

The Women's Research Report 2023

The power of collaboration



the women's
the royal women's hospital



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Collaboration



42%

INTERNATIONAL

42% of the 294 papers involved an international collaboration.



64

COUNTRIES



499

INSTITUTIONS

Co-authors of these papers came from 64 countries and 499 different institutions.



294

PUBLICATIONS

Clinical trials



80

CLINICAL TRIALS



10,346

PATIENTS RECRUITED

2023 highlights



85

RESEARCH STUDENTS

Funding



\$32.6 million

GRANTS HELD

Including \$23.2m
NHMRC/ARC/
MRFF GRANTS



\$7.6 million

GRANTS SPENT

Including \$5.6m
NHMRC/ARC/
MRFF GRANTS



Acknowledgement and thanks

Acknowledgement of Traditional Owners

The Women's acknowledges and pays respect to the Wurundjeri and Boonwurrung people of the Kulin nation, the Traditional Custodians of the Country on which the hospital stands. We pay our respects to their elders past and present. The Women's is committed to improving health equity for Aboriginal and Torres Strait Islander women, children and families and we recognise the fundamental significance of cultural traditions, beliefs, and connection to Country for the health and wellbeing of Aboriginal and Torres Strait Islander peoples.

We acknowledge the importance of kinship and family structure as a cohesive force that binds Aboriginal and Torres Strait Islander peoples and we recognise their cultures, community connection, and self-determination as critical protective factors for wellbeing.

Gender inclusivity

We respect and value individuals of all gender identities, recognising that the binary definition of gender excludes many people. While this report uses the terms 'women' and 'girls,' it is not meant to exclude anyone. Our commitment remains to be as inclusive and affirming as possible of diverse experiences, backgrounds, beliefs, bodies, genders, sexualities, and relationships.

Thanks to our supporters

The Women's, as a public hospital, relies on the generous contributions of donors to fund critical clinical research and numerous initiatives detailed in this report. We extend our profound gratitude to our community of supporters, including donors, charitable trusts, and both past and present patients. Their generosity ensures that women and babies, both now and in the future, receive world-class, evidence-based care.

Thanks to our contributors

We extend our heartfelt thanks to everyone who supports our research efforts, including the various funding agencies, our dedicated research staff, collaborators, and supporters, as well as our committed Human Research and Ethics Committee members. Most importantly, we are grateful to the patients and families who participate in our research. Your contributions enable progress, hope, and meaningful change.

Support our work

Gifts, bequests, and grants are vital in supporting the research, innovation, and leadership detailed in this report. They enable the Women's to deliver world-class advances in clinical care, treatment, and social support.

If you would like to support our research efforts, you can donate online at thewomens.org.au/donate or contact our Philanthropy and Community Investment Office on (03) 8345 2954 or email admin.philanthropy@thewomens.org.au

Pictured left: Aunty Gina Bundle, OAM



Foreword

The 2023 Research Report, fittingly titled *The Power of Collaboration*, recognises our collective efforts with researchers, donors, patients, staff, volunteers, academic partners, and governing bodies.

It reflects our commitment to research innovation and excellence and, highlights our unique role, not only as a healthcare leader, but as a champion of evidence-based care and a partner in collaborative innovation.

In the dynamic and rapidly evolving field of women's and neonatal health, we understand that collaboration adds to the power of what we do. It brings diverse perspectives, complementary expertise, inter-disciplinary insights, and opportunities for greater impact.

In this year's report, we are proud to feature stories that demonstrate the tangible impact of our work – a testament to what can be achieved when we collaborate to achieve a common goal. These stories highlight the progress we have made and the thoughtful approaches we have adopted to advance care, treatments and interventions that improve health outcomes for all women and newborns.

Our commitment to collaboration is not just about working together; it's about applying a strengths-based approach as we create real-world solutions that make a difference in people's lives. We know that progress is achieved through the union of diverse perspectives and expertise and, as part of this, we aim to listen to the voice of our patients and consumers.

An example of this is our work to actively transform maternity care by responding to the unique needs of First Nations communities and families, ensuring culturally sensitive and accessible maternity services. Featured on page 18, this research is part of a larger body of ongoing collaborative work that is proving to be successful in Closing the Gap in maternal and child health outcomes.

Our focus on gender equity underscores everything we do and aims to address the historic exclusion of research into health conditions that uniquely affect women. The story on page 14 showcases our collaborative research in endometriosis, an area of women's health which, up until recently, struggled to attract funding. With nine projects at the Women's funded through the Medical Research Future Fund, considerable progress is now underway.

Our long-term commitment to evidence-based care and groundbreaking research is evident on page 16 with our story about our world-class research to improve lung function in very preterm babies. Driven by their passion, our researchers and clinicians are revolutionising the care of pre-term babies with their integrated approach to lifelong wellbeing.

We do not shy away from the big research challenges; on page 10 we present a story on our pioneering work to better understand the variability of ovarian cancer pathology. As this is such a challenging area, collaboration is at the heart of this important work, which is crucial to the development of therapies tailored to specific cancer subtypes.

At the Women's, our specialisation in women's and neonatal health is more than just our area of expertise - it's our passion. As we look to the future, we are excited about Victoria's commitment to establishing a Women's Health Research Institute. This important initiative will serve as a hub for cutting-edge research, attracting more top-tier talent to Australia and fostering an environment where innovative ideas can flourish.

Philanthropy too has been an instrumental part of our success story. The generosity of our donors powers our research, allowing us to explore new frontiers and launch pioneering projects. We thank our donors and supporters, many of whom help to fund our world-class research, and we acknowledge them for their vision and courage.

We are deeply thankful to our research staff and students - for their initiative, drive, and dedication. We congratulate them on their achievements and thank them for their perseverance, especially during challenging economic times.

Our collaborative spirit isn't just about working together; it's about integrating diverse perspectives to create transformative healthcare solutions that truly make a difference.

We hope you enjoy reading the Women's 2023 Research Report.



Professor Sue Matthews
Chief Executive, the Women's



Professor Peter Rogers
Director of Research, the Women's

Research impact





Our strength is translating research knowledge into clinical practice and better health outcomes for our patients. Our researchers are dedicated to finding better treatments and evidence-based approaches, so women and babies have the healthiest futures possible.

From lab to life: Pioneering advances in ovarian cancer research

Ovarian cancer, notoriously difficult to detect early and treat effectively, is seeing new hope through pioneering research.

Associate Professor Orla McNally, Director of the Oncology and Dysplasia Service, along with her colleagues at the Women's, Walter and Eliza Hall Institute of Medical Research (WEHI), and Monash University, are making significant strides in understanding and treating this complex disease.

Their groundbreaking studies are deciphering the variability within ovarian cancer, known as heterogeneity, which is revolutionising treatment approaches.

"When I was learning about ovarian cancer over 30 years ago, we thought it had two subtypes. Now, we know there are multiple layers of subtypes within those, each with different treatment responses,"

says Associate Professor McNally. This detailed understanding is crucial for developing therapies tailored to specific cancer subtypes, improving patient outcomes.

A significant breakthrough involves the role of Interferon- ϵ , a protein with tumour-suppressing capabilities. "Our research indicates that manipulating the interferon response can effectively inhibit tumour progression, presenting a promising strategy for treating ovarian cancer," A/Prof McNally explains.

Another key area of study is homologous recombination (HR) deficiency in high-grade serous ovarian cancer, one of the most aggressive forms of the disease.

By understanding the genetic weaknesses of HR-deficient tumours, researchers can develop targeted therapies that exploit these vulnerabilities, enhancing treatment efficacy while minimising side effects.

The team is also exploring immunotherapy, which uses the body's immune system to fight cancer. Their research has uncovered superior diagnostic biomarkers for high-grade serous ovarian cancer.

"Immunotherapy can provide a more precise attack on cancer cells, potentially leading to better control over the disease compared to traditional chemotherapy," A/Prof McNally says.



"We hope that this study will provide better treatment options for women with aggressive ovarian cancer, ultimately improving their health outcomes and quality of life."

Dr Gwo Ho





“It’s a big collaboration. This teamwork accelerates our progress and helps us validate our findings more robustly.”

Associate Professor
Orla McNally

Another promising development from recent research is the EriBRO study. Dr Gwo Ho, Head of Cancer Immunology Laboratory at Monash University and a key member of A/Prof McNally’s team, says, “We discovered that eribulin, a chemotherapy drug used for breast cancer, is particularly effective in treating ovarian cancer that doesn’t respond to conventional treatments. The more aggressive the cancer, the more effective eribulin seems to be.”

The EriBRO study, endorsed by the Australian New Zealand Gynaecologic Oncology Group (ANZGOG), aims to explore the effectiveness of combining eribulin with bevacizumab, a treatment

targeting blood vessel formation in tumours. “We hope that this study will provide better treatment options for women with aggressive ovarian cancer, ultimately improving their health outcomes and quality of life,” says Dr Ho.

Collaboration is at the heart of these scientific breakthroughs. Institutions like the Women’s, WEHI, and Monash University are working together to accelerate progress and validate findings robustly. “It’s a big collaboration,” says A/Prof McNally. “This teamwork accelerates our progress and helps us validate our findings more robustly.”

As the team pushes the boundaries of what is possible, their work exemplifies the transformative power of dedicated research and collaboration. Their efforts offer a beacon of hope, illuminating the path toward more effective treatments and better patient outcomes.

Every dollar invested in research brings us closer to lifesaving treatments and, ultimately, a cure. Through scientific innovation and collaborative support, we’re giving women with ovarian cancer a fighting chance.



A leap forward in public health



Certain medical discoveries not only mark scientific milestones but also revolutionise public health.

Such is the case with advancements in detecting, preventing, and treating Human Papillomavirus (HPV), the leading cause of cervical cancer. Women's researchers are at the forefront of this effort, working to unravel the complexities of HPV and potentially reshape global healthcare practices.

A key figure in this narrative is Professor Suzanne Garland, Director of the Centre for Women's Infectious Diseases. Her research underscores the transformative power of real-world data in HPV vaccination.

A collaborative study with the Murdoch Children's Research Institute found that a single dose of the HPV vaccine remained effective for eight years among young pregnant women in Fiji.

"Observational data from diverse populations, including Mongolia and Fiji, reaffirm the effectiveness of HPV vaccination in preventing infection and disease," says Prof Garland.

This research offers tangible benefits worldwide.

"This is hugely important within the context of the WHO's elimination strategy for HPV, aiming for 90% of girls to be fully vaccinated by age 15 by 2030," she adds.

Prof Garland's work supports the feasibility of single-dose vaccination, which could democratise access, particularly in low and middle-income countries where cervical cancer mortality rates are highest.

"Changing to one dose would make it logistically easier and cheaper to meet the needs of diverse populations," she explains.

Associate Professor Yasmin Jayasinghe's research in the Women's Gynaecology Research Centre, illuminates the link between HPV exposure and cervical cancer risk in young women.

"We sought to provide evidence-based insights into the impact of HPV vaccination and screening guidelines on cervical cancer incidence," she says.

Her findings show that existing vaccines effectively cover the HPV genotypes linked to cervical cancer. This is good news for young women, given the change to cervical screening recommendations which occurred in Australia in 2017, delaying the commencement of screening until 25 years of age, but they must be vaccinated to benefit.

An unexpected rise in HPV infections among postmenopausal women was observed in studies undertaken by Consultant Gynaecologist Lead for Dysplasia, Dr David Wrede and Gynaecologist, Dr Jeffrey Tan.



"This is hugely important within the context of the WHO's elimination strategy for HPV, aiming for 90% of girls to be fully vaccinated by age 15 by 2030."

Professor Suzanne Garland, AO

This trend was puzzling because conventional wisdom suggested that HPV infections either clear up on their own or lead to precancerous changes over time. Their meticulous analysis revealed a subset of women defying established notions, prompting a call for greater precision in colposcopy and treatment strategies.

This research highlights the crucial role of vaccination in combating HPV-related cancers.

"Vaccination remains our most potent tool in the fight against HPV-related cancers. Our findings reinforce the urgency of maintaining high vaccination rates to achieve long-term public health goals," says Dr Wrede.

As these researchers push the boundaries of knowledge, their collective vision for a future free from HPV-related diseases hinges on sustained investment and collaboration.

"Our journey may have begun decades ago, but the quest for a world free from HPV-related diseases continues unabated," Prof Garland says.

She emphasises the need for continued vigilance in monitoring vaccine efficacy and prioritising vaccination coverage, screening and treatment.

The collective vision and relentless pursuit of innovation by Women's researchers is helping to reshape global health care practice and paving the way for a future where HPV-related diseases are eradicated.

"Vaccination remains our most potent tool in the fight against HPV-related cancers."

Dr David Wrede



Breakthroughs in endometriosis research offer new hope for women



Recent advances in endometriosis research led by a team at the Women's are paving the way for better diagnosis and treatment of this debilitating condition offering new hope to millions of women worldwide.

Endometriosis affects millions, causing chronic pain, infertility, and significantly reducing quality of life

Professor Peter Rogers, Deputy Director of the Women's Gynaecology Research Centre, has dedicated his career to understanding, diagnosing, and treating this condition. His research is part of a comprehensive program funded by the Medical Research Future Fund (MRFF), encompassing nine projects targeting pain and infertility treatments, as well as the diagnosis of initial and recurrent endometriosis.

A standout achievement from this research is a genome-wide association study (GWAS) aimed at identifying the genetic components of endometriosis.

"Our main goal is to improve diagnosis and treatment," says Prof Rogers.

"We have nine different projects within the MRFF grant, all focused on these areas. This research is a collaborative effort, involving a large team of professionals and patients who contribute significantly."

The GWAS revealed that about 50 per cent of a woman's risk of developing endometriosis is inherited. By pinpointing specific genes that increase this risk, researchers aim to enhance diagnostic methods and develop targeted treatments.

"Knowing which genes are involved helps us understand the processes contributing to endometriosis and potentially find methods for treating it," explains Prof Rogers.





Additionally, Prof Rogers' team has developed a groundbreaking method for precisely identifying the stage of the menstrual cycle based on gene expression in endometrial tissue. This advancement is crucial for diagnosing and treating various endometrial pathologies and for optimising timing in assisted reproductive technologies such as IVF.

"We developed a method to precisely determine the menstrual cycle stage based on gene expression. This allows us to compare normal and abnormal cycles with unprecedented precision," Prof Rogers notes.

This method has significant implications for diagnosing conditions such as abnormal uterine bleeding and heavy menstrual bleeding, and it holds promise for broader applications in women's health research.

Despite these advancements, challenges remain. The research projects are complex and ambitious, requiring substantial patient commitment and cooperation. The COVID-19 pandemic further complicated efforts by halting elective surgeries and delaying patient recruitment. Nonetheless, substantial progress has been made, including the development of a patented diagnostic test that has attracted commercial interest.



Ongoing investment is crucial to sustain and expand this vital research. Prof Rogers emphasises the importance of continued support: "There is a huge unmet need. The problem is very much with us, and if you look at the consequences, it's a multi-billion-dollar problem in terms of healthcare costs, lost work opportunities, and the impact on quality of life."

Australia is uniquely positioned to lead in endometriosis research due to its integrated healthcare and research capabilities.

Sustaining this leadership requires continued support to help unlock new treatments and improve the lives of millions of women suffering from endometriosis.

Investing in endometriosis research is investing in the health and wellbeing of women globally. It will profoundly impact the lives of those affected by this pervasive condition, offering hope for a better future.



Transforming neonatal care: The power of research and collaboration

Driven by a relentless curiosity and a mission to tackle the seemingly unanswerable, the work of the Newborn Research team has yielded remarkable results.

At the forefront of this vital field are Professor Peter Davis, Director of Neonatal Medicine, and Jeanie Cheong, Lead Clinician in the High-Risk Newborn Follow-Up Clinic.

Together, Prof Davis and Prof Cheong exemplify how their dual roles as researchers and clinicians are revolutionising the care of preterm infants.

“Care gets better if research is part of the mix, and that’s what the Women’s brings to the table. That combination is very powerful and makes us one of the powerhouses in neonatal research,” says Prof Davis.

Their passion for research and clinical care is intertwined, each reinforcing the other. It’s about more than short-term victories; it’s about laying the foundation for lifelong wellbeing.

“Research is as important as clinical care. Investing in the baby gives you huge returns because they’ve got their whole life ahead of them,” says Prof Cheong.

A standout achievement is the OPTIMIST-A study, a pioneering trial at the Women’s that introduced surfactant therapy to preterm infants without the invasive need for a breathing tube. This innovation has redefined neonatal care, making NICU stays safer and more comfortable for these vulnerable patients.

A recent follow-up involving 486 infants across 33 neonatal intensive care units in 11 countries confirmed the benefits of this therapy, showing significant improvements in lung and general health during the first two years of life. However, as with any medical journey, challenges remain.



A longitudinal study examining nearly three decades of lung function in extremely preterm infants highlighted that despite significant advances in respiratory support, some issues persist. This underscores the necessity for ongoing research to combat chronic lung disease resulting from prematurity.

"Working with newborns is an opportunity to get in right at the start and make a difference," says Prof Davis. "Even little changes to a baby's outcome can have significant importance for that child, their family, and society as a whole."

While surfactant therapy has proven to be a significant breakthrough, the quest for innovation continues. Prof Davis envisions future advancements such as artificial placentas, which could further mitigate lung-related complications in premature infants, ultimately ensuring smoother transitions to healthier lives.

The impact of this groundbreaking work extends beyond the infants to their families, who often face immense uncertainty and stress. Profs Cheong and Davis emphasise the importance of transparent communication and holistic support throughout the neonatal journey.

"Not every outcome is good, and we can't always change the outcome, but we can ensure families feel part of the journey," Prof Cheong notes.

Their work is a testament to the power of collaboration, innovation, and unwavering dedication in shaping the future of neonatal care. As they navigate the complexities of preterm birth, their message is clear: the investment in research today paves the way for a brighter tomorrow for generations to come.



"Working with newborns is an opportunity to get in right at the start and make a difference. Even little changes to a baby's outcome can have significant importance for that child, their family, and society as a whole."

Professor Peter Davis

Better maternity care for First Nations people

Transforming maternity care for Aboriginal women

A groundbreaking study reveals the transformative impact of culturally tailored continuity of midwife care for Aboriginal women, emphasising the need for sustained investment in vital healthcare models.

Led by Professor of Midwifery Della Forster and Research Coordinator Fiona McLardie-Hore, this initiative stems from a 2012 project at the Women's that explored the benefits of continuous midwife care for low-risk women. The positive outcomes, improved clinical results and high satisfaction, caught the eye of the Victorian Aboriginal Community Controlled Health Organisation (VACCHO). "They approached us, saying, 'We want this for our mob.' It was a community-driven request," says Prof Forster.

The project aimed to implement this model in a culturally appropriate manner for Aboriginal women at the Women's, Mercy, and Sunshine hospitals. The focus was on translating the proven benefits of continuity of midwife care to a group that faces significantly poorer health outcomes compared to non-Indigenous women. "We know this model improves outcomes in low-risk women, so translating it to a group who could benefit greatly was crucial," notes Ms McLardie-Hore.

The approach involved deep engagement with the Aboriginal community to ensure culturally safe and responsive care. Over 100 women participated in surveys during pregnancy and postpartum, providing invaluable insights.

"Many women shared how this model changed their perception of and engagement with the healthcare system. It wasn't just about immediate outcomes but also long-term health trajectories," Ms McLardie-Hore explains.



"It's not just about providing culturally safe care, it's about better outcomes"

Cinnamon-Bliss Henry, Aboriginal Hospital Liaison Officer, Badjurr-Bulok Wilam centre at the Women's

A surprising discovery was the high engagement rate. "More than 90 per cent of the women we offered the model to said, 'Yes, please.' This level of engagement speaks volumes about the need for such tailored care," says Prof Forster.

The success of this research underscores the power of collaboration between health services and the Aboriginal community.

"This work couldn't have happened without the support of VACCHO, the Aboriginal Advisory Committee, and the commitment of the Women's, Mercy, and Sunshine hospitals," Prof Forster adds.

The project has redefined how cultural safety is perceived and implemented in healthcare.

The implications are profound. Prof Forster and Ms McLardie-Hore are advocating for policy changes to ensure all women having a First Nations baby in Victoria can access this model of care. "The outcomes are so significant that we believe it should be rolled out across the state," says Prof Forster. The team's next steps involve further advocacy and seeking funding to expand this model, ensuring it becomes an integral part of the healthcare system.

This research highlights the critical need for continued support and investment in culturally tailored healthcare models. By bridging the gap between evidence and practice, we can make a lasting difference in the lives of Aboriginal women and their children, fostering healthier communities and brighter futures. As Ms McLardie-Hore aptly puts it, "A good start in life makes a huge difference, not just for the individual but for generations to come."





Empowering women: Reshaping mental health care after sexual violence

The trauma of sexual violence doesn't end with the incident itself. The aftermath, particularly the struggle to find effective mental health care, can be a prolonged and painful journey.

Family and sexual violence are major health issues and the Women's is committed to improving care and providing support for women who experience them. Addressing this critical issue is the work of Laura Tarzia, Associate Professor in the Department of General Practice and Primary Care, and the Centre for Family Violence Prevention at the Women's.

A/Prof Tarzia's research highlights the challenges women face in accessing mental health care post-sexual assault, addressing both psychological and cultural barriers to effective treatment. Recent studies emphasise the need for trauma-informed and culturally sensitive care protocols, particularly for marginalised groups.

"Trauma-informed care that specifically addresses the needs of women who have experienced sexual violence is different from other types of trauma care," says A/Prof Tarzia.

In a recent study, A/Prof Tarzia and her team examined South Asian women's experiences with family violence and their interactions with healthcare providers. Her study emphasised the need for cultural sensitivity in healthcare, noting that concepts of honour and family can complicate disclosures and responses.

"Healthcare providers must understand these cultural contexts to offer effective support," she explains.

A/Prof Tarzia is also focused on the broader societal misconceptions about sexual violence. Her research highlights how the psychological impacts of lesser-known forms of sexual violence are often overlooked.

"People think about rape, but there are many other behaviours that cause emotional harm and long-term psychological impacts," she says.

"These experiences can be equally devastating and are often neglected in both research and clinical settings."

"We need environments where survivors feel safe to disclose their experiences without facing stigmatisation," says A/Prof Tarzia.



The goal is not only to advance knowledge but to ensure this research translates into tangible benefits for survivors. This work amplifies the voices of victims and survivors, keeping their needs at the centre of their care. It emphasises the fact that when we listen to survivors and foreground their experiences, we can drive real change.

A/Prof Tarzia's studies have specific implications for improving mental health practices, advocating policy changes, and training healthcare providers and has already been the basis of successful grant applications to enhance mental healthcare responses.

A/Prof Tarzia plans to explore under-researched areas such as the experiences of older women with sexual violence, an issue shrouded in cultural taboos.

"Sexual violence is often seen as a young women's issue, but it's not. It happens to older women too; we're just not talking about it."

Despite the importance of her work, sexual violence receives relatively less attention than family or domestic violence and it can be challenging to keep it at the forefront of policy discussions.

"It's challenging to keep it on the radar with politicians and the community," she says.

By enhancing our understanding of the nuanced needs of survivors and advocating for their voices, we can build a more responsive and compassionate healthcare system. This work is not just about research; it's about transforming lives and creating a society where every survivor of sexual violence receives the care and respect they deserve.



Research excellence





The Women's researchers are internationally recognised for their knowledge, expertise, and innovative research. We create an environment of research excellence where people can undertake cutting edge research and drive the translation of research outcomes for women and babies.

Guidelines and major reviews



NHMRC guideline for growth, health and developmental follow-up for children born very preterm

Professor Jeanie Cheong

Professor Jeanie Cheong is Lead Clinician in the High-Risk Newborn Follow Up Clinic at the Women's and Convener of the Victorian Infant Collaborative Study.

Prof Cheong is a consultant neonatologist with expertise in neonatal neurology, neuroimaging and long term follow up. Her research interest is in the long-term health and developmental outcomes of high-risk infants especially those born preterm.

She led the first Australian study of moderate and late preterm children, the findings of which have significantly increased the understanding of development sequelae of a previously understudied group of children.

Prof Cheong is also Co-Group Leader of the Victorian Infant Brain Studies group, a research team based at the Murdoch Children's Research Institute (MCRI) in Melbourne, which focuses on understanding brain development of preterm newborns and improving their outcomes.

In 2023, Prof Cheong led the development of the first Australian Guideline for Growth, Health and Developmental Follow-up for Children

Born Very Preterm, addressing a major gap in the post-discharge care of very preterm infants. Her clinical expertise and knowledge, as well as leadership of the National Health and Medical Research Council (NHMRC) Centre of Research Excellence in Newborn Medicine made her an obvious choice to oversee the new guideline for Australia.

In developing the guideline, multidisciplinary groups from around Australia were engaged, as well as advisors with lived experience of preterm birth.

The guideline includes evidence- and consensus-based recommendations for follow-up with affected children, their families, and carers.

This initiative will improve care for very preterm infants by offering evidence-based guidance for health practitioners, educators, service providers, policymakers, researchers, and communities.

Development of this guideline was funded by a Centre of Research Excellence grant from the NHMRC.





Review: Preeclampsia
Professor Eva Dimitriadis and
Dr Ellen Menkhorst

Professor Eva Dimitriadis and Dr Ellen Menkhorst are researchers in the Women's Gynaecology Research Centre.

Prof Dimitriadis is a Professor in Reproductive Biology at the Department of Obstetrics and Gynaecology, University of Melbourne, a National Health and Medical Research Council Senior Research Fellow and a Fellow for the Society of Reproductive Biology.

Her research focusses on infertility and pregnancy disorders associated with placental insufficiency and endometrial cancer.

Dr Menkhorst is a Senior Research Fellow at the University of Melbourne/ Royal Women's Hospital and a National Health and Medical Research Council funded researcher. Her contribution to early pregnancy research has been driven by the importance of the intrauterine environment for a healthy pregnancy and lifelong health of the mother and child. Dr Menkhorst's current research, uses a multi-omics approach to illuminate the placental dysfunction underlying preeclampsia.

Pre-eclampsia is a life-threatening disease of pregnancy and a leading cause of maternal and neonatal morbidity and mortality. Characterised by sudden onset hypertension, the only 'cure' for pre-eclampsia is delivery of the dysfunctional placenta and baby, often prematurely. There are also long-term implications for the health of both mother and baby going forward.

This timely review into preeclampsia summarises current knowledge of the epidemiology, risk factors, pathophysiology, clinical presentation, diagnosis, prediction, management and outcomes of pre-eclampsia. Patient quality of life and the outstanding research questions aimed at improving clinical practice and understanding the aetiology of pre-eclampsia are also discussed. The review was published in Nature Reviews Disease Primers, a high impact factor journal.

Review: Care after premenopausal risk-reducing salpingo-oophorectomy in high-risk women: Scoping review and international consensus recommendations

Professor Martha Hickey

Professor Martha Hickey is a consultant gynaecologist and director of the Menopause Symptoms After Cancer Clinic at the Women's, the only one of its kind in Victoria where menopause, mental health and cancer are treated together.

Prof Hickey is also Professor of Obstetrics and Gynaecology at the University of Melbourne, Adjunct Professor of Obstetrics, Gynaecology and Reproductive Sciences at Yale University, Connecticut.

Her research expertise is in reproductive endocrinology and includes the menopause, and in particular, the development of menopausal symptoms after cancer. Currently, she is working on a global project with the World Health Organisation on Self-Care and Menopause.

In this timely review overseen by Prof Hickey, the impact of risk-reducing salpingo-oophorectomy (RRSO) on the short and long-term health of women is examined and evidence-based international

consensus recommendations for care (from preoperative counselling to long-term disease prevention) are provided.

RRSO is the term used to describe the removal of healthy ovaries and fallopian tubes specifically to reduce a women's inherited risk of developing ovarian cancer. The procedure occurs between 35-45 years of age and side effects include sterility and surgical menopause.

Although potentially life-saving, RRSO may induce symptoms that negatively affect quality of life and impair long-term health. These include, hot flushes, sleep disturbance and sexual dysfunction, among others. Bone and cardiovascular health can also be compromised. In the past, clinical care following RRSO has often been suboptimal.

The guidelines were developed by a panel of 27 experts, from 12 countries, across 8 disciplines to inform women and clinicians considering the procedure of the risks and options for managing post operative symptoms.



Next generation researchers

The Women's has a proud history of nurturing and guiding emerging researchers and empowering the next generation. Cultivating future researchers is a vital aspect of our research program and essential to advancing the Women's vision and mission.

Our commitment to supporting up and coming researchers ensures a seamless transition of expertise, fostering collaboration and innovation within the broader medical community as our students embark on diverse career paths, both within our institution and beyond.

Here we highlight three of our PhD students.



Sherine Sandhu is undertaking her studies in the Gynaecology Research Centre at the Women's under the supervision of Associate Professor Michelle Peate, Program Leader for the Psychosocial Health and Wellbeing Research (emPoWeR) Unit based at the Department of Obstetrics and Gynaecology, University of Melbourne.

Sherine Sandhu

On completing her Bachelor of Science degree (Honours) at the University of Melbourne, Sherine worked as a research assistant before commencing her PhD at the Women's. Sherine's interest in psychosocial research led her to develop and evaluate the first, evidence-based decision aid for women considering elective egg freezing. Sherine says,

"The number of women considering elective egg freezing has increased, although many find this decision difficult to make. Our decision aid has shown some promising results in helping women decide if egg freezing is right for them. It will be further evaluated in a randomised controlled trial."

The aid provides information on infertility and the process of egg freezing. A/Prof Peate says of Sherine.

"Her work not only provides valuable insights but also empowers women to make informed decisions about their reproductive health."

A/Prof Peate says training students like Sherine to conduct high-quality research is crucial for advancing knowledge and improving health outcomes - and is a deeply rewarding experience.

"Sherine's growth throughout this process, her dedication to her project, and the incredible achievements she has made, exemplifies the importance of empowering the next generation of researchers to address complex and impactful issues."



Anna Kidman and Arun Sett are undertaking their studies in the Newborn Research Centre at the Women's, under the supervision of Professor Peter Davis, Director of the Newborn Research Centre.

Anna Kidman

Anna is a neonatal clinical nurse specialist undertaking PhD studies in the Newborn Research Centre at the Women's. Her interest in neonatal respiratory support, developed while working as a neonatal nurse in Brisbane. This led to her PhD studies investigating how extubation (removal of breathing tube) failure could be reduced in extremely preterm infants.

Babies born before 28 weeks' gestation often need help with breathing because their lungs are not yet fully developed. This often involves support from a ventilator, which provides 'breaths' via a tube in the windpipe.

Anna's research redefines management of preterm infants coming off a ventilator and shows that higher-than-standard continuous positive airway pressure levels are safe and effective.

Her work was published in the high impact journal 'The Lancet: Child and Adolescent Health'.

Prof Davis speaks highly of Anna's research and sees promising career prospects ahead for her.

"It's great to see Anna's work come to fruition. She came to us as a neonatal nurse worried about the number of babies who struggled to come off the ventilator," he says.



"When a baby needs the breathing tube reinserted, it is heartbreaking for parents and frustrating for nurses. The results of Anna's study will help more babies make the transition to a more comfortable, safer form of breathing support."

"For Anna, her PhD and mastery of an important area of clinical care, represents the start of a long career in practical neonatal research."

Dr Arun Sett

Arun completed his medical degree at Monash University and went on to specialise in neonatology; working at the Women's as a Neonatal Fellow until the end of 2023. Arun is undertaking his PhD at the Women's on applications of lung ultrasound to help guide respiratory support in newborns.

Arun's research demonstrates the importance of ultrasound in the monitoring of newborn babies' lungs. The use of lung ultrasound can decrease exposure to harmful radiation and provide reliable guidance on how to best support breathing.

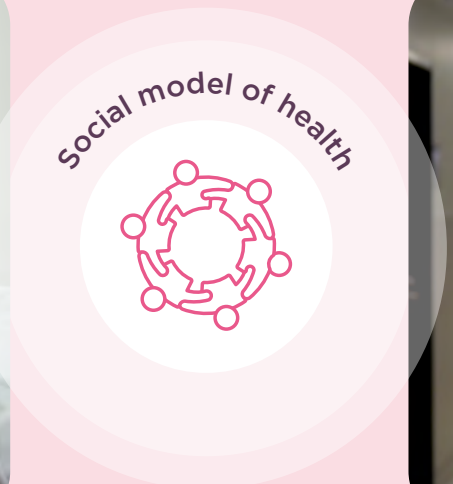
Prof Davis says it's rewarding to see researchers like Arun progress.

"Arun is at the start of an amazing career as an academic neonatologist," he says.

"His PhD puts him at the forefront of international efforts to use ultrasound to monitor newborn babies' lungs, to fine tune their care and improve their outcomes. He joins a growing list of graduates of the Women's training program making a difference to neonatal care around the world."



Clinical trial research





As Australia's first and largest specialist hospital for women and babies, the Women's is ideally placed to lead national and international clinical trials into neonatal and maternal health treatment and care.

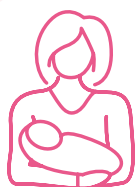
Our Women's program of clinical trials has advanced treatment protocols and therapies, resulting in safer pregnancies, healthier births, and better maternal and neonatal health globally. We rigorously test prenatal care strategies, birthing techniques, neonatal care, and postpartum interventions to identify effective methods for preventing maternal complications and reducing neonatal mortality. By involving pregnant women and newborns in our research, we ensure medical advancements are tailored to their specific needs, driving meaningful improvements in maternal and neonatal healthcare.

We are extremely grateful to the women, babies and families who participate in our clinical trials. Without their courage and support, the advances that have been made would not have been possible.

Following are summaries of recent clinical trials conducted at the Women's program and their impact on the health of women and babies. The titles of these trials may seem unusual or surprising, as they are often acronyms of longer scientific titles that can be cumbersome for regular use.



Maternity and newborn



Clinical trial research



The MAGNOLIA study

Researcher: Professor Della Forster

The MAGNOLIA (Midwifery Caseload Care – Supporting Childbearing Women: A Randomised Controlled Trial) study aims to determine if continuity of care from one midwife throughout pregnancy, birth, and postpartum (caseload midwifery) improves birth outcomes for women experiencing social disadvantages. This group is at a higher risk of having a baby born early (preterm) and of low birthweight. The study involves 1,894 pregnant women across two sites: The Women’s and Northern Health.

Funded by the Medical Research Future Fund, this study addresses the significant issues of babies born preterm (9%) or low birthweight babies (7%) in Australia, both critical indicators of infant health and long-term wellbeing.

A Cochrane review found that midwife-led continuity of care reduces preterm births and fetal/neonatal deaths, however, most existing studies focused on low-risk women.

MAGNOLIA specifically targets higher-risk women, including those on government pensions, teenagers, women who are unpartnered or homeless, smokers and those with a BMI < 18.5 or ≥ 35. The results arising from this trial will lead to the development of better models of care for women experiencing social disadvantage.



PROTECT-Me

Researcher: Dr Clare Whitehead

Fetal growth restriction (FGR) complicates 1 in 14 pregnancies in Australia and affects 30 million pregnancies worldwide. FGR arises when the placenta fails to adequately supply oxygen and nutrients to the developing fetus, leading to injury in the developing brain.

Currently, there is no treatment to protect the brain from the effects of FGR. The Perinatal Research Group is participating in PROTECT-Me, a multi-centre clinical trial investigating the potential of melatonin, a hormone responsible for regulating sleep-wake cycles, to reduce brain injury in FGR.

Women diagnosed with FGR early in pregnancy, are randomised to receive either melatonin or a placebo until delivery. The children will be followed up until 2-3 years of age to determine if melatonin improves the developmental outcomes of babies impacted by FGR. If the outcomes are positive, clinical practice may change so that babies at risk of FGR are routinely given melatonin to protect their developing brains.



TELE-CONNECT

Researcher: Associate Professor Helen Frawley

Urinary incontinence affects one-third of women causing significant physical, social, emotional and financial distress. While pelvic floor muscle training is a recommended treatment for urinary incontinence, its effectiveness in women post-gynaecological cancer treatment is unclear.

A novel study, Telehealth Exercise for Continence After Gynaecological Cancer Treatment (TELE-CONNECT) has been established, funded by Victorian Cancer Agency, to test if this treatment works. Seventy-two participants will take part in this first-ever, randomised trial delivered entirely by telehealth and supported by a home-based, pelvic floor muscle, biofeedback device. A post-intervention assessment will determine the effectiveness of the treatment and a 12-month follow up will assess if the results last. Should the intervention prove successful and be cost-effective, a new pathway for receiving physiotherapy care may become available to women with a range of pelvic floor disorders.



UNCOVER study

Researchers: Dr Liz McLindon and Professor Kelsey Hegarty

Researchers from the Women’s Centre for Family Violence Prevention have conducted groundbreaking research into psychological abuse in relationships. This marks the first large-scale survey examining the trajectory and early warning signs of abuse, involving a nationally representative sample of 815 women survivors of recent intimate partner violence (IPV).

Participants completed an interactive online timeline detailing abusive behaviours. The study revealed that non-physical forms of abuse often preceded physical and sexual violence. Early warning signs of an abusive relationship included isolation and control by a partner.

To assist health practitioners, the findings are being translated into key clinical practice messages so that they:

- Understand that psychological abuse is often a pattern of behaviour with physical and sexual elements;
- Ask women directly if they have experienced psychological abuse: e.g. “Has anyone in your family controlled your day-to-day activities (e.g. where you go, who you see) or put you down?” and
- Validate the harm to women caused by psychological abuse.

This research provides critical insights for early intervention and supports the development of more effective prevention strategies in clinical settings. With more women in our community experiencing IPV, the better informed our health professionals are the more likely it is that these women will receive the support they require.



TURRIFIC study

Researchers: Dr Sarah Price and A/Prof Stefan Kane

Intrahepatic Cholestasis of Pregnancy (ICP) is a disorder affecting approximately 1 in 200 pregnancies, predominantly manifesting with severe third-trimester itch that significantly disrupts sleep. ICP can lead to severe liver dysfunction during pregnancy and while it typically resolves after birth, it increases the long-term risk of liver disease. For fetuses, ICP is associated with a threefold increase in spontaneous preterm birth rates and a heightened risk of stillbirth.

The TURRIFIC study is an international research initiative established to identify the best treatment for ICP. It compares two treatments: Ursodeoxycholic acid (UDCA), the most common and expensive treatment, and Rifampicin, a more cost-effective and accessible alternative. Despite UDCA's widespread use, there is little evidence to support its superiority. Rifampicin's potential efficacy makes it a promising candidate for further investigation.

This study seeks to provide high-quality evidence on the most effective treatment for ICP so that women and their babies receive the best possible care.



Interventions to stop women smoking during pregnancy: a feasibility trial

Researchers: Professor Yvonne Bonomo and Julie Blandthorn

Women affected by substance use often continue smoking during pregnancy, risking adverse outcomes for mothers and babies. Traditional efforts focus on cessation without addressing nicotine addiction. To tackle this, researchers tested an intensive tobacco treatment program that used an internet-based contingency management approach. This included nicotine replacement therapy and telephone counselling for pregnant women at three metropolitan antenatal services. Participants received financial incentives for verified smoking abstinence or reduction.

This innovative, non-face-to-face program was well received and proved effective in addressing tobacco use in high-risk populations. It also highlighted the potential for scalable remote interventions to improve maternal and fetal health, which has implications for regionally based women who may find accessing treatment difficult.



Improving our understanding of period problems among young Australian women.

Researcher: Associate Professor Michelle Peate

A survey by the Women's researchers has revealed the profound impact of heavy menstrual bleeding and dysmenorrhea on 16-24-year-olds. An overwhelming 92 per cent reported being unable to perform regular activities due to pain, and 69 per cent were significantly affected by heavy bleeding. Over three-quarters missed school because of menstruation-related issues, yet only half sought medical help, preferring advice from friends and family. Respondents stressed the need for validation and support from family, friends, and healthcare professionals, and called for greater flexibility and understanding from schools and workplaces. Key supportive measures identified include menstrual leave, flexible work schedules, access to sanitary products, and mental health services. The importance of rapid access to care, timely diagnoses, treatment, and culturally inclusive education was also highlighted. Future studies will focus on interventions to address these challenges and better support young women at school, in the workplace and more broadly within the community.



ESPRESSO Trial

Researcher: Professor Shaun Brenneke

Preeclampsia is a serious and common pregnancy disorder involving high blood pressure, which poses significant risks to both mothers and babies. Currently, the only way to resolve the condition is to end the pregnancy, which often leads to premature delivery. Early use of low-dose aspirin can help prevent or delay preeclampsia, but additional treatments are needed. Laboratory studies suggest that esomeprazole, a common heartburn medication, may inhibit factors contributing to preeclampsia. The Women's hospital is participating in the National Health and Medical Research Council (NH&MRC) -funded ESPRESSO study, which examines whether regular use of esomeprazole combined with low-dose aspirin, starting in early pregnancy, can better prevent preeclampsia and its complications compared to aspirin alone. A medication-based treatment for preeclampsia would significantly reduce risk to mothers and babies and impact clinical practice worldwide.



PLUSS trial

Researcher: Professor Brett Manley

The international PLUSS trial (Preventing Lung Disease Using Surfactant + Steroid) led by the Women's Newborn Research team, investigated whether combining corticosteroids with surfactant, a routine therapy for premature babies, improves survival and reduces severe lung disease in extremely preterm infants. Conducted across 21 units in Australia, Canada, Singapore, and New Zealand, the trial involved 1,059 extremely premature babies. Despite promising results from smaller trials, the PLUSS trial found no support for this treatment in extremely premature infants. These findings will have a profound impact on clinical practice.

Areas of research

Newborn Research Centre

**Professor Peter Davis (Director),
Dr Marta Thio (Deputy Director)**

The Newborn Research Centre team works hard to give all babies, irrespective of their size and maturity at birth, the best chance of growing into healthy adults. The team has demonstrated that it is possible to undertake high-quality studies in the often chaotic and stressful environment of the delivery room, facilitating the development of new ways to monitor and treat newborn babies. The impact that interventions on babies may have on their health in later life, is also being investigated.

Centre for Women's Infectious Diseases

Professor Suzanne Garland AO (Director), Dr Gerald Murray (Senior Scientist)

The Centre for Women's Infectious Diseases conducts clinical research, cutting-edge molecular diagnostics and geno-surveillance in the fields of neonatal and infectious diseases research, including reproductive and sexual health. Key research areas include cervical and anal cancer, and sexual health and mother-to-baby infections, with emphasis on providing evidence for changes that may translate into clinical practice to support improved patient health.

Gynaecology Research Centre

Professor Martha Hickey (Co-director), Professor Eva Dimitriadis (Co-director), Professor Peter Rogers (Deputy Director)

The Women's Gynaecology Research Centre brings together clinical, psychosocial and laboratory expertise to investigate common conditions affecting women of all ages. The centre's research has directly improved patient care through prevention, diagnosis and management of a wide range of conditions affecting women's health.

Women's Cancer Research Centre

Associate Professor Orla McNally (Director Gynaecology Tumour Stream, Victorian Comprehensive Cancer Centre)

The team at the Women's Cancer research centre focuses on gynaecological cancers: uterine; ovarian/ fallopian tube; cervical; and vulval. It's important to understand the conditions which lead to these cancers and the impact of genetics which may put women at increased risk of gynaecological cancers. Translational research (laboratory and clinical) into rare cancers occurs across a range of clinical trials and women are given the opportunity to participate at the Women's and the Victorian Comprehensive Cancer Centre Clinical Trials Unit in Parkville.

Midwifery & Maternity Services Research Unit

Professor Della Forster (Director)

The Midwifery and Maternity Services Research Unit is committed to making sure the care provided to women during pregnancy and childbirth is evidence-based and of the highest possible quality. The focus is on exploring how care is provided so that the best outcomes are achieved for mothers and babies. This includes work on midwifery-led models of care, breastfeeding, and perinatal mental health. Integral to the work, are the views and experiences of women and the midwives who care for them. Developing the research capacity of midwives and nurses is a unit priority.

Centre for Family Violence Prevention

Professor Kelsey Hegarty (Director), Associate Professor Laura Tarzia (Deputy Director)

The Centre for Family Violence Prevention focuses on improving the safety, health and wellbeing of women and their families who have experienced abuse and violence and feel afraid of their partner or family members. The centre conducts practical research, working with women who have lived experience and practitioners, to develop evidence-based models of care for the identification and early intervention of women at risk. With this knowledge, the Women's assists other health services to improve access to safe, appropriate support for women and children and minimise the harm caused by family violence.

Allied Health Research

**Associate Professor
Helena Frawley (Director)**

The Allied Health and Clinical Support Services' directorate encompasses pharmacy; nutrition and dietetics; social work; and physiotherapy. These areas all participate in clinical research to develop evidence-based interventions and treatment for women and babies. Sonographers from the Women's Obstetrics and Gynaecology Ultrasound department play a pivotal in the research conducted by these services.

Pregnancy Research Centre

Professor Shaun Brennecke (Director), Dr Bill Kalionis (Deputy Head, Laboratory Research)

The focus of the Women's Pregnancy Research Centre is to better understand the causes of pregnancy disorders that compromise the health of mothers and their babies. These include miscarriage, preeclampsia, fetal growth restriction, gestational diabetes and preterm labour. The team applies contemporary research techniques to the investigation of these conditions to improve evidence-based clinical practice.

Social Model of Health Research

Clare Manning (Director)

A woman's health and well-being is affected not only by medical problems but by social and environmental factors. These non-medical factors include socioeconomic status; access to education and housing; freedom from violence and more. The division's research explores how to address health inequities caused by these social determinants of health.

Anaesthetics Research

Dr Patrick Tan (Director)

The goal of the Anaesthetics Research Centre is to reduce maternal suffering and death by achieving optimal maternal health before, during and after birth. The centre's work addresses the problems of high blood pressure, obstetric critical illness, and improving anaesthesia and analgesia for pregnant women, especially in the perioperative period. Research at the centre also aims to increase understanding of heart function and structure in pregnant women and the cause of preeclampsia.

Reproductive Services Research

Dr Wan Tin Teh (Group head)

The Reproductive Research Team is dedicated to advancing fertility-related research and enhancing patient care. Five key domains which include enhancing access to fertility options, fertility preservation, endometrial research, optimising fertility treatments and improving IVF pregnancy outcomes are addressed by our research.

Obstetric Medicine Research Group

Dr Sarah Price (Group Head)

The lifelong importance to mother and baby of managing maternal medical conditions before, during and after pregnancy is increasingly recognised. The Obstetric Medicine Research Group aims to improve outcomes for all women with medical disorders related to pregnancy and give their babies the best chance of lifelong good health.

Perinatal Research

Dr Clare Whitehead (Group head)

The Women's Perinatal research group focusses on improving care and outcomes for both mothers and their infants impacted by pregnancy complications including preterm birth, fetal growth restriction and preeclampsia. We achieve this by better understanding why complications arise, how to detect them early and developing and evaluating treatments for them using innovative clinical trial designs.

Imaging and Ultrasound Research Group

Dr Debbie Nisbet (Group Head)

Imaging and ultrasound research includes the prevention, management and diagnosis of issues which may be of fetal or maternal origin. Current examples include outcomes after chorion villous (placental tissue) sampling; the correct medication to use for fetal tachyarrhythmias (abnormal heart rhythm) and the use of aspirin to prevent early onset preeclampsia in twin pregnancies. Studies related to women's health issues include adenomyosis and endometriosis and the significance of ultrasound findings such as endometrial cysts.

Gandel Simulation Service Research

Dr Rebecca Szabo (Group Head)

The Gandel Simulation Service uses simulation as a tool for learning and research. It is focused on teamwork, health systems integration, quality improvement and patient safety, as well as researching simulation-based education and other simulation activities. The team uses simulation, human factors, education, implementation and improvement science principles and expertise; this is termed translational simulation.

Publications 2023

A total of 294 papers were published in peer reviewed medical journals by the Women's in 2023.

The publications below have been selected to highlight the quality of our research at a national and international level. The papers have been selected based on the quality of the journal in which they are published. The journals selected are in the top two per cent of journals, as is indicated by an 'impact factor' greater than 10. Impact factor (as determined by InCites Journal Citation Reports) is a measure of the frequency with which the 'average article' in a journal has been cited in a particular year or period.

Adamson, S. R., Higgins, C. L., & Veysey, E. (2023). *Hailey-Hailey disease (benign familial pemphigus) responsive to treatment with ocrelizumab for multiple sclerosis*. **The British Journal of Dermatology**, 189(2), 232-234.

Burdett, N. L., Willis, M. O., Alsop, K., Hunt, A. L., Pandey, A., Hamilton, P. T., Abulez, T., Liu, X., Hoang, T., Craig, S., Fereday, S., Hendley, J., Garsed, D. W., Milne, K., Kalaria, S., McNally, O. et al. (2023). *Multiomic analysis of homologous recombination-deficient end-stage high-grade serous ovarian cancer*. **Nature Genetics**, 55(3), 437-450.

Byrne, A. B., Arts, P., Ha, T. T., Kassahn, K. S., Pais, L. S., O'Donnell-Luria, A., Babic, M., Frank, M. S. B., Feng, J., Wang, P., Lawrence, D. M., Eshraghi, L., Arriola, L., Toubia, J., Nguyen, H., McGillivray, G., et al. (2023). *Genomic autopsy to identify underlying causes of pregnancy loss and perinatal death*. **Nature Medicine**, 29(1), 180-189.

Canfell K, Chiam K, Nickson C, Mann GB. (2023) *The complex impact of COVID-19 on cancer outcomes in Australia*. **Med J Aust**. 219(9):402-404.

Calvert, C., Brockway, M. M., Zoega, H., Miller, J. E., Been, J. V., Amegah, A. K., Racine-Poon, A., Oskoui, S. E., Abok, I. I., Aghaeepour, N., Akwaowo, C. D., Alshaiikh, B. N., Ayede, A. I., Whitehead, C., et al. (2023). *Changes in preterm birth and stillbirth during COVID-19 lockdowns in 26 countries*. **Nature Human Behaviour**, 7(4), 529-544.

Crean, A. J., Afrin, S., Niranjani, H., Pulpitel, T. J., Ahmad, G., Senior, A. M., Freire, T., Mackay, F., Nobrega, M. A., Barrès, R., Simpson, S. J., & Pini, T. (2023). *Male reproductive traits are differentially affected by dietary macronutrient balance but unrelated to adiposity*. **Nature Communications**, 14(1), 2566.

Dakic, J. G., Hay-Smith, E. J. C., Lin, K.-Y., Cook, J. L., & Frawley, H. C. (2023a). *Women's preferences for pelvic floor screening in sport and exercise: A mixed-methods study integrating survey and interview data in Australian women*. **British Journal of Sports Medicine**, 57(24), 1539-1549.

Dall, G., Vandenberg, C. J., Nestic, K., Ratnayake, G., Zhu, W., Vissers, J. H. A., Bedó, J., Penington, J., Wakefield, M. J., Kee, D., Carmagnac, A., Lim, R., Shield-Artin, K., Milesi, B., Lobley, A., Hamilton, A., McNally, O., Scott, C. L., et al. (2023). *Targeting homologous recombination deficiency in uterine leiomyosarcoma*. **Journal of Experimental & Clinical Cancer Research**: CR, 42(1), 112.

Dargaville, P. A., Kamlin, C. O. F., Orsini, F., Wang, X., De Paoli, A. G., Kanmaz Kutman, H. G., Kornhauser-Cerar, L., Derrick, M., Cheong, J. L. Y., Davis, P. G. et al. (2023). *Two-Year Outcomes After Minimally Invasive Surfactant Therapy in Preterm Infants: Follow-Up of the OPTIMIST-A Randomized Clinical Trial*. **JAMA**, 330(11), 1054-1063.

De Silva, D. L., Stafford, L., Skandarajah, A. R., Sinclair, M., Devereux, L., Hogg, K., Kentwell, M., Park, A., Lal, L., Zethoven, M., Jayawardana, M. W., Chan, F., Butow, P. N., James, P. A., Mann, G. B., Campbell, I. G., & Lindeman, G. J. (2023). *Universal genetic testing for women with newly diagnosed breast cancer in the context of multidisciplinary team care*. **The Medical Journal of Australia**, 218(8), 368-373.

Dimitriadis, E., Rolnik, D. L., Zhou, W., Estrada-Gutierrez, G., Koga, K., Francisco, R. P. V., Whitehead, C., Hyett, J., da Silva Costa, F., Nicolaidis, K., & Menkhorst, E. (2023b). *Pre-eclampsia*. **Nature Reviews. Disease Primers**, 9(1), 8.

Doyle, L. W., Ranganathan, S., & Cheong, J. (2023). *Bronchopulmonary dysplasia and expiratory airflow at 8 years in children born extremely preterm in the post-surfactant era*. **Thorax**, 78(5), 484-488.

Doyle, L. W., Ranganathan, S., Spittle, A. J., Opie, G., Mainzer, R. M., & Cheong, J. L. Y. (2023). *Expiratory airflow at 7-8 years of age in children born extremely low birthweight from 14 years before to 14 years after the introduction of exogenous surfactant*. **EClinicalMedicine**, 62, 102115.

Erikson, E. J., Edelman, D. A., Brewster, F. M., Marshall, S. D., Turner, M. C., Sarode, V. V., & Brewster, D. J. (2023). *The use of checklists in the intensive care unit: A scoping review*. **Critical Care (London, England)**, 27(1), 468.

Gilchrist, C. P., Kelly, C. E., Cumberland, A., Dhollander, T., Treyvaud, K., Lee, K., Cheong, J. L. Y., Doyle, L. W., et al. (2023). *Fiber-Specific Measures of White Matter Microstructure and Macrostructure Are Associated with Internalizing and Externalizing Symptoms in Children Born Very Preterm and Full-term*. **Biological Psychiatry**, 93(6), 575-585.

Hiscock, R. J., Atkinson, J. A., Tong, S., Walker, S. P., Kennedy, A., Cheong, J. Y. L., Quach, J. L., Gurrin, L. C., Hastie, R., & Lindquist, A. (2023). *Educational Outcomes for Children at 7 to 9 Years of Age After Birth at 39 vs 40 to 42 Weeks' Gestation*. **JAMA Network Open**, 6(11), e2343721.

Hui, L., Marzan, M. B., Rolnik, D. L., Potenza, S., Pritchard, N., Said, J. M., Palmer, K. R., Whitehead, C. L., Sheehan, P. M., Ford, J., Mol, B. W., & Walker, S. P. (2023). *Reductions in stillbirths and preterm birth in COVID-19-vaccinated women: A multicenter cohort study of vaccination uptake and perinatal outcomes*. **American Journal of Obstetrics and Gynecology**, 228(5), 585.e1-585.e16.

Kennedy, A. L., Vollenhoven, B. J., Hiscock, R. J., Stern, C. J., Walker, S. P., Cheong, J. L. Y., Quach, J. L., Hastie, R., Wilkinson, D., McBain, J., Gurrin, L. C., MacLachlan, V., Agresta, F., Baohm, S. P., Tong, S., & Lindquist, A. C. (2023). *School-age outcomes among IVF-conceived children: A population-wide cohort study*. **PLoS Medicine**, 20(1), e1004148.

- Kidman, A. M., Manley, B. J., Boland, R. A., Malhotra, A., Donath, S. M., Davis, P. G. & Bhatia, R. (2023). *Higher versus lower nasal continuous positive airway pressure for extubation of extremely preterm infants in Australia (ÉCLAT): A multicentre, randomised, superiority trial.* **The Lancet. Child & Adolescent Health**, 7(12), 844-851.
- Manley, B. J., & Hodgson, K. A. (2023). *Addressing the subpar success rates of infant intubation.* **The Lancet. Child & Adolescent Health**, 7(2), 80-81.
- Marino, J. L., Lin, A., Davies, C., Kang, M., Bista, S., & Skinner, S. R. (2023). *Childhood and Adolescence Gender Role Nonconformity and Gender and Sexuality Diversity in Young Adulthood.* **JAMA Pediatrics**, 177(11), 1176-1186.
- Marks ZRC, Campbell NK, Mangan NE, Vandenberg CJ, Gearing LJ, Matthews AY, Gould JA, Tate MD, Wray-McCann G, Ying L, Rosli S, Brockwell N, McNally O; Australian Ovarian Cancer Study; McNeish IA, Bowtell DL, de Weerd NA, Scott CL. et al. (2023) *Interferon-ε is a tumour suppressor and restricts ovarian cancer.* **Nature**. 620(7976):1063-1070.
- McLachlan, H., Newton, M., McLardie-Hore, F., McCalman, P. R., & Forster, D. (2023). *Improving outcomes for First Nations mothers and babies in Australia through culturally safe continuity of midwifery care: The time for scale-up is now!* **EClinicalMedicine**, 61, 102093.
- McQuilten, Z. K., Venkatesh, B., Jha, V., Roberts, J., Morpeth, S. C., Totterdell, J. A., McPhee, G. M., Abraham, J., Bam, N., Bandara, M., Bangi, A. K., Barina, L. A., Basnet, B. K., Bhally, H., Bhusal, K. R., Bogati, U., Bowen, A. C., Burke, A. J., Christopher, D. J., ...Tong, S. Y. C. (2023). *Anticoagulation Strategies in Non-Critically Ill Patients with Covid-19.* **NEJM Evidence**, 2(2), EVIDoaa2200293.
- McRae JE, McHugh L, King C, Beard FH, Blyth CC, Danchin MH, Giles ML, Mohammed H, Wood N, Macartney K. (2023) *Influenza and pertussis vaccine coverage in pregnancy in Australia, 2016-2021.* **Med J Aust**. 19;218(11): 528-541.
- Mileshkin, L. R., Moore, K. N., Barnes, E. H., Gebiski, V., Narayan, K., King, M. T., Bradshaw, N., Lee, Y. C., Diamante, K., Fyles, A. W., Small, W. J., Khaw, P., Brooks, S., Quinn, M., et al. (2023). *Adjuvant chemotherapy following chemoradiotherapy as primary treatment for locally advanced cervical cancer versus chemoradiotherapy alone (OUTBACK): An international, open-label, randomised, phase 3 trial.* **The Lancet. Oncology**, 24(5), 468-482.
- Moreno I, Capalbo A, Mas A, Garrido-Gomez T, Roson B, Poli M, Dimitriadis E, Santamaria X, Vilella F, Simon C. (2023) *The human periconceptual maternal-embryonic space in health and disease.* **Physiol Rev**. 103(3):1965-2038.
- Murray, G. L., Plummer, E. L., Bodiabadu, K., Vodstrcil, L. A., Huaman, J. L., Danielewski, J. A., Chua, T. P., Machalek, D. A., Garland, S., Doyle, M., Sweeney, E. L., Whiley, D. M., & Bradshaw, C. S. (2023). *gyrA Mutations in Mycoplasma genitalium and Their Contribution to Moxifloxacin Failure: Time for the Next Generation of Resistance-Guided Therapy.* **Clinical Infectious Diseases: An Official Publication of the Infectious Diseases Society of America**, 76(12), 2187-2195.
- Rahmioglu, N., Mortlock, S., Ghiasi, M., Møller, P. L., Stefansdottir, L., Galarneau, G., Turman, C., Danning, R., Law, M. H., Sapkota, Y., Donohue, J. F., Healey, M., Girling, J. E., Rogers, P. A., et al. (2023). *The genetic basis of endometriosis and comorbidity with other pain and inflammatory conditions.* **Nature Genetics**, 55(3), 423-436.
- Sharma, K., Machalek, D. A., Toh, Z. Q., Amenu, D., Muchengeti, M., Ndlovu, A. K., Mremi, A., Mchome, B., Vallely, A. J., Denny, L., Rees, H., & Garland, S. M. (2023). *No woman left behind: Achieving cervical cancer elimination among women living with HIV.* **The Lancet. HIV**, 10(6), e412-e420.
- Smith, E. R., Champion de Crespigny, P. J., Vally, F., Hewitson, T. D., Toussaint, N. D., Cade, T. J., & Holt, S. G. (2023). *Cord blood effectively resists mineralization through mechanisms that stabilize calciprotein particles.* **Kidney International**, 103(4), 782-786.
- Smith, E. R., Oakley, E., Grandner, G. W., Rukundo, G., Farooq, F., Ferguson, K., Baumann, S., Adams Waldorf, K. M., Afshar, Y., Ahlberg, M., Ahmadzia, H., Akelo, V., Aldrovandi, G., Bevilacqua, E., Whitehead, C. et al. (2023). *Clinical risk factors of adverse outcomes among women with COVID-19 in the pregnancy and postpartum period: A sequential, prospective meta-analysis.* **American Journal of Obstetrics and Gynecology**, 228(2), 161-177.
- Sullivan, T. R., Gould, J. F., Bednarz, J. M., McPhee, A. J., Gibson, R., Anderson, P. J., Best, K. P., Sharp, M., Cheong, J. L. Y., Opie, G. F., Travadi, J., Davis, P. G., Simmer, K., Collins, C. T., Doyle, L. W., & Makrides, M. (2023). *Mediation Analysis to Untangle Opposing Associations of High-Dose Docosahexaenoic Acid with IQ and Bronchopulmonary Dysplasia in Children Born Preterm.* **JAMA Network Open**, 6(6), e2317870.
- Teh, W. T., Chung, J., Holdsworth-Carson, S. J., Donoghue, J. F., Healey, M., Rees, H. C., Bittinger, S., Obers, V., Sloggett, C., Kendarsari, R., Fung, J. N., Mortlock, S., Montgomery, G. W., Girling, J. E., & Rogers, P. A. W. (2023). *A molecular staging model for accurately dating the endometrial biopsy.* **Nature Communications**, 14(1), 6222.

Grants 2023

Australian Research Council (ARC)

Guy R, Broom A, Whiley D, Bradshaw C, Applegate T, Treloar C, Wiseman V, Huston W, Williamson D, Kaldor J, Valley A, Hocking J, Regan D, Donovan B, Kelly-Hanku A, Murray G. Industrial Transformation Research Program. *Research Hub to Combat Antimicrobial Resistance*. \$10,000,000; 2020-2024.

Spangaro J, Hegarty, K, Rutherford A, Zwi A, Man N, McMahon T, Perry A, Koziol-McLain J. Linkage Program. *Screening and responding to domestic violence experienced by refugee women* (SAHAR project). \$449,514; 2020 -2023.

National Health and Medical Research Council (NH&MRC)

Clinical Trials and Cohort Studies Grants

Brown S, Gartland D, Giallo R, Carlin J, Gold L, Hegarty K, Sanci L, Fogarty A, Herrman H, Macmillan H. *Uncovering the hidden impacts and costs of exposure to intimate partner violence in childhood: a 20-year cohort study*. \$1,595,473; 2022-2024.

Mishra G, Hickey M, Dobson A, Wilson L, Doust J, Tooth L, Moss K, Buckley L. *Maternal and early life origins of adolescent menstrual disorders and pelvic pain*. \$1,475,456; 2022-2027.

Said J, Groom K, Crowther C, Doyle L, Karahalios A. *PRECeDe: Prevention of neonatal Respiratory morbidity with antenatal corticosteroids prior to Elective Caesarean section in women with Diabetes: A Randomised trialDE*. \$3,409,951; 2022-2027.

Stark M, Collins C, Sullivan T, Andersen C, Morton R, Marks D, Owen L. *The effect of transfusion with washed versus unwashed red blood cells to modify neonatal morbidity and mortality: A randomised controlled trial*. \$2,071,936; 2020-2024.

Centre for Clinical Research Excellence

Cheong J, Doyle L, Davis P, Anderson A, Spittle A, Hunt R, Thompson D, Lee K, Manley B, Owen L. *Centre for Research Excellence in Newborn Medicine*. \$2,496,997; 2019-2023.

Mishra G, Hickey M, Dobson A, Gannon B, Doust J, Fisher J, Cicuttini F, Huxley R, Tooth L, Brown H. *Centre of Research Excellence on Women and Non-communicable Disease (CRE WaND): Prevention and Detection*. \$2,495,848; 2018-2023.

Teede H, Norman R, Mishra G, Boyle J, Hart R, Mol B, Moran L, Hickey H, Laven J, Rodgers R. *Centre of Research Excellence - Women's Health in Reproductive Life (CRE WHiRL)*. \$2,499,056; 2020- 2024.

Canfell K, Brotherton J, Saville M, Valley A, Garland S, Bateson D, Guy R, Simms K, Whop L, Kaldor J. *Centre for Research Excellence in Cervical Cancer Control (C4)*. \$2,500,000; 2023-2027.

Mazza D, Black K, Bateson D, Norman W, Mishra G, Fisher J, Grzeskowiak L, Edvardsson K, Tarzia L, Cameron S. *SPHERE - The Centre of Research Excellence in Women's Sexual and Reproductive Health in Primary Care*. \$2,500,000; 2023-2028.

Development Grants

Theda C, Prentice E, Pflaumer A, Grayden D, Chia L. *The Neonav ECG Tip Location System: Better & safer care for paediatric intensive care patients*. \$879,010; 2021-2023.

Ideas Grants

Crossley K, DeKonick P, Hodges R, Thio M. *Reducing the risk of pulmonary hypertension in infants with a congenital diaphragmatic hernia*. \$920,076; 2020-2023.

Hegarty K, Tarzia L, Humphreys C, Murray E, Hameed M, Feder G. *BETTER MAN Project: Tailored early online intervention for men using intimate partner violence*. \$506,202; 2021-2023.

Jordan S, Wilson L, Hickey M. *Hysterectomy, Oophorectomy and Long-term chronic Disease - the HOLD study*. \$690,000; 2021-2024.

Ingram W, Amir L. *A paradigm shift in lactational mastitis: Exploration of immune factors in breast milk: cohort study of women at high and low risk mastitis*. \$723,935; 2022-2024.

Parkington H, Sheehan P. *Mechanisms underlying the generation of spontaneous contractions in human uterine muscle: Potential therapeutic target for dysfunctional labour*. \$374,926; 2021-2023.

Menkhorst E, Dimitriadis E, Nicolaides K, Zhou W. *Uncovering and detecting placental dysfunction in late-onset preeclampsia*. \$1,222,195; 2023-2025.

Investigator Grants

Garland S. Leadership 3. *Improving Reproductive Health Through Infectious Diseases Research*. \$1,957,108; 2021-2025.

Hickey M. Leadership 2. *Better evidence and new tools to improve health after surgical menopause*. \$1,855,260; 2021-2025.

Lensen S. Emerging Leadership 1. *Towards evidence-based use of IVF add-ons in Australia*. \$645,205; 2021-2025.

Price S. *Improving maternal metabolic health prior to pregnancy to prevent metabolic disease in the offspring*. \$650,740; 2022-2026.

Scott C. *Super-Responders and Super-Survivors - how to dramatically improve cancer outcomes*. \$2,372,570; 2022-2027.

Manley B. *Improving Outcomes for Preterm Infants Through Randomised Clinical Trials*. \$2,354,074; 2023-2027.

Cheong J. *Optimising lifelong health and development for our most immature newborns*. \$2,505,432; 2023-2027.

Owen L. *Lungs for life: a programme of clinical trials to improve respiratory outcomes for premature babies*. \$1,345,834; 2023-2027.

Partnership Projects

Spittle A, Novak I, Boyd R, Morgan C, Doyle L, Dale R, Scuffham P, Whittingham K, Colditz P, Pannek K. *Early diagnosis and early intervention for infants with cerebral palsy: implementation of international evidence-based guidelines into practice*. \$1,196,362; 2018-2023.

Koplin J, Clifford V, Amir L, Fisher J, Dalziel K, Price S, Tottman A, Rumbold A, Perrett K, Klein L. *Pasteurised donor human milk supplementation for term babies*. \$1,126,309; 2023-2028.

Project grants

Chamberlain C, Atkinson C, Herrman H, Campbell S, Lovett R, Canuto K, Nicholson J, Segal L, Mohamed J, McMahon M. *Healing the past by Nurturing the Future: perinatal awareness, recognition, assessment and support for Aboriginal and Torres Strait Islander parents experiencing complex trauma - Phase 3*. \$1,100,000; 2022-2026.

Kaldor K, Machalek D, Delany-Moretlwe S, Rees H, Chikandiwa A, Brotherton J, Petoumenos K, Cornall A, Vallely A. *Impact of 2-dose and 1-dose human papillomavirus (HPV) vaccination schedules on community level HPV prevalence in South African adolescent girls (The HOPE study)*. \$1,482,052; 2019-2023.

Manley B, Kamlin CO, Davis P, Doyle L, McKinlay C, Schmolzer G, Jacobs S, Cheong J, Dargaville P, Donath S. *Intratracheal budesonide mixed with surfactant to reduce bronchopulmonary dysplasia in extremely preterm infants - the PLUSS Study*. \$2,113,820; 2019-2023.

Skinner S, Marino J, Lymer S, Doherty D, Steinbeck K, Straker L, Kang M, Tait R. *The health, social and economic implications of risk-taking in adolescence over the life-course: a data linkage study of the Raine cohort*. \$1,061,014; 2019-2023.

Personal support

Davis PG. Practitioner Fellowship. *Generating and applying clinical research to improve the outcomes of neonatal intensive care*. \$585,270; 2019-2023.

Special Initiative: Mental Health

Palmer V, Gunn J, Pikis J, Patton G, Eades S, Wheeler A, Kisely S, Hiscock H, Panellis C, Maybery D, Lautenschlager N, Almeida O, Sanci L, Larkins S, Wright M, Morgan V, Galletly C, Brophy L, Hegarty K, Harris M, Laboupoulos J, Neil A, Chapman W, Preen D, Harvey C, Roper C, Bowman J, Lim M, Baker E, Parsell C, Coghill D, Hamilton B, Bennett J, Burchill L, O'Donnell M. *ALIVE - A National Research Translation Centre to implement Mental Health Care at Scale*. \$10,000,000; 2021-2026.

Medical Research Future Fund (MRFF)

Emerging Priorities and Consumer Driven Research

Rogers P, Healey M, Holdsworth-Carson S, Donoghue J, Frawley H, Cheng C. *Improving treatment and diagnosis of endometriosis*. \$3,929,234; 2020-2025.

Teede H, Geelhoed G, Arnott L, Boyle J, Byles J, Chambers G, Clifton V, Frayne J, Glover K, Hickey M, Hart R, Larkins S, Loxton D, Makrides M, Mishra G, Nagle C, Nippita T, Perz J, Walker S, Zaman S. *National Women's Health Research, Translation and Impact Network (WHRTN)*. \$5,000,000; 2020-2024.

Clinical Trials Activity

Said J, Groom K, Crowther C, Morris J, Doyle L, Forster D, Zeps N, Harding J, Henry A, Whitehead C. International Clinical Trials Collaborations. *The C*STEROID Trial: An international, randomised placebo-controlled trial to determine the effect of antenatal corticosteroids on newborn health when given prior to planned caesarean section birth from 35+0 to 39+6 weeks of pregnancy*. \$2,151,495; 2021-2025.

Clinical Translation and Commercialisation

Theda C, Navi Medical Technologies. *Safer care for critically-ill children: clinical translation of a new medical device to place and monitor paediatric central vascular catheters*. \$1,239,187; 2022-2024.

Preventative and Public Health Research

Chamberlain C, Marriott R, Langton M, Gray P, Krakouer J, Atkinson C, Canuto K, Herrman H, Kendall S, McLachlan H, Segal L, Walker S, Skouteris H, Forster D, Fisher J, Atkinson J, Reibel T, Kotz J, Ah Chee V, Walker R, Eades AM, Singh D, Mohamed J, Campbell P, Andrews S, Bowman D, Davis E, Jones K, Fiolet R, Kamitsis L, Bright T, Smith K, Russ V, McCalman P, Bundle Gina, Elliott A, Priest N, Andrews J, Stewart S, Dent A, Johnston L, Davis MT, Carmody D, Lipscomb A, Tye O, Reynolds K, Reppington P, Gliddon J. *Replanting the birthing trees to support First Nations Parents and Babies*. \$4,999,905; 2022-2025.

Forster D, Kane S, McLachlan H, Jacobs S, Shafiei T, Nguyen C, Nguyen T. *Exploring the impact of midwife-led group antenatal care on caesarean section rates and infant health: a multi-site randomised controlled trial*. \$1,284,106; 2021-2026.

Giles M, Kollmann T, Davey M, Amenyogbe N. *The protective effect of maternal immunisation on obstetric outcomes: characterising the underlying mechanisms and impact on newborn immune function*. \$1,146,489; 2021-2025.

McLachlan H, Forster D, Kane S, Sandall J, Shafiei T, Cuzzilla R, Shiell A, Nguyen C, Newton M, Kingsley M. *Exploring the impact of caseload midwifery on preterm birth among vulnerable and disadvantaged women: a multi-centre randomised controlled trial*. \$1,598,496; 2020-2024.

Spittle, A. *Tele-rehabilitation for early intervention to improve neurodevelopmental outcomes of infants born preterm and their patients' wellbeing: a randomised controlled trial*. \$1,819,842; 2020-2024.

Indigenous Health Research

Bailey S, Finlay SM, Mitchell F, Larsen P, Baur L, Dickson ML, Grant JM, Forster DA, Wright DC, Springall T. *Decolonising lactation care to support the initiation and maintenance of breastfeeding among First Nations women*. \$973,863; 2023-2025.

Clinician Researchers

Jayasinghe Y, Anazodo A, Sullivan M, Orme L, Zacharin M, McCarthy M, Stern C, Lantsberg D, Anderson R, Gomez-Lobo V, Yano J, Winstanley M, Super L, Lockwood L, Heath J, Ryan J, Ledger W, Ryan J, Julania S, Hunter T, Kabalan Bseza P, Manudhane R, Reid S, Wanaguru D, Slonim M, Rozen G, Yazdani A. *The Australian New Zealand Oncofertility Clinical Trials Network*. \$2,999,970; 2021-2025.

Whitehead C, Manley B, Groom K, Davis P, Lee K, Mol B, Newnham J, Webb S, Morris J, Forster D, Lui K, Cheong J, Palmer K, Kumar S, Gordon A, Stark MJ, Strunk T, Dargaville P, Unger H, Dalziel K, Hua X, Huang L. *Transforming Clinical Research to Improve Outcome for Preterm Infants*. \$2,642,199; 2021-2025.

Australian Government Accelerating Commercialisation Grant

Theda C, Navi Medical Technologies. *Neonav: medical device to enable safer care for critically-ill newborns*. \$600,000; 2022-2024.

Student completions

Doctor of Philosophy

Brennen R. PhD, University of Melbourne. *Pelvic floor disorders after gynaecological cancer treatment*. Supervisors: Frawley H, Denehy L.

Sorby K. PhD, Monash University. *Non-invasive testing of embryonic aneuploidy during IVF*. Supervisor: Dimitriadis E.

Misiakos G. PhD, Swinburne University of Technology. *A novel framework for designing with vulnerable people and sensitive topics*. Supervisors: Taffe S, Jayasinghe Y, Paulovich B, Peate M.

Rodrigo R. PhD, La Trobe University. *Optimal method to express, store and transport breast milk from home to hospital in two settings: a developed and a developing country*. Supervisors: Amir L, Forster D.

McLardie-Hore F. PhD, La Trobe University. *RUBY – Ringing up about breastfeeding early – a randomised controlled trial*. Supervisors: Forster D, McLachlan H, Shafiei

Zheng S. PhD, University of Melbourne. *The Effect of Extracellular Vesicles on Damaged Endothelial Cells: Modelling Preeclampsia*. Supervisors: Kalionis B, Kokkinos M, Georgiou G, Ye L, Brennecke S.

Masters

Barton S. Masters, University of Melbourne. *miR-23b-3p alters human endometrial receptivity implying a role in implantation*. Supervisor: Dimitriadis E.

Dowing P. Masters, University of Melbourne. *Endometrial epithelial cell effects on blastocyst implantation*. Supervisor: Dimitriadis E.

Kaur H. Masters, University of Melbourne. *Developing a framework for Clinical Practice Guidelines*. Supervisors: Jayasinghe Y, Assis M.

Kwan T. Masters, University of Melbourne. *Exploring the effects of human papillomavirus (HPV) vaccination on diversity of circulating genotypes*. Supervisors: Haqshenas G, Murray G, Garland S, Machalek D.

Bachelor Degree (Honours)

Paterson S. BSc(Hons), University of Melbourne. *Safety and efficacy of FP procedures in children*. Supervisors: Jayasinghe Y, Assis M.

Saggio I. BSc(Hons), University of Melbourne. *Evaluating a Fertility Preservation Decision Aid with Eye-Tracking Technology: A Pilot Study*. Supervisors: Jayasinghe Y, Assis M.

Kane C. BSc(Hons), University of Melbourne. *Accuracy of self-reported HPV vaccination status among Australian men and women*. Supervisors: Machalek D, Murray G, Garland S.

Rajapakse D. BSc(Hons), University of Melbourne. *Tailoring the 'Most Bothersome Symptom' approach for endometriosis research*. Supervisor: Lensen S.

Liu K. BSc(Hons), University of Melbourne. *Post of Care testing for the diagnosis of gestational diabetes*. Supervisors: Price S, Nankervis A, Barmanray R.

Medical Degree Research Project (MDRP)

Yang S. MDRP, University of Melbourne. *Values of maternal serum LDL, HDL and VLDL across trimesters in the prediction and diagnosis of preeclampsia in previously health women*. Supervisors: Menkhorst E, Dimitriadis E, Zhou W.

Jia T. MDRP, University of Melbourne. *Maternal Serum Lipid Profile, Apolipoproteins, Lipid-related Metabolites and Fatty Acids in Fetal Growth Restriction: A Narrative Review*. Supervisors: Menkhorst E, Dimitriadis E, Zhou W.

Lee M. MDRP, University of Melbourne. *Pre-clinical models to investigate embryo implantation failure*. Supervisor: Zhou W.

Machado B. MDRP, University of Melbourne. *Female infertility of unknown cause*. Supervisor: Dimitriadis E.

Oliver E. MDRP, University of Melbourne. *Key performance indicators in oncofertility*. Supervisor: Jayasinghe Y.

Baylis A. MDRP, University of Melbourne. *Late onset preeclampsia: can it be detected and prevented?* Supervisor: Dimitriadis E.

Publications: Featured stories

Ovarian cancer: Mechanisms and treatment

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Nature. 2023 Aug;620(7976):1063-1070. doi:10.1038/s41586-023-06421.

Nat Genet. 2023 Mar;55(3):437-450. doi: 10.1038/s41588-023-01320-2.

Cancers (Basel). 2023 Jan 21;15(3):667. doi: [10.3390/cancers15030667](https://doi.org/10.3390/cancers15030667).

Human papilloma virus: Outcomes of vaccination

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Aust NZ J Obstet Gynaecol. 2023 Aug;63(4):564-570. doi: 10.1111/ajog.13684.

Pathogens. 2023 Mar 13;12(3):451. doi: [10.3390/pathogens12030451](https://doi.org/10.3390/pathogens12030451).

Lancet Reg Health West Pac. 2023 Jun 14;37:100798. doi: 10.1016/j.lanwpc.2023.100798.

Endometriosis improving our understanding and developing better treatments

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Nat Genet. 2023 Mar;55(3):423-436. doi: 10.1038/s41588-023-01323-z.

Nat Commun. 2023 Oct 6;14(1):6222. doi: 10.1038/s41467-023-41979-z.

Biomolecules. 2023 Jun 8;13(6):965. doi: [10.3390/biom13060965](https://doi.org/10.3390/biom13060965).

Newborn: Changing practice for better care of babies

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JAMA. 2023 Sep 11: e2315694. doi: 10.1001/jama.2023.15694.

EClinicalMedicine. 2023 Jul 20;62:102115. doi: 10.1016/j.eclinm.2023.102115.

Better maternity care for First Nations people

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EClinical Medicine (doi: [10.1016/j.eclinm.2023.102093](https://doi.org/10.1016/j.eclinm.2023.102093))

Aust N Z J Obstet Gynaecol (doi: 10.1111/ajog.13641)

Women and Birth (doi: 10.1016/j.wombi.2022.06.001)

Women's experience of violence

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Trauma, Violence and Abuse 25(1), 704-720. doi: [10.1177/15248380231162976](https://doi.org/10.1177/15248380231162976).

Violence Against Women [Online first] doi: [10.1177/10778012231176198](https://doi.org/10.1177/10778012231176198)

Trauma, Violence, & Abuse, 2023. 24(2): p. 794-808. doi: [10.1177/15248380211043829](https://doi.org/10.1177/15248380211043829)

Research excellence

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Professor Jeanie Cheong

Guideline for Growth, Health and Developmental Follow-up for Children Born Very Preterm.

Professor Martha Hickey

BJOG. 2023 Nov;130(12):1437-1450. doi: 10.1111/1471-0528.17511.

Professor Eva Dimitriadis and Dr Ellen Menkhorst

Nat Rev Dis Primers. 2023 Feb 16;9(1):8. doi: 10.1038/s41572-023-00417-6.





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