstetrics and gynaecology.

The Obstetrics and Gynaecology department continues to collaborate with numerous other departments within Metro North Hospital and Health Service (MNHHS) as well as with UQ, QUT, UQCCR, Mater Hospital, interstate hospitals and New Zealand. A growing academic team in O&G along with O&G PhD scholars and more registrars and residents undertaking and presenting research is increasing research output to enhance clinical outcomes.

Doctors Amoako and Tanaka have an ongoing research project into the genetics of endometriosis, and via the RBWH research foundation. In 2019, Metro North Health partnered with the University of Queensland to offer a collaborative research grant to Dr Amoako and the project team to enable new collaborative research between clinicians, academics and scientists with the potential to lead to ongoing research of direct benefit to Metro North Health patients and the community. This collaboration leverages new technologies in advanced imaging, machine learning, genetic profiling, molecular and cellular phenotyping, and spatial genomics to build knowledge and advance cost-effective solutions to change the poor outcomes for women with endometriosis. They have established the Endometriosis Research Queensland Study (ERQS), a flagship research platform that underpins a comprehensive program of clinical, basic science and translational endometriosis research in Queensland. The ERQS is a collaborative project between UQ and the RBWH, bringing together a diverse, interdisciplinary team of clinician researchers and experts in the fields of genetics, cell and molecular biology, imaging, bioinformatics and computational biology. We aim to accelerate endometriosis research translation and deliver research that meets national and international priorities. The ERQS platform takes an innovative and integrative approach to establish a high-quality, standardised clinical and surgical database populated with linked professionally processed and curated biospecimen repositories and provide critical resources for data analysts, clinical and basic scientists, that can be applied to answer pressing questions in endometriosis.

Dr Lehner has completed a research project pertaining to COVID and perinatal mental health effects and successfully published the outcomes of this work. The Gynaecology Oncology department continues its focus on conducting surgical clinical trials to develop the best standard of care for women experiencing gynaecological cancer and have been awarded 5 grants to undertake further clinical trials.

The Maternal Fetal Medicine unit has been very proactive in fostering an environment conducive to prospective and retrospective research and audits as well as partnering with centres in both Australia and New Zealand to develop collaborative research. Currently, Professor Sailesh Kumar is involved with the MRFF grant trial i-SEARCH and the RBWH funded RIDSTRESS2 trial. The MFM unit is also involved in multicentric international trial commencing next year with regards to the use of antenatal corticosteroids in elective caesarean section.

In testament to the high quality of research being undertaken at the department, in 2024 key research outputs include \$7.94 million worth of grants for research, 18 publications and a significant number of presentations at national and international meetings. The department led or participated in 6 trials in 2024.

Research Grants

Investigator Names (RBWH staff in bold)	RBWH Departments / Research Groups	Research Project Title	Granting Body	Total Awarded (whole all years)	Length of Awards in years and years active
Kearney, L., Jenkinson, R., Eley, V., Townsend, B. & Becuzzi,	NMRC / WNS	Queensland Birth Strategy – Development and evaluation of Vaginal Birth after Caesarean Section and Epidural decision aids	ОСМО	\$75,000	2 years, 2024-2025

Investigator Names (RBWH staff in bold)	RBWH Departments / Research Groups	Research Project Title	Granting Body	Total Awarded (whole all years)	Length of Awards in years and years active
Seed, E., Kearney, L., Becuzzi, N., Lehner, C., Jenkinson, B., Ballard, E, Sekar, R	WNS	OptiMising induction of labour care. Low-dose, oral misoprostol versus standard care [OptiMise]: A feasibility study	RBWH Foundation	\$49, 651	2 years, 2024-2025
Victoria Eley, Christoph Lehner, Elizabeth Martin, Nigel Lee, Tim Donovan, Jayesh Dhanani, Jason Roberts	Obstetrics	Nebulised fentanyl for labour pain – a pharmacokinetic and feasibility study – The FUN Study	ANZCA Project Grant	\$63,483.00	2 years, 2023-2024
NLin, A., Eley, V., O'Brien, E., Collins, G., Kelley, A., Lehner, C., Johnston, L., Hoy, S., Aladhami, N., Woods, C. & Kearney, L.	WNS Pharmacy	Self-administration of non- opioid oral analgesia post- caesarean delivery: a consumer co-designed implementation project	RBWH Foundation	\$44,310.41	2 years, 2024-2025
Rebecca Kimble, Karen Barlow and collaborators Monash University	WNS	Develop and implement an International Clinical Guideline on Mild Traumatic Brain Injury	NHMRC MRFF	\$490,000	3 years, 2022-2024
Akwasi Amoako	Obstetrics and Gynaecology	Evaluation of the Novel Imaging Modality Integrated PET/MRI in the Diagnosis, Staging and Prognosis of Endometriosis	Queensland Health Clinical Research Fellowships	\$249,972.00	4 years, 2023–2026
Brett McKinnon, Akwasi Amoako	Obstetrics and Gynaecology	Identifying endometriosis risk and disease variability by mapping endometrial stem cell maturation	NHMRC IDEAS Grants	\$981,387.16	3 years, 2023–2025
Brett McKinnon, Akwasi Amoako	Obstetrics and Gynaecology	Generation of patient derived micro-organoid spheres for precision medicine in endometriosis	Royal Brisbane & Women's Hospital 2023 Translational Research Project Grant	\$149,496.00	2 years, 2023–2024
Akwasi Amoako, Keisuke Tanaka, Grant Montgomery, Brett McKinnon, Sally Mortlock, Darsy Darssan, Graham Galloway, Katie McMahon	Obstetrics and Gynaecology	Accuracy of Integrated 68 Ga-FAPI Positron Emission Tomography – Magnetic Resonance Imaging (PET-MRI) in the Diagnosis and Staging of Endometriosis. A Pilot Study	RBWH & RBWH Foundation Project Grant 2023 SERTA Project Grant	\$74,560.50	2 years, 2023–2024
Sailesh Kumar, Christine Catling, Donna Hartz, Louise Thornton, Kompal Sinha, Carolyn Murray, Valsamma Eapen, Kellie Wilton	Obstetrics and Gynaecology	BUBs Quit Study: clinical Midwife Specialist to assist pregnant women to quit smoking using counselling and embedded technology	NHMRC	\$1,245,561.55	5 years, 2022-2026
Tarnow-Mordi W, Popat H, Keir A, Aziz K, Lui K, Lehner C, Gordon A, Kumar S, Robledo K, Polglase G, Bonney D, Mattin M, Strunk T, Spotswood N	Obstetrics & Gynaecology	Delayed Cord Clamping in babies born before 37 weeks gestation to prevent anaemia, death and disability (WAMM – Wait a Minute or More): a pragmatic stepped-wedge implementation trial	MRFF-NHMRC	\$2,975,545.90	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
Kearney L., Lehner C, Jenkinson R, Eley V, Marsh N, Thompson JMD, de Jersey S, August D, Ullman A.	WNS	Fluids in Labour: Ensuring Maternal Euvolaemia	RBWH Foundation/SERTA	\$60,268	2 years, 2023-2024

RBWH Department / Research Group Led Research Activity

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Lehner C	Woods A, de Jersey S , Lawton S, Foxcroft K , Kothari A, Amoako A, Kumar S, Callaway L , Mackle T, Bennett E	The impact of the COVID-19 pandemic on maternal depression and related disorders during the perinatal period		1784
Lehner C	Langston-Cox A, Kearney L, Amoako A, Payne M	Towards Term: reducing preterm birth amongst First Nations women attending midwifery group practice: a pilot study		N/A
Victoria Eley	Severine Navarro, Akwasi Amoako, Leonie Callaway	Do pre-delivery antibiotics affect the neonatal microbiome and immune system? Intravenous Cefazolin v Placebo before elective caesarean section: RCT Feasibility Study		
Akwasi Amoako	Keisuke Tanaka, Akram Khalil, David Baartz, Grant Montgomery, Brett McKinnon, Sally Mortlock	Understanding the Pathogenesis of Endometriosis and Treatment Response		
Akwasi Amoako	Keisuke Tanaka, Akram Khalil, David Baartz, Grant Montgomery, Brett McKinnon, Sally Mortlock	Endocannabinoid Signalling in Endometriosis-Associated Pain: A potential Therapeutic Target		
Akwasi Amoako	Keisuke Tanaka, Akram Khalil, David Baartz, Grant Montgomery, Brett McKinnon, Sally Mortlock	Somatic mutation in endometriotic lesions and their relationship to disease progression, severity and symptoms		
Renukar Sekar	Johanna Laporte	The C*STEROID Trial: Corticosteroids before planned caesarean section from 35+0 to 39+6 weeks of pregnancy		13

Collaborative Research Activity <u>Involving</u> RBWH Department / Research Group

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Thuy Frakking	Alison Craswell, Anne Clayton, Karen Hay, Shahida Rehman, Alka Kothari, Christoph Lehner, Julia Affleck	Outcomes of breech birth by mode of delivery across hospitals within Metro North Hospital & Health Service: a retrospective observational study"	N/A	
Nigel Lee	Sue Kildea, Lena Birgitta Mårtensson, Yu Gao, Leonie Callaway , Belinda Barnett, Akwasi Amoako	Novel Use of Water for Injections to Relieve Contraction Pain in Labour		

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Rebecca Kimble	Professor Karen Barlow UQ and collaborators Monash University	Develop and implement an International Clinical Guideline on Mild Traumatic Brain Injury	N/A	
Lehner C	Field B, Ballard E	Raising awareness of decreased fetal movements (DFM) and initial rollout of the Safer Baby Bundle (SBB) in a tertiary maternity unit – impact on service utilisation, obstetric activity and perinatal outcomes at the Royal Brisbane and Women's Hospital (RBWH)" (since 2021)	N/A	
Kumar S	Tegan Triggs	Reducing operative birth for fetal distress in women with small or poorly grown infants using Sildenafil Citrate – The RidStress 2. Randomised Controlled Trial (RIDstress)		18
Kumar S	Mol BW, Tarnow-Mordi W, Flenady V, Liley H, Badawi N, Walker S, Hyett J, Askie L, Callander E	Can intrapartum Sildenafil Citrate safely avert the risks of contraction nduced hypoxia in labour? iSEARCH – a pragmatic multicentre Phase III randomised controlled trial		42
Chris Lehner	Lauren Kearney	Wait a Minute or More: A pragmatic stepped wedge cluster randomised implementation trial		180
Chris Lehner	Renukar Sekar	New techniques for predicting fetal RhD in pregnancy		50

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

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Number of RBWH Patients Recruited
Rebecca Kimble	Professor Karen Barlow UQ and collaborators Monash University	Develop and implement an International Clinical Guideline on Mild Traumatic Brain Injury	N/A
Lehner C:	Langston-Cox A, Kearney L, Amoako A, Payne M	Towards Term: reducing preterm birth amongst First Nations women attending midwifery group practice: a pilot study"	N/A

Research Publications

Authors

Investigator	ORCID ID	Investigator	ORCID ID
Rebecca Kimble	0000-0001-9044-194X	Akram Khalil	0000-0001-8790-670X
Christoph Lehner	0000-0001-8466-0273	Lauren Kearney	0000-0003-0299-6537
Keisuke Tanaka	0000-0001-8958-0731	Emma Shipton	0000-0003-0981-8135
Akwasi Amoako	0000-0002-9428-650X		

Publications in 2024

Journal Articles (RBWH staff or consumers in bold)

Triggs T, Badawi N, Crawford K, Liley H, **Lehner C**, Nugent R, Kristensen K, Da Silva Costa F, Tarnow-Mordi W, Kumar S: "RidStress 2 randomised controlled trial protocol: an Australian phase III clinical trial of intrapartum sildenafil citrate or placebo to reduce emergency caesarean birth for fetal distress in women with small or suboptimally grown infants at term (3 37 weeks)", BMJ Open 2024;14:e082945

Journal Articles (RBWH staff or consumers in bold)

Rossi GR, Sun J, Lin CY, Wong Josh, Alim L, Lam PY, Khosrotehrani K, Wolvetang E, Cheetham S, Derrick E, **Amoako A, Lehner C**, Brooks A, Beavis P, Souza-Fonseca-Guimaraes F: "A scalable, spin-free approach to generate enhanced iPSC-derived NK cells for cancer immunotherapy", Immunology & Cell Biology 2024;102:924-934

Sebina I, Bidgood C, **Stalley F**, Hartel G, Stark T, **Callaway L, Amoako A**, **Lehner C**, Dekkert Nitert M, Phipps S: "Prepregnancy obesity is associated with an altered maternal metabolome and reduced FLT3L expression in preterm birth" Scientific Reports 2024;14:30027

Tanaka, K, Subramaniam, S, Atluri, S, **Amoako, A**, Mortlock, S, Montgomery, G, and McKinnon, B. Endometrial cell-type specific regulation of the endocannabinoids system and the impact of menstrual cycle and endometriosis. Cannabis and Cannabinoid Research. doi.org/10.1089/can.2024.0081

Meloncelli N, Wilkinson SA, Rushton A, Pateman K, Gallaher S, O'Connor H, **Kearney L, de Jersey S.** Co-designing The Healthy Gut Diet for Preventing Gestational Diabetes: Co-design methods and process outcomes. Journal of Human Nutrition and Dietetics, J Hum Nutr Diet 2024 Oct;37(5):1231-1244. doi: 10.1111/jhn.13341. Epub 2024 Jun 18

Lee N, Hawley G, Morris J, **Kearney L**. Perineal repair performed by midwives in Australia: A cross-sectional survey study of education and practice. Women Birth. 2024 Feb;37(1):153-158. doi: 10.1016/j.wombi.2023.08.001. Epub 2023 Aug 4

Meloncelli N, O'Connor H, **de Jersey S**, Rushton A, Pateman K, Gallaher S, **Kearney L**, Wilkinson S. Designing a behaviour change intervention using COM-B and the Behaviour Change Wheel: Co-designing the Healthy Gut Diet for preventing gestational diabetes. Journal of Human Nutrition and Dietetics, 2024 Dec;37(6):1391-1406. doi: 10.1111/jhn.13355

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Lai, M., August, D., Sharfuddin, Z. Palmer-Field K, Johnston L, Main E, Smith P, Kilgour CM, Kearney L. Outcomes and perspectives of woman-newborn dyads following discharge from a quaternary maternity service in Australia: A cross-sectional survey. Women and Birth, 2024 Feb;37(1):248-256. doi: 10.1016/j.wombi.2023.10.007

Lai, M.Y.K., Wong, M.M., Kearney L., Lee N. The effect of antenatal hypnosis training on pharmacological analgesia use during labour and birth: A systematic review and meta-analysis. Midwifery, 2024 Oct;137:104113. doi: 10.1016/j.midw.2024.104113

Meyer, H., Lee, N., George, K, **Kearney** L. Factors influencing midwives' intentions to facilitate normal physiological birth: A qualitative study. Women and Birth, Women Birth. 2024 Jul;37(4):101617. doi: 10.1016/j.wombi.2024.101617

Cole, R., **Kearney**, L., Jenkinson, B. Kettle I, Ng B, **Callaway** L, Nugent R. Partnering with consumers and practising clinicians to establish research priorities for public hospital maternity services. Australian Health Review, 2024 Jun;48(3):321-331. doi: 10.1071/AH23222

Kearney, L., Cummins, A., O'Connell, M. Sweet L. Mastering the art of responding to peer review. Women and Birth, 2024 Mar;37(2):257-258. doi: 10.1016/j.wombi.2023.08.002

Kearney, L., Nugent, R., Maher, J. Shipstone R, Thompson JM, Boulton R, George K, Robins A, Bogossian. Factors associated with spontaneous vaginal birth in nulliparous women: A descriptive systematic review. Women and Birth, 2024 Feb;37(1):63-78. doi: 10.1016/j.wombi.2023.08.009

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Chamorro-Koc, M., Gomez, R., Wannenburg, E. Byram I, Thomas C, **Kearney L**, Clark J, Atkins H. Beyond safety: A design examination of facial PPE in paediatric wards. Design Studies, doi.org/10.1016/j.destud.2024.101265

Pervin S, Kearney L, Giudice S, Holzapfel S, Denaro T, Dyer J, Cole PE, **Callaway L.** Being a First Nations baby is not independently associated with low birthweight in a large metropolitan health service. Australian and New Zealand Journal of Obstetrics and Gynaecology, doi.org/10.1016/j.destud.2024.101265

Kearney, L., Brady, S., **Marsh, N.** Davis-Tuck M, Nugent R, Eley V. The effects of intravenous hydration regimens in nulliparous women undergoing induction of labor: A systematic review and meta-analysis. Acta Obstetricia et Gynecologica Scandinavica, 2024 Jul;103(7):1254-1262. doi: 10.1111/aogs.14793.

Obstetric Medicine

Research Highlights

The department of Obstetric Medicine continues to progress practice changing research into maternal and fetal outcomes during and after pregnancy. Cardiac disease in pregnancy continues to be a focus of the unit as well as breastfeeding in the context of maternal diabetes.

The department continues to collaborate with other departments within Metro North as well as other research groups around Australia. We strongly encourage the presentation and publication of challenging cases to disseminate the knowledge we have acquired in relation to the care of women with rare conditions where the available literature is limited.

Research Awards and Achievements

Recipient (RBWH staff in bold)	Award	Event
Prof Leonie Callaway	Researcher of the Year	Metro North Research Excellence 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
Jenkinson B, Griffiths A, Callaway L, Kearney L, Hill B, Hocking J, Boyle J, Cawthorne T, Mason Z, Tome R, Hewett L, Waqanikalou B	Obstetric Medicine	Weight-inclusive maternity care: Codesigning best practice principles with women, clinicians, and key stakeholders	WHRTN Co- Production Grant Scheme	\$252,000	3 years, 2023-2025
Jenkinson B, Griffiths A, Callaway L, Kearney L, Hill B, Hocking J, Boyle J, Cawthorne T, Mason Z, Tome R, Hewett L, Waganikalou B	Obstetric Medicine	Weight inclusive maternity care: Codesigning best practice principles with women, clinicians and key stakeholders	Health and Wellbeing Queensland Grant, matched to WHRTN grant.	\$50,000	3 years, 2023-2025
Callaway L, Bakrania B.	Obstetric Medicine/UQ PRC	Aspirin for the treatment of cardiac dysfunction in preeclampsia	RBWH Foundation	\$74,620. \$76,620	2 Years, 2022-2024
Sullivan C, Thomas R, de Jersey S, Callaway L	Obstetric Medicine/Clinical Informatics	NINA: National Infrastructure for federated learning in DigitAl health	MRFF National Critical Infrastructure Initiative	6,012,048 (MRFF) and \$2,597,965 (non MRFF)	6 Years, 2023-2028
Kearney L, Jenkinson B, Nugent R, Hill B, Robins A, Callaway L	Obstetric Medicine	Weight bias, attitudes and beliefs of maternity care providers in Australia: a cross sectional survey	HiPP CRE (Monash University)	\$10,000	2 years, 2023-2024
Skouteris H, Teede H, Boyle J, Moran L, Thangaratinam S, Hills A, Venn A, Jack B, Norman R, Ademi Delaney Z, Callaway L, (Chair of Advisory Group)	Obstetric Medicine/Centre for Research Excellence in Preconception and Pregnancy	Prevention of Maternal Obesity	NHMRC	\$2,496,527	6 Years, 2019-2024
L Callaway, A Kothari, I Szollosi, D Mann, D Wilson, P Terrill	Obstetric Medicine/Sleep Disorders TPCH	High resolution measurement of sleep position during pregnancy and the impact on infant birthweight	Metro North Collaborative Research Grants	\$47,268.40	3 years, 2022-2024

RBWH Department / Research Group Led Research Activity

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Lust K, Tanner H	Prasad S, Atherton J, Parsonage W, Lo A, Callaway L	Serial evaluation of advanced echocardiographic parameters during healthy pregnancy — a prospective observational cohort study	N/A	
McKeown L	Leonie Callaway, Katie Foxcroft, Kylie Burke, Vanessa Cobham	The prevalence of post-traumatic stress disorder in parents of infants in the Neonatal Intensive Care Unit		Recruitment completed 102

Collaborative Research Activity Involving RBWH Department / Research Group

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
EURObservational research programme	Lust K, Parsonage W	Registry of pregnancy and cardiac disease		
Sullivan E, Cordina R, Simmons L, Pollock W, Kennedy D, Vaughan G, Li Z, O'Brien A, Turnbull K, Peek M, Celermajer D, Lam L, Zentner D, Hyett J, Clarke M	Lust K, Parsonage W	NSW longitudinal study of first- time mothers with heart disease and their babies		N/A
Regan AK, Andrews RM, Moore HC, Binks MJ, McHugh L, Pereira G, Blyth CC, Van Buynder PG	Lust K	Links2HealthierBubs: Influenza and pertussis vaccine effectiveness in pregnancy		N/A
Chang A, Binks M, Smith- Vaughan H, Pizzutto S, O'Grady K, Marshall H, Toombs M, Torzillo P, Grimwood K	Lust K	Pneumatters - Preventing early- onset pneumonia in Indigenous infants through maternal immunisation: a multi-centre randomised controlled trial		

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

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Number of RBWH Patients Recruited
A/Prof Karin Lust	Chang A, Binks M, Smith- Vaughan H, Pizzutto S, O'Grady K, Marshall H, Toombs M, Torzillo P, Grimwood K	Pneumatters - Preventing early-onset pneumonia in Indigenous infants through maternal immunisation: a multi-centre randomised controlled trial.	7
Leonie Callaway	Lauren Kearney, Sonita Giudice, Tara Denaro, Sonia Pervin	Maternal and Neonatal Outcomes for Aboriginal and Torres Strait Islander Women Birthing in Metro North Health: Outcomes and opportunities	No active recruitment – accessing PDC retrospective cohort

Research Publications

Authors

Investigator	ORCID ID		
Helen Tanner	0000-0002-2066-4862	Fiona Britten	0000-0002-0148-7442
Karin Lust	0000-0002-6536-7191	Emma Shipton	0000-0003-0981-8135

Penny Wolski	0000-0002-9127-2049	Lisa McKeown	0000-0002-1457-2320
Leonie Callaway	0000-0002-0137-9935	Lauren Kearney	0000-0003-0299-6537
Katie Foxcroft	0000-0003-1851-036x		

Publications in 2024

Journal Articles (RBWH staff or consumers in bold)

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

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

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

Shanmugalingam,R, Barrett, H, **Tanner HL** et al A summary of the 2023 Society of Obstetric Medicine of Australia and New Zealand (SOMANZ) hypertension in pregnancy guideline. Medical Journal of Australia 2024

Dianna Luong, **Kate Hawke**, Elzahn De Waal, **Madeline Duke**, **Penny Wolski**. Diagnosing Primary Hyperparathyroidism in Pregnancy: A Case of Altered Parathyroid Hormone Degradation in Pregnancy. JCEM Case Reports Sept 2024

Kate Hawke, Kaustuv Joshin, Hervey Lau, Arani Halder, **Petrina Duncan**, **Penny Wolski**. Anomalous systemic arterial supply to the basal segment of the lung presenting with haemoptysis in the third trimester of pregnancy. Obstetric Medicine Journal March 2024

Kothari A, Dulhunty J, Callaway L. The forgotten fathers in obstetric care. Aust N Z J Obstet Gynaecol. 2024 62(1):12-14

Rebecca Hudson, Natasha Abeysekera, **Penny Wolski** et al. De novo HNF4A-associated Fanconi renal tubulopathy syndrome. Journal of Nephrology Jan 2024

Callaway LK, **Britten F.** Managing pre-existing diabetes prior to and during pregnancy. Aust Prescr. 2024 Feb;47(1):2-6. doi: 10.18773/austprescr.2024.002

Frost J, Weaver E, **Callaway L**. Severe acute maternal morbidity reporting in Australia: Why is it so hard? Aust N Z J Obstet Gynaecol. 2024 Apr;64(2):88-94. doi: 10.1111/ajo.13787. Epub 2024 Jan 12

Shipton EV, Foxcroft K, Dekker Nitert M, McIntyre HD, Barrett H, Tang M, **Callaway L**. OFFSPRING: A SPRING Follow-Up Study Assessing the Efficacy of Maternal Probiotics and Allergic Disease in the Child. Int Arch Allergy Immunol. 2024;185(3):212-217. doi: 10.1159/000535179. Epub 2023 Dec 15

Bracci EL, Barnett AG, Brown C, **Callaway L**, Cardona M, Carter HE, Graves N, Hillman K, Lee XJ, McPhail SM, White BP, Willmott L, Harvey G. Process evaluation of a tailored nudge intervention to promote appropriate care and treatment of older patients at the end-of-life. BMC Geriatr. 2024 Feb 28;24(1):202. doi: 10.1186/s12877-024-04818-4

White NM, Barnett AG, Lee XJ, Farrington A, Carter H, McPhail SM, Cardona M, Hillman K, **Callaway L**, Willmott L, White BP, Harvey G, Graves N, Brown C. Impact of a prospective feedback loop aimed at reducing non-beneficial treatments in older people admitted to hospital and potentially nearing the end of life. A cluster stepped-wedge randomised controlled trial. Age Ageing. 2024 Jun 1;53(6):afae115. doi: 10.1093/ageing/afae115

Hillman K, Barnett AG, Brown C, **Callaway L**, Cardona M, Carter H, Farrington A, Harvey G, Lee X, McPhail S, Nicholas G, White BP, White NM, Willmott L. The conveyor belt for older people nearing the end of life. Intern Med J. 2024 Aug;54(8):1414-1417. doi: 10.1111/imj.16458

Whiteoak B, Dawson SL, **Callaway L**, **de Jersey S, Eley V**, Evans J, **Kothari A**, Navarro S, Gallegos D. Food Insecurity Is Associated with Diet Quality in Pregnancy: A Cross-Sectional Study. Nutrients. 2024 Apr 28;16(9):1319. doi: 10.3390/nu16091319

Harrison G, Fitzgerald K, O'Leary P, **Kothari A, Callaway L.** Promoting men-inclusive maternity services: exploring the expectations, experiences and needs of men as fathers. BMC Pregnancy Childbirth. 2024 Jul 12;24(1):477. doi: 10.1186/s12884-024-06644-3

Eley V, Llewellyn S, Pelecanos A, **Callaway L**, Smith M, van Zundert A, Stowasser M. Finger cuff versus invasive and noninvasive arterial pressure measurement in pregnant patients with obesity. Acta Anaesthesiol Scand. 2024 May;68(5):645-654. doi: 10.1111/aas.14399. Epub 2024 Mar 5

Cole R, **Kearney L**, Jenkinson B, Kettle I, Ng B, **Callaway L, Nugent R.** Partnering with consumers and practising clinicians to establish research priorities for public hospital maternity services. Aust Health Rev. 2024 Jun;48(3):321-331. doi: 10.1071/AH23222

Journal Articles (RBWH staff or consumers in bold)

Sebina I, Bidgood C, **Stalley F**, Hartel G, Stark T, **Callaway L**, **Amoako A**, **Lehner C**, Dekker Nitert M, Phipps S. Pre-pregnancy obesity is associated with an altered maternal metabolome and reduced Flt3L expression in preterm birth. Sci Rep. 2024 Dec 3;14(1):30027. doi: 10.1038/s41598-024-81194-4

Pervin S, Kearney L, Giudice S, Holzapfel S, Denaro T, Dyer J, Cole PE, **Callaway L**. Being a First Nations baby is not independently associated with low birthweight in a large metropolitan health service. Aust N Z J Obstet Gynaecol. 2024 Dec;64(6):608-618. doi: 10.1111/ajo.13843. Epub 2024 Jun 7

Woods A, Ballard E, Kumar S, Mackle T, **Callaway L, Kothari A, De Jersey S,** Bennett E, Foxcroft K, Willis M, **Amoako A, Lehner C.** The impact of the COVID-19 pandemic on antenatal care provision and associated mental health, obstetric and neonatal outcomes. J Perinat Med. 2023 Oct 26;52(2):222-229. doi: 10.1515/jpm-2023-0196. Print 2024 Feb 26

Tanner HL, Ng HT, Murphy G, Barrett HL, **Callaway LK**, McIntyre HD, Nitert MD. Habitual carbohydrate intake is not correlated with circulating β -hydroxybutyrate levels in pregnant women with overweight and obesity at 28 weeks' gestation. Diabetologia. 2024 Feb;67(2):346-355

Rebecca Hudson, Natasha Abeysekera, **Penny Wolski** et al. De novo HNF4A-associated Fanconi renal tubulopathy syndrome. Journal of Nephrology Jan 2024.

Keynote or Plenary Lectures given in 2024

Date	Title
November 2024	Speaker - Women's and Children's Symposium Adelaide – Interwoven Research, Clinical Practice, Health service Delivery. Prof Leonie Callaway
October 2024	Conference Chair Session 8 - ISOM /SOMANZ International Meeting Sydney- Helen Tanner
October 2024	Session Chair and Speaker – The Vital Role of maternity Health care Providers in RSV prevention – ISOM /SOMANZ International Meeting Sydney – Helen Tanner
July 2024	QLD Women's Health Forum – Panel Chair: The Gaps in Maternal Healthcare. – Prof Leonie Callaway
May 2024	Speaker – 2024 Perinatal and Infant Mental Health Symposium Penrith – More than meets the eye: Weaving research and clinical practice together. Prof Leonie Callaway

Perinatal Research Centre

Research Highlights

Research highlights should be no more than 500 words, written in paragraph form highlighting the key outcomes and research achievements for 2024.erinatal Research Centre (PRC), directed by Prof Paul Colditz, is committed to improving health for mothers and babies through world class biomedical and clinical research. Our multidisciplinary research team, consisting of clinicians, scientists, allied health professionals and engineers, aims to discover and translate research advances into clinical practice and better health outcomes for mothers and babies. Research within the PRC covers several related areas including fetal growth restriction led by Dr Julie Wixey, nutrition and systems physiology led by Dr Yvonne Eiby, impacts of hypertensive disorders of pregnancy led by Dr Bhavisha Bakrania, as well as clinical trials involving the Royal Brisbane and Women's Hospital.

2024 was a successful year for the PRC. We had the opportunity to attend national and international conferences to showcase their work, including the joint Fetal and Neonatal Societies Conference in Nottingham, UK and the Hershey Conference on Developmental Brain Injury in Sweden. Our students achieved a number of awards and milestones this year, including best abstract at the Hershey Conference. PhD candidate, Tam Nguyen reached her final milestone and submitted her thesis titled, "Factors driving early plasma loss in preterm piglets." This project challenges clinical estimates which indicate that preterm infants have a higher blood volume than term infants. Tam found that preterm piglets have a lower blood volume than term at birth, and that regardless of gestational age, both groups have a rapid plasma loss likely driven by capillary permeability and plasma protein concentration. In preterm piglets, low lymphatic return may also contribute. This impaired fluid maintenance leaves preterm piglets vulnerable to adverse outcomes, such as cardiovascular deterioration and poor cerebral oxygenation. If the same relationships exist in preterm babies, this has major implications for the provision of cardiovascular support to improve long-term outcomes.

Dr Yvonne Eiby begins a 3-year NHMRC Ideas grant investigating packed red blood cell transfusion in the hours after preterm birth to support cardiovascular function and improve brain outcomes. Dr Eiby's team also continues work to examine the effects of sulfate deficiency on the preterm brain, also funded by an NHMRC Ideas grant.

Dr Julie Wixey continues work on her NHMRC Investigator grant where her team is discovering interesting findings around blood biomarkers of brain injury in fetal growth restriction in addition to examining different neuroprotective strategies with the aim to reduce burden of disability in these infants.

We continue working with our collaborators on an NHMRC Synergy Grant focussing on reducing the incidence of cerebral palsy through novel early biomarkers and therapeutic trials. This study is incorporating advanced neuroimaging, genetics, and liquid biopsy, enabling fetal and newborn diagnosis, prognosis, and prediction of treatment responses to prevent, treat and cure cerebral palsy. Our ongoing funding is creating amazing results and media interest, and we look forward to another year of high impact translational research. We would like to thank RBWH Foundation and so many members of the public for their generous support which is vital to improving outcomes for mothers and babies through research.

Successful Research Higher Degree candidates in 2024

		3	9	
Name	Title	Month Competed	Affiliated University	Summary
Tam Nguyen (PhD)	Factors driving early plasma loss in preterm piglets	October 2024	University of Queensland	Extremely preterm infants (<28 weeks gestational age) are susceptible cardiovascular deterioration and long-term adverse neurodevelopmental outcomes. The overall aim of this thesis was to determine blood volume changes in the hours after birth and investigate factors that may be driving hypovolemia and
				postnatal blood volume changes in preterm piglets. We found that preterm piglets have a lower blood volume than term at birth, and that regardless of gestational age, both groups have a rapid plasma loss likely driven by capillary permeability and plasma protein concentration. In preterm piglets, low lymphatic return may also contribute. These findings may have major implications for the provision of cardiovascular support to improve long-term outcomes, if the same relationships exist in preterm infants.

Research Awards and Achievements

Recipient (RBWH staff in bold)	Award	Event
Julie Wixey	Dr Stephen Morrison Best Clinical Research Award	Herston Health Precinct Symposium
Tam Nguyen	Best Poster Abstract	Hershey Conference on Developmental Brain Injury
Hannah Musco	Best Late PhD Presentation	UQCCR 3MT Competition

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
Wixey J, Colditz P, Bjorkman ST, Chand K, Patel J, Khosrotehrani K	Perinatal Research Centre	Long-term protection in the growth restricted newborn	Research Foundation of Cerebral Palsy Alliance grant	\$200,000	4 years, 2021-2024
Eapen V, Liaw S-T, Pritchard M, Lingam R, Woolfenden S, Jalaludin B, Page A, Kohlhoff J, Scott J, Lawson K	Perinatal Research Centre	Watch Me Grow: Changing practice to improve Universal Child Health and Developmental Surveillance in the primary care setting	NHMRC Partnership Grant	\$1.1M	6 years, 2019-2025
Boyd R, Novak I, Rose S, Fahey M, Colditz P, Hunt R, Badawi N, Sakzewski L, Corbett M, Comans T, Gecz J	Perinatal Research Centre	Cerebral Palsy Synergy Network to Protect, Repair and improve outcomes	NHMRC Synergy Grant	\$5M	5 years, 2022-2026
Dawson P, Badawi N, Colditz P, Koorts P, Hurrion E, Eiby Y, Bjorkman T, Nestor P	Perinatal Research Centre	Neuroprotective benefit and safety of preterm neonatal sulphate supplementation	NHMRC Ideas Grant	\$966,906	4 years, 2023-2026
Eiby Y, Stark M, Bakrania B, Wixey J, Colditz P , Wright I	Perinatal Research Centre	Early transfusion to support blood volume in preterm piglets	NHMRC Ideas Grant	\$1,032,160	4 years, 2023-2026
Eiby Y, Nguyen T	Perinatal Research Centre	Blood volume in preterm infants	ANZ Society for Blood Transfusion	\$30,528	2 years, 2023-2024
Wixey J	Perinatal Research Centre	Detection and treatment of brain injury in growth restricted newborns	NHMRC Investigator grant	\$655,000	5 years, 2023-2027
Musco H	Perinatal Research Centre	Blood biomarkers to detect brain injury in the growth restricted newborn	Research Foundation of Cerebral Palsy Alliance grant	\$26,000	3 years, 2024-2026

RBWH Department / Research Group Led Research Activity

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Paul Colditz	Boyd R, Malhotra A, Rose S, Boashash B, Ditchfield M, Fahey M, Pannek K, Moldrich R	Neurodevelopment of the preterm infant (PREBO)		
Paul Colditz	Wixey J	Brain-specific blood biomarkers of injury in the growth restricted newborn		

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Paul Colditz	Eiby Y	Identifying priority targets for effective blood volume management in preterm infants		
Paul Colditz	Eiby Y, Wixey J	NeoBRAIN		

Research Publications

Authors

Investigator	ORCID ID		
Paul Colditz	https://orcid.org/0000-0002-6408-8238	Melissa Lai	https://orcid.org/0000-0002-1970-7247
Barbara Lingwood	https://orcid.org/0000-0002-8143-2707		

Publications in 2024

Journal Articles (RBWH staff or consumers in bold)

Vijayakumar P, McWhinney A, Eiby YA, Dawson PA. Modified turbidometric microassay for the measurement of sulfate in plasma and urine. MethodsX. 2024 Apr 18;12:102712. doi: 10.1016/j.mex.2024.102712

Kwong AKL, Eeles AL, Anderson PJ, Badawi N, Boyd RN, Cameron KL, Cheong JLY, Colditz P, **Koorts P**, Crowle C, Dale RC, Doyle LW, Fahey M, George J, Hunt RW, McNamara L, Morgan C, Novak I, Olsen JE, Reid N, Rieger I, Whittingham K, Spittle AJ. The Knowledge Translation of Early Cerebral Palsy (KiTE CP) Study: Implementing Screening Among a High-Risk Prospective Cohort of Australian Infants. J Pediatr. 2024 May:268:113949. doi: 10.1016/j.jpeds.2024.113949

Blazek JW, Colditz PB, Guzzetta A, Ware RS, Chatfield MD, Hough JL, Boyd RN, George JM. Sensitivity and specificity of the Neonatal Visual Assessment to predict motor and cognitive outcomes in infants born very preterm. Early Hum Dev. 2024 Aug:195:106068

Mistry KH, Bora S, Pannek K, Pagnozzi AM, Fiori S, Guzzetta A, Ware RS, Colditz PB, Boyd RN, George JM. Diagnostic accuracy of neonatal structural MRI scores to predict 6-year motor outcomes of children born very preterm. Neuroimage Clin. 2024 Dec 14:45:103725. doi: 10.1016/j.nicl.2024.103725

Musco H, Beecher K, Chand KK, Colditz PB, Wixey JA. Blood Biomarkers in the Fetally Growth Restricted and Small for Gestational Age Neonate: Associations with Brain Injury. Dev Neurosci. 2024;46(2):84-97. doi: 10.1159/000530492

Bakrania BA, Spradley FT, McClements L. Editorial: Adverse outcomes of preeclampsia: from mother to baby, pregnancy to postpartum. Front Physiol. 2024 Apr 8;15:1394120. doi: 10.3389/fphys.2024.1394120

Wu BA, Chand KK, Bell A, Miller SL, Colditz PB, Malhotra A, Wixey JA. Effects of fetal growth restriction on the perinatal neurovascular unit and possible treatment targets. Pediatr Res. 2024 Jan;95(1):59-69. doi: 10.1038/s41390-023-02805-w

Musco H, Beecher K, Chand KK, Boyd RN, Colditz PB, Wixey JA. The search for blood biomarkers that indicate risk of adverse neurodevelopmental outcomes in fetal growth restriction. Front Pediatr. 2024 Jun 20;12:1396102. doi: 10.3389/fped.2024.1396102

Adams RC, Carter-Cusack D, Llanes GT, Hunter CR, Vinnakota JM, Ruitenberg MJ, Vukovic J, Bertolino P, Chand KK, Wixey JA, Nayler SP, Hill GR, Furlan SN, Zeiser R, MacDonald KPA. CSF1R inhibition promotes neuroinflammation and behavioral deficits during graft-versus-host disease in mice. 2024 Mar 7;143(10):912-929. doi: 10.1182/blood.2023022040

Nguyen TMT, Morwood HK, Bakrania BA, Miller SM, Bjorkman ST, Lingwood BE, Wright IMR, Eiby YA. Blood volume reduction due to rapid plasma loss after birth in preterm piglets. Pediatr Res. 2024 Dec;96(7):1693-1698. doi: 10.1038/s41390-024-03252-x.

Keynote or Plenary Lectures given in 2024

Date	Title
June 2024	Julie Wixey. Nanoparticle treatment to improve brain outcomes in growth restricted newborns. Neonatal Cell Therapy, Sydney. Invited speaker
June 2024	Julie Wixey. Session Chair. Neonatal Cell Therapy, Sydney.
November 2024	Bhavisha Bakrania. Session Chair x 4. Hypertension Australia ASM, Sydney.

Queensland Centre for Gynaecological Cancer

Research Highlights

The Queensland Centre for Gynaecological Cancer Research (QCGC) is committed to improving the standard of care for women with gynaecological cancers through rigorous research initiatives. Our mission includes understanding the causes, preventing occurrences, and enhancing treatment approaches for these malignancies. In 2024, we expanded our focus to include various types of gynaecological cancers: uterine, ovarian, and vulvar cancer through collaboration with national and international organisations.

In the field of uterine cancer, we continued the ENDO3 trial, a multicentre Phase III randomised surgical study sponsored by the University of Queensland, examining the role of sentinel node biopsy in endometrial cancer.

In 2024, we launched the SATELLITE study, a national, multicentre Phase 2b open-label, single-arm feasibility trial evaluating the efficacy, safety, and tolerability of dostarlimab in women with early-stage mismatch repair (MMR) deficient endometrioid endometrial adenocarcinoma. Sponsored by the University of Queensland, the study aims to assess whether dostarlimab could serve as a potentially curative, conservative treatment for early-stage endometrial cancer in non-surgical candidates while preserving fertility in women of reproductive potential. The SATELLITE study commenced at RBWH in August 2024 in collaboration with Women's & Newborn Services and the Cancer Care Unit.

We also launched the EN10 study at RBWH, an international multicentre Phase II clinical trial evaluating de-escalated adjuvant treatment in patients with POLE-mutated or p53wt/NSMP (p53 wild-type/no specific molecular profile) early-stage endometrial cancer. Sponsored by the Australia New Zealand Gynaecological Oncology Group (ANZGOG), RBWH serves as one of the recruiting sites in Queensland, enrolling patients since August 2024.

Vulvar Cancer: The treatment of vulvar cancer leads to significant morbidity, with most survivors experiencing long-term adverse effects due to the lack of alternative treatment options. The personal and societal burden is substantial, making it a national priority to improve management strategies for this disease. Since 2022, we have been building a portfolio of vulvar cancer studies in Australia, sponsored by UQ, focusing on feasibility studies to generate preliminary data supporting the development of a Phase II clinical trial for this rare cancer. In 2024, we advanced the Pre-ANVU (Australian National Vulvar Cancer Trial) study, which evaluates the feasibility of using groin ultrasound to predict lymph node involvement in patients with histologically confirmed vulvar cancer. That year, we expanded the study nationally and internationally, opening sites in six sites across Australia and one in Uruguay. Additionally, with the support of Women's & Newborn Services at RBWH, we established the Pre-ANVU study in the Northern Territory as a teletrial through the Australian Teletrial Program, increasing access to participation.

As the next step, we launched the NODE (Groin Ultrasound in Detecting Cancer) study, a feasibility trial assessing whether patients are willing to undergo non-invasive groin monitoring—serial ultrasounds every two months alongside clinical examination—as an alternative to surgical lymph node removal. Recruitment for the NODE study commenced in 2024.

In line with our commitment to improving the quality of life for women with vulvar cancer, we developed ANVU, a multicentre Phase II randomised clinical trial: Ultrasound Groin Monitoring vs. Groin Lymph Node Dissection to De-Escalate the Extent of Surgery in Vulvar Cancer. This trial aims to determine whether groin ultrasound monitoring can safely and effectively replace invasive lymph node dissection (LND) in managing vulvar cancer, reducing surgical morbidity and healthcare costs without compromising survival outcomes. The ANVU trial received approval from the Metro North Ethics Committee in 2024, with patient enrolment set to begin in June 2025.

Ovarian Cancer: MOST involves a three-monthly nurse-led follow-up via telehealth, incorporating monitoring of serum CA125 and other tumour markers, along with patient-reported outcomes using the MOST (Measure of Ovarian Symptoms and Treatment Concerns) tool. The enrolment phase concluded in 2024, and data analysis is set for publication in 2025.

TUBA-WISP II Study: An international multicentre prospective preference study assessing risk-reducing salpingectomy (RRS) with delayed risk-reducing oophorectomy (RRO) as an alternative to risk-reducing salpingo-oophorectomy (RRSO) in BRCA1/2 mutation carriers and women with moderate penetrance gene mutations (BRIP1, RAD51C, RAD51D, PALB2). The study commenced at RBWH in September 2024 and aims to determine whether the alternative method is equivalent to the standard approach in preventing ovarian cancer in high-risk individuals.

ACUMEN Trial: In 2024, we continued screening and recruiting participants for the ACUMEN trial, which aims to improve the physical and mental health-related quality of life in women treated for gynaecological cancer by supporting lifelong exercise habits.

QCGC Research remains dedicated to advancing knowledge, improving outcomes, and enhancing the quality of life for women facing gynaecological cancers through relentless research and innovative approaches.

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Research Awards and Achievements

Recipient (RBWH staff in bold)	Award	Event
Prof Andreas Obermair	2024 Australian Academy of Health and Medical Sciences	Fellow of the Australian Academy of Health and Medical Sciences for outstanding professional achievements ad leadership in a field related to health and /or medicine

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
Prof Andreas Obermair, Prof Monika Janda, Prof Carlos Salomon Gallo, & Prof Sandie McCarthy,	University of Queensland /QCGC Research	A non-surgical alternative to hysterectomy for the treatment of endometrial cancer	NHMRC Partnership Projects	\$739,426	3 years, 2022-2024
Prof Andreas Obermair	University of Queensland /QCGC Research	Creating treatment options for endometrial cancer through high-level clinical trials	NHMRC Investigator Grants	\$2,250,000	5 years, 2021-2025
Prof Andreas Obermair, Professor Neville F Hacker, A/Prof Carlos Salomon, Dr Eva Baxter, Dr Shohreh Rezai, Dr Zoe West	University of Queensland /QCGC Research	Feasibility of Groin Ultrasound to Predict Groin Lymph Node Involvement in Patients with Histologically Proven Vulvar Cancer and Feasibility of biomarker discovery in the differential diagnosis of VIN versus invasive vulvar cancer	Cherish Women's Cancer Foundation	\$200,000	2 years, 2023-2024
Prof Andreas Obermair, Professor James Nicklin, Professor Val Gebski, Professor Monika Janda, Professor Sandi Hayes, Professor Nicholas Graves, Professor Linda Mileshkin, Dr Ming-Yin Lin, Professor George Hanna	University of Queensland /QCGC Research	A Phase III Randomised Controlled Clinical Trial Comparing Disease-Free Survival of Patients with or without lymph node dissection in clinical stage I Endometrial Cancer	NHMRC Clinical Trials & Cohort Studies	\$3,158,864	5 years, 2024-2028
Prof Andreas Obermair, A/Prof Jeffrey Goh, Dr Anna Kuchel, Professor Alison Brand, Professor Linda Mileshkin, A/Prof Orla McNally	University of Queensland /QCGC Research	Safety and feasibility of dostarlimab in women with early-stage MMR deficient endometrioid endometrial adenocarcinoma	GlaxoSmithKli ne plc	\$ 1,120,002.74	5 years, 2024-2028
Prof Andreas Obermair, Professor Neville F Hacker, Professor Val Gebski, Professor Andrew Martin, Professor Alexandra McCarthy, Professor Sandra Hayes, Professor Monika Janda, Professor Haitham Tuffaha, Dr Shohreh Rezai, Dr Sarah Lord, Dr Eva Baxter, Dr Zoe West, Professor Paul A. Cohen, Associate Professor Orla McNally, Dr Rohan Lourie	University of Queensland /QCGC Research	A Phase II randomised clinical trial of ultrasound groin monitoring versus groin lymph node dissection to de-escalate the extent of surgery in vulvar cancer (ANVU)	Cherish Women's Cancer Foundation	\$500,000	1 year, 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
Prof Andreas Obermair	University of Queensland /QCGC Research	Improving quality of life for vulvar cancer patients through non-invasive interventions	Metro North Hospital & Health Service	\$62,185	1 year, 2024
Dr Kristen Moloney	University of Queensland /QCGC Research	Standardisation of Surgical Procedures: Acceptability and appropriateness outside of the research setting and potential collateral benefits to clinical practice and training	Gynaecologica I Cancer Research Education & Development Society	\$18,000	2 years, 2024-2025

RBWH Department / Research Group Led Research Activity

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Prof Andreas Obermair	Prof Jim Nicklin, Dr Andrea Garrett, Prof Val Gebski, Prof Monika Janda, Prof Sandi Hayes, Prof Nicholas Graves, Prof Linda Mileshkin, Dr Ming-Yin Lin, Prof George Hanna	A Phase III randomised clinical trial comparing sentinel node biopsy with no retroperitoneal node dissection in early-stage endometrial cancer (ENDO-3)	2 & 3	84 in total 15 in 2024
Prof Andreas Obermair	A/Prof Carlos Salomon, Dr Eva Baxter, Dr Jamie Kutasovic, Dr Andrew Lai, Dr Michelle Alizart, Prof Margaret Cummings, A/Prof Olga Kondrashova	Identifying predictive biomarkers for progestin treatment of early-stage endometrial cancer	4	-
Prof Andreas Obermair & Dr Kristen Moloney	Prof Andreas Obermair, Prof Neville F Hacker, A/Prof Carlos Salomon, Dr Eva Baxter, Dr Shohreh Rezai	Feasibility of Groin Ultrasound to Predict Groin Lymph Node Involvement in Patients with Histologically Proven Vulvar Cancer (Pre-ANVU)	4	30 in total 15 in 2024
Prof Andreas Obermair & Dr Andrea Garret	Prof Andreas Obermair, Professor Neville F Hacker, Associate Professor Carlos Salomon, Dr Eva Baxter, Dr Zoe West, Dr Shohreh Rezai, Dr Andrea Garrett	Randomised Feasibility Study Of Groin Ultrasound Surveillance Versus Groin Node Surgery To De-Escalate The Extent Of Surgery In Queensland Women with Vulvar Cancer (NODE)	4	3
Prof Andreas Obermair & Dr Andrea Garret	Prof Andreas Obermair, Professor Neville F Hacker, Prof Alexandra McCarthy, Prof Sandra Hayes, Prof Monika Janda, Prof Haitham Tuffaha, Dr Shohreh Rezai, Dr Sarah Lord, Dr Eva Baxter, Dr Zoe West, Prof Paul A. Cohen, A/ Prof Orla McNally, Dr Rohan Lourie, Prof Val Gebski, Prof Andrew Martin	A Phase II randomised clinical trial of ultrasound groin monitoring versus groin lymph node dissection to de- escalate the extent of surgery in vulvar cancer (ANVU)	2	0
Prof Andreas Obermair & A/Prof Jeffrey Goh	Prof Andreas Obermair, A/Prof Jeffrey Goh, Dr Anna Kuchel, Prof Alison Brand, Prof Linda Mileshkin, A/Prof Orla McNally	A Phase 2b, open-label, single arm, multicentre, pilot study of the efficacy, safety and tolerability of dostarlimab in women with early-stage MMR deficient endometrioid endometrial adenocarcinoma (SATELLITE)	2	0

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Dr Michael Wilkinson, Dr Rhett Morton	Prof Andreas Obermair, Ms Karen Sanday, Dr Ze Zhang	Can the log reduction in serum CA- 125 levels predict successful interval cytoreduction surgery in ovarian cancer patients?	4	-
Dr Andrea Garrett	Meg Welsh (student)	Predictors of chemotherapy resistance in patients with GTN	4	-
Dr Andrea Garrett	Assoc Prof Orla Mcnally,Estefania Vicario, Wirawan Jeong,Dr Monica McGauran, Mira Prashar (student)	Actinomycin D and Methotrexate as First Line Management for Low-Risk Gestational Trophoblastic Neoplasia: A comparison at 2 Tertiary Hospitals	4	-
Prof Andreas Obermair	Dr Simon West, Dr Stacey Davie	Classification system for recording intraoperative adverse events in Gynaecology Oncology	4	-
Dr Stacey Davie	Prof Andreas Obermair	Management of groin nodes in early vulval cancer: patterns of care in a Queensland population	4	-

Collaborative Research Activity <u>Involving</u> RBWH Department / Research Group

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Prof Alexandra McCarthy (UQ)	Dr Andrea Garrett, Tom Bailey (UQ), A/Prof Tina Skinner (UQ), Ms Elizabeth Stewart (UQ)	Enhancing Treatment Outcomes after Gynaecological Cancer: Using Exercise to Promote Health after Cancer Therapy (ACUMEN)	3	80
Prof Paul Cohen	Dr Paul Cohen, Prof Michael Friedlander, Prof Penelope Webb, Prof Val Gebski, Prof Madeleine King, Prof Phyllis Butow, Prof Andreas Obermair (Gyn Onc), A/Prof Rachael Morton, Ms. Wanda Lawson, Prof Patsy Yates, Dr Rachel Campbell, A/Prof Tarek Meniawy, Dr Andrew Dean, Dr Jeffrey Goh (Med Onc), A/Prof Philip Beale, A/Prof Orla McNally, Prof Linda Mileshkin, Ms. Jane Hill, Mr. Cyril Dixon, Ms. Sue Hegarty, Prof Jim Codde, Ms Angela Ives, Dr Yeh Chen Lee, A/Prof Alison Brand, Ms Anne Mellon, Dr Mihitha Ariyapperuma, Dr Andrew Kiberu	Getting the MOST out of follow-up: three-monthly nurse-led follow-up via telehealth, including monitoring serum CA125 and other relevant tumour markers, and patient reported outcomes using the MOST (Measure of Ovarian Symptoms and Treatment concerns) following completion of first-line chemotherapy in patients with epithelial ovarian cancer	4	17
Prof Alison Brand	Dr Andrea Garrett	A Phase II Study of Tailored Adjuvant Therapy In Pole-Mutated And p53-wildtype/NSMP Early Stage Endometrial Cancer (RAINBO BLUE & TAPER)	4	0
Prof Martha Hickey	Dr Amy Tang	TUBectomy with delayed oophorectomy as Alternative for risk-reducing salpingo- oophorectomy in high-risk Women to assess the Safety of Prevention (TUBA-WISP II)	4	3

Research Publications

Authors

Investigator	ORCID ID	Investigator	ORCID ID
Andreas Obermair	0000-0003-2199-1117	Russell Land	0000-0002-1134-6379
Andrea Garrett	0000-0001-6595-1905	Stacey Davie	0000-0003-0286-4454
Kirsten Moloney	0000-0003-1068-5202	Michael Yu	0000-0002-3463-236X

Publications in 2024

Journal Articles (RBWH staff or consumers in bold)

Obermair H, Scasso S, Laufer J, **Obermair A**. Use of indocyanine green for ureteric illumination and visualization. International journal of gynecological cancer. 2024

Ribeiro R, Baiocchi G, **Obermair A**, Costa CN, Leitao M. Uterine transposition for fertility preservation in pelvic cancers. International journal of gynecological cancer. 2024

Manning-Geist B, **Obermair A**, Broach V, Leitao M, Zivanovic O, Abu-Rustum N. Update on near infrared imaging technology: indocyanine green and near infrared technology in the treatment of gynecologic cancers. International journal of gynecological cancer. 2024

Hayes, S. C., Spence, R. R., Janda, M., Eakin, E., Shannon, C., Goh, J., Beesley, V. L., Vagenas, D., Webb, P., Coward, J., Gordon, L. G., O'Neill, H., Williams, M., Rye, S., Newton, M. J., Baniahmadi, S., Nascimento, M., Nicklin, J., **Garret, A., & Obermair, A.**. Pre-post feasibility trial of a telephone-delivered exercise intervention for patients during chemotherapy for recurrent ovarian cancer: the ECHO-R trial protocol. BMJ Open. 2024;14(1):e077158

Nasioudis, D., Grcevich, L., Albright, B., McDonald, M., Grassi, T., Zach, D., Wallace, S., Tsibulak, I., Mantia-Smaldone, G., Anastasio, M. K., Reis, R. D., AlHilli, M., Do, A., Baiocchi, G., Cucinella, G., Labban, N., Gregorich, N., Heredia, F., Pereira, A., Giuntoli, R. (2024). Outcomes of low-volume metastatic disease among patients with early-stage squamous cell carcinoma undergoing sentinel lymph node biopsy: Results from the International Vulvar Cancer Consortium (IVUCCO). Gynecologic oncology, 190, S28-S29. https://doi.org/10.1016/j.ygyno.2024.07.048

Ng, Z. Y., Manchanda, R., Lopez, A., **Obermair, A.**, Dostalek, L., Pareja, R., van Lonkhuijzen, L. R. C. W., Falconer, H., Ortiz, D. I., Fagotti, A., Ramirez, P. T., Landoni, F., Weinberger, V., Laky, R., Kim, S. H., Klat, J., Kocian, R., Pari, D., Borcinova, M., Cibula, D.. The prognosis of stage IA cervical cancer: Subgroup analysis of the SCCAN study. Gynecol Oncol. 2024;191:95-9

Obermair, A., Hanna, G. B., Gebski, V., Graves, N., Coleman, M. G., Sanjida, S., Horsham, C., Rao, A., & Janda, M. Feasibility and safety of a surgical training program in total laparoscopic hysterectomy: Results of a pilot trial. Aust N Z J Obstet Gynaecol. 2024;64(1):48-54

Plinsinga, M. L., Rye, S., Jones, T., Vagenas, D., Ward, L., Janda, M., **Obermair, A.**, & Hayes, S. C.. Mild symptoms matter: Results from a prospective, longitudinal study on the relationship between symptoms, lymphedema and health-related outcomes post-gynecological cancer. Gynecol Oncol. 2024;191:158-64

Ramachandran, D., Tyrer, J. P., Kommoss, S., DeFazio, A., Riggan, M. J., Webb, P. M., Fasching, P. A., Lambrechts, D., García, M. J., Rodríguez-Antona, C., Goodman, M. T., Modugno, F., Moysich, K. B., Karlan, B. Y., Lester, J., Kjaer, S. K., Jensen, A., Høgdall, E., Goode, E. L., Heitz, F. Genome-wide association analyses of ovarian cancer patients undergoing primary debulking surgery identify candidate genes for residual disease. NPJ Genom Med. 2024;9(1):19-2

amirez, P. T., Robledo, K. P., Frumovitz, M., Pareja, R., Ribeiro, R., Lopez, A., Yan, X., Isla, D., Moretti, R., Bernardini, M. Q., Gebski, V., Asher, R., Behan, V., Coleman, R. L., & **Obermair, A**.. LACC Trial: Final Analysis on Overall Survival Comparing Open Versus Minimally Invasive Radical Hysterectomy for Early-Stage Cervical Cancer. J Clin Oncol. 2024;42(23):JCO2302335-2746

Spence RR, Janda M, Eakin E, Shannon C, **Goh J**, Beesley V, et al. The ECHO-R Exercise Trial For Recurrent Ovarian Cancer: Robust Evidence In An Understudied Population: 2539. Medicine and science in sports and exercise. 2024;56(10S):952-3

Virili F, **Obermair A**, Sanjida S, Nicklin JL, **Garrett A**, **Land R**, et al. Impact of gated FDG PET/CT on the staging of patients with suspected or proven newly diagnosed advanced epithelial ovarian, fallopian tube, and primary peritoneal cancer: results from a non-randomized, phase II clinical trial. Int J Gynecol Cancer. 2024:ijgc-2024-005633

Welsh M, Morrison S, Baartz D, **Sanday K**, **Garrett A**. Outcomes of patients registered with the Queensland Trophoblast Centre diagnosed with gestational trophoblastic neoplasia who develop resistance to chemotherapy. Aust N Z J Obstet Gynaecol. 2024.

Keynote or Plenary Lectures given in 2024

Date	Title
7 March 2024	Prof Andreas Obermair: Chaired a session on Controversies in Cervical Cancer (The Australian Society of Gynaecological Oncologists (ASGO)
8 March 2024	Dr Michael Yu : Effect of a Multidisciplinary Approach to Placenta Accreta Spectrum at a Tertiary Obstetric Hospital (The Australian Society of Gynaecological Oncologists (ASGO)
09 March 2024	Dr Archana Rao: Surgical Experience of Fellows in CGO Training (ASGO)
21 March 2024	Dr Andrea Garrett: Development of a sustainable Pacific GTD Registry: the issues, barriers and benefits / Gestational Trophoblastic Disease - Low Risk and High Risk (Pacific Society for Reproductive Health meeting (PSRH)
03 June 2024	Prof Andreas Obermair: Controversies in the Surgical Management of Gynaecologic Cancer: Balancing the Decision to Operate or Hesitate (American Society of Clinical Oncology (ASCO)
17 October 2024	Prof Andreas Obermair: Chaired a session on Uterine transposition (International Gynaecologic Cancer Society (IGCS))