Delivering the Future



A note from our CEO

As winter sets in, I'm delighted to share with you the latest edition of *Delivering the Future*. This edition is particularly special, as it proudly reflects our refreshed brand—an exciting milestone that marks the beginning of a bold new chapter for the Women & Infants Research Foundation (WIRF).

Our updated brand introduces a dynamic new logo, made up of organic shapes that symbolise the deep connection between woman, baby, family, and heart. At its core, our new brand is about strengthening our impact so we can continue to shape healthier futures for women, babies, and families. It's a renewed promise to the community we serve, families like Katrina and Dave, whose twins Olivia and Kyle (featured on the front cover) were born at just 24 weeks and one day, weighing only 600 grams each. Today, they're in year two—bright, happy, and thriving. Their journey reminds us why our work matters so deeply.

One of the most exciting parts of our transformation is the launch of our new website. It now offers a more powerful platform to showcase the breadth and depth of WIRF's research, healthcare programs, and support services. More than ever, it serves as a place to raise awareness, share stories, and rally support for our mission.

Our revitalised brand has been shaped by the voices and insights of our staff, researchers, partners, and community. To all who contributed, thank you. Your input helped guide this important evolution.

I'd also like to extend heartfelt thanks to Elton Swarts, Charles Kobelke and the team at *Business News* for partnering with us to officially launch our new brand at a wonderful sundowner. Your support has been invaluable.

Over the past six months, we've been fortunate to be part of many special events. On World Prematurity Day, Mrs Darrilyn Dawson hosted a beautiful reception for WIRF in the Government House Ballroom. We were honoured by the presence of Her Excellency the Honourable Sam Mostyn AC, Governor-General of Australia, who helped shine a light on the critical need for awareness and action around preterm birth and its impacts on families.

In April, we were proud to be the beneficiary of the inaugural Ladies Long Table Lunch at Hillarys Yacht Club, a heartfelt initiative led by the extraordinary Liz Daly. We are deeply grateful for Liz's generosity and to all who attended.



I was also privileged to present at The Raine Study Symposium. The Raine Study has spanned over 30 years and four generations, and is a shining example of what long-term vision, research excellence, and community spirit can achieve.

At the Board level, we farewelled Graeme Boardley after 16 years of exceptional service, and welcomed Peta Fisher and Scott Steinkrug—two highly respected professionals who bring great strengths to the Foundation. I would like to take this opportunity to thank Graeme for his incredible support and the rare combination of integrity, mentorship and dedication that he brought to his role. His unwavering commitment to WIRF has left an indelible mark.

We also welcomed Vicki Main to the WIRF team as our new Research Talent Development Officer. Her energy and expertise will be a tremendous asset.

Our community's support continues to inspire us—it comes in countless forms, each one meaningful. One shining example is Maria Crawford, who this year celebrates an incredible 25 years of volunteering in the WIRF café. Every act of generosity, big or small, plays a vital role in advancing our mission.

With a strengthened identity and a clearer voice, WIRF hopes to continue to inspire, engage, and grow our community, and to continue leading the way in maternal and infant health. But we can only do this with your continued support. On behalf of the entire team, thank you for your ongoing generosity and commitment.

I hope you enjoy reading about our recent highlights and achievements in this issue.

Warm regards,

Deb

Deb Portughes Chief Executive Officer

Strengthening our profile through a new brand and website

Shaping healthier futures, together

WIRF proudly launched our refreshed brand identity and newly redesigned website in May—an exciting milestone that marks the beginning of a bold new chapter in our journey.

For nearly 50 years, WIRF has been a leader in maternal and infant health. Our new brand reflects the evolution of our organisation and our commitment to growth, inclusivity, and innovation. At its core, our rebrand is about one thing: strengthening our impact so we can continue to shape healthier futures for women, babies, and families—in Australia and around the world.

The updated brand introduces a dynamic new logo, made up of organic shapes that symbolise the deep connection between woman, baby, family, and heart. Paired with a vibrant colour palette, the new identity communicates warmth, diversity, and strength—key attributes of our vision and community. It's more than a new look, it's a renewed promise to continue to lead the charge in women's and babies' health.

As part of this transformation, our website has undergone a complete redesign to be more user-friendly, accessible, educational, and engaging. It better showcases the breadth and depth of WIRF's research, healthcare programs, and support services. Importantly, it offers an improved platform to raise awareness and rally support for our mission.

Our revitalised brand was shaped by the voices of our community and people. It's grounded in collaboration and reflects our shared aspirations. We are grateful to everyone who contributed to this journey.

A special thank you to advertising agency Topham Guerin for their generous support throughout our rebrand and website projects, and to Elton Swarts, Charles Kobelke and the team at *Business News* for partnering with us to officially launch our new brand at a wonderful sundowner event.

We were honoured to be joined at this event by the Minister for Medical Research, Hon Stephen Dawson MLC, who spoke powerfully about WIRF's world-class research and mission to drive life-changing outcomes for women, babies, and families. Thank you, Minister, for your support.

Together, with a strengthened identity and a clearer voice, WIRF is ready to inspire, engage, and grow our community—and to continue leading the way in maternal and infant health.

Because at the heart of everything we do is one simple reason: **because we care**.

Healthy women. Healthy babies. Healthy families.



WIRF Chief Scientist Professor Matt Kemp, Minister for Medical Research Hon Stephen Dawson MLC, WIRF CEO Deb Portughes, and Business News CEO Charles Kobelke at the special Business News sundowner to launch WIRF's new brand.



WATCH OUR SHORT 'BRAND REVEAL' VIDEO



VISIT OUR
NEW WEBSITE







From micropreemies to thriving seven-year-olds: Katrina's journey with Olivia and Kyle

Katrina's pregnancy with her twins, Olivia and Kyle, was progressing smoothly. Her 20-week scan showed everything was on track, and her next appointment also brought reassuring news. However, at just 23 weeks and three days, Katrina felt something was wrong.

"I knew in my gut that something wasn't right," Katrina said. "And I was right—one of my membranes had ruptured."

She was immediately given a steroid injection and transferred to King Edward Memorial Hospital (KEMH), where she underwent extensive testing and monitoring for infection. Another round of steroids followed, and doctors delivered sobering news—she wouldn't be leaving the hospital until her babies were born.

At just under 24 weeks, the border of viability, Katrina and her husband had a heartbreaking conversation with the medical team about what might happen if the babies arrived too soon. The odds were daunting—just a 50-50 chance of survival.

"That was the hardest discussion we've ever had," said Katrina. "They walked us through the possible consequences, the disabilities, and what our family life might look like."

Katrina remained in the hospital until the critical moment arrived—Olivia was born at 10.33pm, followed by Kyle at 10.53pm, at just 24 weeks and one day gestation, weighing only 600 grams each, in December 2017.

"It was traumatic," said Katrina. "Each baby had their

own team working on them. I didn't even get to see Olivia before she was taken away. I only got a tiny glimpse of Kyle."

Later that night, at around 2am, Katrina and her husband Dave made their first visit to the NICU. Olivia and Kyle would spend the next 89 days between the NICU and the special care nursery.

The challenges of prematurity

For Katrina, those first few months were a rollercoaster of emotions.

"I just wanted them to live. That's all I focused on every day."

Holding her babies was a heartbreaking milestone—she wasn't allowed to hold them for over a week.

Olivia was first at seven days, Kyle at eight. Their eyes remained shut for days, and naming them felt impossible until she could see their eyes.

Throughout their NICU stay, Olivia and Kyle endured numerous medical challenges, including multiple blood transfusions, PDA (a heart valve condition), and other prematurity-related complications.

Kyle struggled more—he had a brain bleed and needed medication to close his heart valve.

They were too fragile to be next to each other at first and didn't meet for six weeks.

"When they were finally placed together, it was such a relief," Katrina said.

Despite the odds, both babies progressed well, defying expectations. They came home earlier than expected at 36 weeks and five days.

The journey continues

Even after discharge, their journey was far from over. Olivia and Kyle underwent years of medical monitoring and therapy.

"KEMH followed them for five years because they were micropreemies," Katrina said. "The first two years were filled with physio, specialist appointments, and weekly checkups."

There were early concerns about Olivia potentially having cerebral palsy, but she does not. Kyle had frequent bouts of croup, requiring hospitalisation multiple times. Both had retinopathy of prematurity (ROP), necessitating weekly follow-ups at the Perth Children's Hospital.

By two and a half years old, both Olivia and Kyle were doing well, and in March 2023, they were officially 'signed off' from further checkups.

"Having them constantly assessed for issues was exhausting. I felt like medical professionals kept looking for things wrong with them, so they could do early intervention, but I knew they were fine. I had to keep defending them," Katrina said.

"When they were finally given the all-clear, it was the first time in over five years that I felt like I could breathe again."

Today, Olivia and Kyle are in Year 2 and are happy, active, and bright children.

"They love playing video games, being outside, and are adored by their teachers," Katrina shares. "They're similar but different in their own ways."

While Olivia and Kyle have thrived and have no lasting medical complications, the experience left a lasting impact on Katrina.

"I have experienced symptoms of PTSD," Katrina said.
"I've had a lot of counselling. In the early days, I couldn't let anyone else look after Olivia and Kyle. I wouldn't let them out of my sight. Even when they started school, I just wanted them to be close."

Now, she has learned to let go and trust others to care for her children.

Having walked this journey, Katrina shares advice for parents going through similar experiences:



Ask as many questions as you can. "Knowledge is power."



Trust your gut. "If something doesn't feel right, speak up and demand to be heard."



Build a community. "Other NICU parents going through a similar experience were my lifeline."

She remains deeply connected to the NICU community through groups like Helping Little Hands and Tiny Sparks and regularly meets up with other NICU families.

The importance of research

Katrina is grateful for the medical advancements that helped save her babies.

"Anything that can improve outcomes for premature babies is amazing," she said.

"The research and progress in neonatal care made a world of difference. I was told that they'd never seen an outcome this good for babies this small—and I truly believe things like kangaroo care, skin-to-skin contact, and reading to them helped with their progress."

While Katrina's family's story has a happy ending, many premature babies face significant challenges. Each year, approximately 13.4 million babies are born prematurely worldwide, with nearly 8% of Australian babies arriving before 37 weeks. Those born extremely preterm, like Olivia and Kyle, are at higher risk for complications, but medical advancements continue to improve survival rates and long-term outcomes.

WIRF remains committed to researching and developing better care for premature babies, ensuring every newborn has the best possible start in life.

Katrina's journey is a testament to the strength of NICU families, the power of medical research, and the resilience of tiny fighters like Olivia and Kyle.

Thank you to the incredible health



Chief Scientist's Message

Delivering research-driven innovations to secure the health of women, mothers, and babies has been central to WIRF's mission over the past 50 years. Today, the importance of this work, and the need for organisations like WIRF to step up and deliver creative women's and newborn healthcare solutions, has never been greater.



Indicative of this need for action in women's and newborn health is a report released by the World Economic Forum earlier this year, identifying nine conditions (of which, six were directly related to pregnancy or gynaecology) that drive more than one third of the health gap that presently exists between men and women¹. Produced in collaboration with the McKinsey Health Institute, the report noted that closing this health gap (women still live 25% more of their lives in poor health compared to men) would unlock 75 million disability-adjusted life years annually—along with \$1 trillion in annual global GDP by 2040¹.

Despite the clarion call to action contained in this report, efforts to generate the data we need to close this health gap are under threat in many parts of the world. For example, a decision earlier this year to cancel funding contracts for the Women's Health Initiative (the largest women's health study ever undertaken, involving some 160,000 US women over a 30-year period) has only been recently overturned following intense media and public attention.

By global standards, WIRF is a small organisation, albeit one that punches well above its weight in terms of research output and impact. Against a backdrop of increasing need, the recent global uncertainty in women's and newborn health research means that the work of WIRF and similarly minded organisations is increasingly important. WIRF is able to achieve its outsized impact as a result of the tenacity and skill of its researchers, the dedication and generosity of its staff and supporters, and an unwavering commitment by the organisation as a whole to advance the health of women, mothers, and babies.

In this edition of *Delivering the Future* you will read about some of the ground-breaking work undertaken by WIRF's Dr Erin Fee—whose efforts to drive the optimisation and personalisation of antenatal steroid therapy showcases the sort of innovative and impactful research WIRF aspires to deliver. Erin has recently completed a PhD with WIRF support, collecting multiple awards and several high-impact publications along the way. Her ongoing work into the personalisation of antenatal steroid therapy has the potential to achieve a transformational shift in how this key element of obstetric medicine is used here in Australia, and around the world.

Erin, along with leading researchers from WA and interstate, will converge in Perth on the 5th of September this year for the new-look WIRF Scientific Dialogue. Emphasising the pressing need for data-driven efforts to advance women's and newborn health, this event will showcase local research talent (including a new prize for the best graduate student presentation) as well as providing a masterclass in translational research from two of Australia's foremost women's and newborn health researchers, professors Ben Mol and Brett Manley. I look forward to you joining me, and the WIRF team, at what will be a hugely exciting and inspiring meeting later this year.

I hope you enjoy this issue of *Delivering the Future* and thank you for your support—big or small, it allows us to undertake the research that we need to secure the health of WA's women, mothers and babies.

With warm regards,

Professor Matt Kemp, WIRF Chief Scientist

Dr Erin Fee's PhD research paves the way for safer, more targeted antenatal steroid therapy

WIRF researcher Dr Erin Fee has completed a PhD with a focus on improving the use of antenatal steroids (ANS) for babies at risk of preterm birth.

Her research questions the use of current high-dose ANS treatment regimens and supports the development of a safer, and more targeted treatment approach.

For decades, ANS have been a cornerstone of obstetric care, primarily to promote fetal lung development ahead of anticipated preterm delivery. However, Dr Fee's findings suggest that the current "one-size-fits-all" approach may no longer be appropriate.

"Response to treatment varies, with many ANS treated preterm babies still experiencing respiratory morbidity, showing that some fetuses do not benefit from the steroids," Dr Fee said.

"Additionally, up to 40 percent of fetuses exposed to antenatal steroids ultimately deliver at term.

"That means a large number of babies may be unnecessarily exposed to high doses of steroids and are potentially at risk of longterm harm."

Her research tackled four key issues plaguing current ANS practices: overexposure due to unoptimised dosing, unnecessary exposure due to uncertainty in predicting preterm birth, the expanding use of ANS (including elective caesarean deliveries at

term), and growing evidence of possible adverse effects on the baby's neurodevelopment and long-term health.

Key aims and breakthroughs

Dr Fee's work comprised two major aims:

- Determining the lowest dose of steroid required to drive lung maturation in **preterm babies.** The study found that only a small amount of the corticosteroid betamethasone-0.61 mg, administered to the fetus over 48 hours—is required for the lungs to develop before birth. This is much lower than the amount currently used (clinical ANS treatments use 24 mg of betamethasone preparation), meaning lung benefit could be achieved with a smaller, safer dose.
- Investigating how babies respond to ANS treatment by looking at lung responses in non-identical twin lambs. Nearly half of the twin pairs showed different lung responses to ANS treatment, and researchers found 13 genetic differences linked to how well it worked—suggesting genetics may influence treatment response.

"This level of variability even in shared intrauterine environments—points to the importance of individual genetic factors in determining treatment success," Dr Fee said.

"It underscores the urgent need for individualised treatment in this field."

The implications of Dr Fee's findings are widereaching.

By advocating for lowerdose, targeted ANS regimens, her research offers a path to minimise unnecessary steroid exposure for both mothers and babies—without compromising the lifesaving benefits of fetal lung maturation. In addition, the identification of genetic markers that predict ANS responsiveness could one day enable clinicians to tailor treatment to the individual fetus—maximising benefit while reducing the risk of harm.

Next steps

The next phase of Dr Fee's work will focus on refining dosing protocols and further exploring individual response to ANS treatment.

Dr Fee and her collaborators hope to translate these findings into clinical trials and, ultimately, into new standards of care, leaving a lasting legacy—one that could reshape the treatment landscape for millions of mothers and their babies around the world.

"We're working to give preterm babies the strongest start possible" she said.

"Protecting the most vulnerable, so every baby can thrive".

Congratulations to Dr Fee on the outstanding achievement of completing her PhD and for her important research on antenatal steroid therapy. Her work marks a significant step forward in improving the safety and effectiveness of care for mothers and babies, and lays the foundation for more personalised and precise treatment in the future.



Telethon grants boost local research to improve women's and babies' health

Thanks to three Telethon grants, research projects into gestational diabetes and its impact on newborn health, Placenta Accreta Spectrum, and antenatal steroid therapy for preterm babies have been boosted.



groundbreaking study on Gestational Diabetes Mellitus (GDM) and its impact on newborn health, titled The SWEET Mum + Baby Study, is the most comprehensive of its kind in WA.

It will compare outcomes for babies born to mothers with diagnosed GDM, those who tested negative, and those who declined screening.

GDM affects one in six pregnancies in Australia, with cases tripling over the past decade. Additionally, there is a growing clinical concern over an increasing number of mothers opting out of GDM screening.

Infants born to mothers with GDM face higher risks of preterm birth, low birth weight, and respiratory distress syndrome, and long-term health issues such as obesity, type 2 diabetes and cardiovascular disease.

The study's lead investigator Associate Professor Zoe Bradfield—who has a joint appointment between Curtin University and King Edward Memorial Hospital (KEMH), is President of the Australian College of Midwives, and is a member of the WIRF Scientific Committee—said the urgent need for this study is underscored by the rapid rise in GDM cases across Australia.

"GDM is the fastest-growing type of diabetes in Australia, and we need better strategies to support mothers and their babies. Understanding the reasons and impact of declining screening is crucial for improving care," Associate Professor Bradfield said.

The research aims to explore perinatal outcomes for babies born to women diagnosed with GDM and for those who declined GDM screening over the past five years in WA's largest maternity service.

It will also explore the experiences of mothers with GDM and the observed health outcomes for their newborns, while assessing the long-term implications of declining GDM screening on mother-baby health, feeding practices, and future vulnerability to chronic conditions.

This study will not only shed light on the consequences of declining GDM screening but also pave the way for improved antenatal screening, care and early intervention strategies.

"By identifying risk factors and advocating for more effective screening methods, the research will contribute to enhanced healthcare policies, clinical guidelines, and public awareness campaigns about the importance of prevention and management of GDM," said Associate Professor Bradfield.

"This will empower mothers and healthcare providers to participate in informed decision making and take proactive steps in ensuring the health of both the mother and child, ultimately reducing the incidence of GDM-related complications.

"Essentially, our findings will help optimise the health of at-risk mothers and babies ensuring they receive the best possible start in life."

Read Rihanna's story on page 10 to discover the real-life impact of gestational diabetes and why more research is urgently needed.



The Telethon grant for these research projects will be administered through WIRF. The Foundation is proud to be a beneficiary of this funding and thanks the Channel 7 Telethon Trust for their ongoing support of life-changing research.



ital research into Placenta Accreta Spectrum (PAS), a serious pregnancy condition that affects one in 500 pregnancies, has been supported.

PAS happens when the placenta attaches too firmly to the uterus and, in severe cases, spreads to other organs like the bladder and bowel.

The number of cases has increased dramatically over the years, mainly due to the worldwide increase of caesarean section births.

Severe cases are often associated with major blood loss and complicated surgeries, making recovery difficult and can affect the mother's ability to care for her newborn.

Babies born to mothers with PAS are more likely to be born early, need resuscitation at birth, and require care in a neonatal intensive care unit.

We currently don't understand why some women develop PAS and why certain forms progress from the adherent accreta to the more invasive percreta. This study aims to address this critical gap in knowledge.

The KEMH research project, titled Defusing the Placenta Accreta Time Bomb, will examine cells and tissues from women with PAS to investigate the underlying causes of PAS, and why it affects some women more severely.

The study's lead investigator Dr Mathias Epee-Bekima—Lead of the Placenta Accreta Team at KEMH at North Metropolitan Health Service, and member of the WIRF Scientific Committee—said he hopes the study will uncover any genetic causes of PAS and specific biomarkers, allowing doctors to diagnose it earlier and develop new ways to prevent it.

"We still don't fully understand why PAS occurs or why some cases are more severe," he said. "We hope that our research will provide crucial insights to help detect and treat this condition sooner."

By identifying the root causes, the study aims to improve care for mothers and babies. "If we can pinpoint women at risk earlier, we can potentially offer better care and reduce complications.

Ultimately, we want to find ways to prevent PAS from happening at all."



new research project aimed at making antenatal steroid treatments safer and more effective for preterm babies, led by WIRF researcher Dr Haruo Usuda, hopes to change how doctors give antenatal steroid treatment to mothers at risk of preterm births, potentially saving more babies and improving their health.

Preterm birth is the leading cause of death and disability in children under five, with up to 10 per cent of babies born prematurely in Western Australia.

Antenatal steroid therapy, given to mothers to help their babies' lungs develop, is an important part of care for these pregnancies.

However, the project's research team has found that the current method—injecting high doses of steroids into the mother—is less effective at helping the baby's lungs mature and may increase the risk of brain problems, compared to a constant, low-dose exposure given intravenously.

In response, they are investigating how constant, low doses of the steroid betamethasone could reduce risks and improve lung development for preterm babies.

Dr Usuda said that a safer and more effective treatment method could make a big difference for preterm babies, who often face lifelong health challenges such as lung and brain problems.

"We want to make sure that babies born early have the best chance at a healthy life," he said.

"If we can use a safer and more effective method to deliver steroids, it could help babies avoid some of the health problems they face after birth."

The long-term goal of the research is to develop a new treatment method that becomes the standard for mothers at risk of preterm birth, not just in Western Australia but around the world.



The reality of gestational diabetes Rihanna's journey and the need for more research

For new mum Rihanna, the joy of pregnancy came with an unexpected challenge. When she was diagnosed with gestational diabetes mellitus (GDM) during her pregnancy with baby Lawrie, she was shocked.

"The test itself was uncomfortable. You have to fast overnight before heading to pathology for an initial blood test. Then, you're given a sugary drink, and your blood is tested again after one and two hours. It made me feel sick, not just that day but the next as well.

"Then when I was told that I had GDM at a following appointment I almost fell off my chair," Rihanna said. "It was the last thing I expected."

From that moment, Rihanna's pregnancy journey changed dramatically.

Following her diagnosis, she attended a two-hour

seminar where she received information on how to manage her condition—how to read and understand food labels, how to follow a strict diet, and how to incorporate exercise into her routine.

Monitoring her blood sugar became a daily commitment, requiring finger-prick tests four times a day. If her sugar levels spiked, it was advised that she go for a walk or engage in exercise to bring them

Rihanna had to overhaul her diet, ensuring every meal fit within strict carbohydrate guidelines. This meant eating out and socialising became a challenge, and she had to study menus beforehand to find suitable options.

On top of these lifestyle changes, Rihanna faced additional medical appointments, including extra growth scans and doctor visits to monitor Lawrie's development—because GDM can lead to your baby being oversized or undersized.

"For a period of time, my appointments doubled, which was really tricky as I was working full-time. It really was a lot to take on," she said.

Beyond the physical demands, Rihanna also carried a huge emotional burden.

"At the seminar, you learn about the risks to you and your baby, and that creates fear for both your health and your baby's health. I felt like I didn't fully understand the risks, even though I did a lot of my own research.

"I also felt guilty at times. If you don't get your levels right, you think, 'What have I done to my baby? What impact is this going to have?'

"I was also worried about needing an induction of labour because of the GDM, which was an extra layer of concern for me."

For Rihanna, the constant monitoring, planning, researching, and worry created a significant mental load that was difficult to manage. This was on top of all the usual challenges of being pregnant.

During her pregnancy, Rihanna participated in another research study that provided her with a continuous glucose monitor (CGM). Unlike traditional finger-prick tests, this device offered real-time data on her sugar levels, allowing her to make more informed dietary decisions.

"The CGM was a game changer, you get better data of what your sugars are throughout the day, so you can make better decisions about your diet. It's a tool for you to keep your sugars in a better range which then improves the health outcomes for you and your baby. And it does make life easier."

Unfortunately, CGMs are not commonly available for women with GDM. Under the National Diabetes Services Scheme (NDSS), only those with type 1 diabetes receive subsidised access to these devices. For others, the cost can be prohibitive.

Baby Lawrie was born on 8 September 2024 at 41 weeks and 3 days. He was born with low blood sugar, requiring multiple heelprick tests and prescribed formula for the first three days, which disrupted Rihanna's breastfeeding journey, but from the very early days Lawrie has thrived. Today, he is a happy and healthy six-month-old.

Both Lawrie and Rihanna are at an increased risk of developing type 2 diabetes later in life due to Rihanna having had GDM during pregnancy, something which Rihanna says will always be at the back of her mind.

Reflecting on her experience, Rihanna sees several areas where support and care for women with GDM could be improved, which is why she chose to participate in The SWEET Mum + Baby Study.

In addition to providing all women with GDM with a continuous glucose monitor, she believes another key improvement would be a dedicated app.

"At the seminar, you're given pieces of paper that essentially become your bible for managing GDM. But if you had all that information in an app, it would be a game-changer," she said.

"The app could help women calculate their carbohydrate intake, build meals, access educational resources, and find answers to frequently asked questions—all in one place."

Rihanna hopes this research study will improve the care and outcomes for women with GDM and their newborns.

"We know that GDM affects the short-term and longterm health and wellbeing of both mothers and babies. This research is a major step forward in preventative health, enhancing both care and outcomes.

"It will lead to a brighter future for both mothers who are diagnosed with GDM and their babies, and this is why I chose to take part."

WIRF Gala returns in 2026— Celebrate 50 years with us!

WIRF's flagship event, the WIRF Gala, is making its grand return next year—and it's going to be unforgettable!
Join us at The Ritz-Carlton as we celebrate a monumental milestone:
WIRF's 50th Anniversary

SATURDAY 6 JUNE 2026

Mark your diaries now for an evening of inspiration, celebration, and impact.

More details will be shared soon.



Cutting-edge VR training to equip first responders for birth emergencies

A new virtual reality (VR) training program developed by Edith Cowan University (ECU) is set to revolutionise how volunteer ambulance officers and paramedics prepare for unplanned out-of-hospital births.

ECU PhD candidate Michella Hill designed the NEONATE in VR training to enhance confidence and competency in managing birth emergencies before arriving at hospital.

It has been developed in response to Michella's earlier study which investigated volunteer ambulance officers' perceptions of training, experience and confidence regarding unplanned out-of-hospital births, and planned homebirth with obstetric emergencies where ambulance assistance is required.

Immersive training for high-stakes situations

NEONATE in VR is an interactive 30 to 40-minute virtual reality simulation that guides users through critical neonatal care scenarios. The program focuses on key aspects such as temperature management, respiratory distress, cardiopulmonary resuscitation (CPR), and the one-minute Apgar score assessment.

"Out-of-hospital births are rare events, meaning paramedics and volunteer ambulance officers often have limited exposure in this critical area," Michella said.

"The infrequency of these cases creates anxiety, and when they do occur, they can be high-pressure situations where immediate, skilled intervention is required."

The program is tailored for paramedics, volunteer ambulance officers, paramedic students, and nursing and midwifery students. It includes an initial tutorial, making it accessible for those unfamiliar with VR, followed by hands-on scenarios featuring a neonate in respiratory distress and a neonate requiring CPR.

Bridging the gap between classroom theory and real-life emergencies

Traditional in-service training often prioritises high-risk, high-frequency emergencies, leaving less time for obstetric and neonatal emergency preparation. NEONATE in VR provides a flexible, high-fidelity alternative that offers a consistent and realistic training experience.

"In a classroom setting, trainees often work with plastic mannequins and must imagine elements such as chest movements or a baby's cries," Michella said.

"With VR, they can actually see the baby move and hear realistic breathing sounds, which significantly enhances engagement and skill retention."

Accessibility and future availability

Michella said a key advantage of the NEONATE in VR is its accessibility.

"Unlike traditional in-person training, which requires coordination, significant resources and for rural volunteer ambulance officers potentially travelling long distances, NEONATE in VR can be used anytime and anywhere," Michella said.

"It serves as both a standalone training tool and a supplement to existing training programs."

The development of NEONATE in VR has been made possible through funding from a 2024 WIRF Research Acceleration Award granted to Dr Brennen Mills, in partnership with St John Ambulance WA.

Trials are currently underway with student paramedics and midwives, and registered paramedics and volunteer ambulance officers.

The NEONATE in VR training is expected to be available to the broader healthcare community in early 2026 following data analysis and final development stages.

WIRF is proud to be building upon our long-standing commitment to the next generation of WA researchers working in the service of women's, maternal and newborn health. Future treatments and possible cures are not achievable unless we back the scientists and clinicians who work tirelessly to make an impact on the health of all Western Australians.

WIRF looks forward to announcing the winners of the 2025 Research Acceleration Awards at the WIRF Scientific Dialogue on 5 September.



From Eminence to Evidence

The importance of generating and using robust data to ensure the health of women, mothers and babies.

FRIDAY 5 SEPTEMBER 2025 - AUDITORIUM, UWA CLUB

The Women and Infants Research Foundation presents a celebration and showcase of WA's top emerging medical and senior researchers revealing their latest discoveries relating to pregnancy, women's and newborns' health in short sharp research reviews.

FEATURING KEYNOTE SPEAKERS:



Professor Ben (Willem) Mol Professor of Obstetrics and Gynaecology at Monash University



Professor Brett Manley
Neonatologist/Professor/Director
of Newborn Recognity at The More

Neonatologist/Professor/Director of Newborn Research at The Mercy Hospital for Women in Melbourne, and the Department of Obstetrics, Gynaecology and Newborn Health at The University of Melbourne

Professors Brett Manley and Ben Mol are key to advancing the theme *From Eminence to Evidence* using robust data to improve maternal and neonatal health. Prof Manley leads innovative trials like PLATIPUS for preterm infants, while Prof Mol focuses on evidence through large-scale clinical trials for safer, more effective interventions. Both will share their latest findings, shaping the future of women's and newborn health.

Other speakers include Professor Mary Steen, Dr Kate Buchanan, Dr Mark Fear, Dr Erin Fee, Dr Bradley Macdonald, and Dr Brennen Mills.

The event will also feature the announcement of the 2025 Research Acceleration Award winners, presentations from our student and early career researcher competition, an interactive moderated Q&A session, and a consumer panel hosted by Joanne Beedie.

SPONSOR





ACM and RANZCOG accreditation for 2025 is pending. As a guide, 2024 accreditation was 4.5 hours.

DATE

5 Sep 2025

TIME

12noon for lunch 1pm WIRF Scientific

Dialogue opens 6-7pm Drinks reception

VENUE

with canapés

Auditorium, UWA Club

COST

\$149 / Students \$99

Includes lunch, presentations, afternoon tea, drinks and canapés



SCAN TO BOOK

WIRF launches new podcast and webinar series to drive impact

WIRF is proud to announce the launch of two exciting new initiatives designed to amplify the Foundation's impact and deepen engagement in women's and infant health: the *Accelerating Impact* webinar series and the *In Scientific Dialogue With...* podcast.

Accelerating Impact Webinar Series

This online series is designed to enhance the skills and impact of researchers, healthcare professionals, and community stakeholders in women's health, pregnancy, and infant care.

Focused on research translation, the series also explores community engagement and the power of philanthropy.

So far, two sessions have been delivered:

Session 1: Celebrating Women in Science & Leadership—Accelerating Action for Gender Equality, held in alignment with the International Women's Day theme, Accelerate Action.

Session 2: Celebrating Volunteerism— Building Stronger Communities & Breaking Barriers, held as part of National Volunteer Week.

Each webinar brings together expert speakers and timely topics, from preventative medicine to the latest advancements in healthcare.



Missed a session? You can catch up anytime—just scan the QR code below.



In Scientific Dialogue With... Podcast

Hosted by WIRF's Research Talent
Development Officer, Vicki Main, this
monthly podcast celebrates the inspiring
individuals who are transforming maternal
and newborn health in Western Australia.

Each episode features engaging conversations with leading voices—researchers, clinicians, nurses, midwives, and healthcare professionals—who are making a real difference in the lives of mothers and babies.

In episode one, Vicki speaks with WIRF researcher Dr Sean Carter—a John Monash Scholar, RANZCOG Senior Registrar at King Edward Memorial Hospital, and PhD candidate at the National University of Singapore. His research is paving the way for better outcomes of preterm birth through enhanced antenatal corticosteroid therapy. From the molecular science of fetal lung maturation to the future of maternal care, this is a conversation you won't want to miss.



Follow the podcast and tune in to join the conversation—scan the QR code below.

World Prematurity Day marked by special reception at Government House

Her Excellency the Honourable Sam Mostyn AC highlights the urgent need for action on preterm birth

In recognition of World Prematurity Day on 17 November, Mrs Darrilyn Dawson hosted a special reception for WIRF at Government House Ballroom. The Governor of Western Australia, His Excellency the Honourable Chris Dawson AC APM and Mrs Dawson are Joint Patrons of WIRF.

Governor-General of Australia, Her Excellency the Honourable Sam Mostyn AC, also attended and highlighted the critical need for awareness and action around preterm birth and its impacts on families. We also welcomed WIRF Ambassadors, Amy and Mike Hussey.

The reception served as an important platform to raise awareness about the potentially devastating effects of preterm birth and to celebrate WIRF's achievements in preventing preterm births and improving pregnancy outcomes.

In her address, Mrs Dawson emphasised WIRF's pivotal role in advancing scientific research to prevent preterm birth and improve treatments for preterm babies

"Preterm birth is the leading cause of death and disability in children under five," Mrs Dawson said.

"It's reassuring to know that we have some of Western Australia's brightest minds at WIRF, who are working so hard to find innovative ways to support babies and families with health challenges associated with premature birth." "The pathways to pre-term birth are complex and varied. And the aftermath and outcomes are challenging for medical professionals and deeply distressing for families," Her Excellency said.

"In the anxiety, anguish and, tragically, grief after loss, there is a deep human need for care, connection and community.

"As WIRF demonstrates, when care is at the centre, it can be the catalyst for change, discovery and progress that has an impact on the lives of all Australians.

"Thank you for the work you do, every day, to give children the best possible start in life and assure the long-term health of women."

WIRF extends its gratitude to the Governor-General, Governor Dawson, Mrs Dawson, and our supporters for championing awareness of preterm birth and its global impacts. The support we receive from our Patrons and the wider community is invaluable.

If you would like to read the Governor-General's full speech to the Women and Infants Research Foundation, please scan the QR code.



FRONT ROW (L-R): WIRF Chair Tony Walsh, WIRF CEO Deb Portughes, Her Excellency the Honourable Sam Mostyn AC, Governor-General of Australia, WIRF Joint Patron Mrs Darrilyn Dawson, Hugo Moullin, Anita Moullin. BACK ROW (L-R): WIRF Directors Associate Professor Graeme Boardley, Marnie Paoliello and Dr Mei Lon Ng, WIRF Chief Scientist Professor Matt Kemp, WIRF Director Wylie Collins.



Our supporters in the spotlight

At WIRF, we are fortunate to be surrounded by an incredible community of supporters. From fundraising events and in-kind donations to partnerships and personal giving, the support we receive comes in many meaningful forms—and every contribution helps drive our mission forward.

Here's a snapshot of just some of the wonderful individuals, groups, and organisations who have supported WIRF over the past six months.

Ladies raise \$23,000 for WIRF at inaugural long table lunch

The inaugural Ladies Long Table Lunch held at Hillarys Yacht Club on 11 April, as part of the Hillarys Boat Show, raised an impressive \$23,000 for WIRF.

Marking the beginning of a new annual tradition, sixty women gathered for this exclusive lunch bringing together a community of vibrant women to support our groundbreaking research.

One of the highlights was a heartfelt address by WIRF Ambassador Amy Hussey, wife to cricket legend Mike Hussey and mother of four, who shared her personal journey of preterm birth with her two youngest children Molly and Oscar.

In 2007, Mrs Hussey gave birth to Molly at just 28 weeks, with her newborn weighing little more than one kilogram. In 2012, her youngest son Oscar arrived three months early, mirroring his sister's premature birth and also weighing just over one kilogram. While both Molly and Oscar have faced challenges—including for Molly, living with cerebral palsy—Mrs Hussey expressed

"Our preterm birth experiences have been the most traumatic chapters in our lives, but ultimately, ones that have shaped us and made our family stronger. For us, our two preterm babies survived, and we feel truly blessed. They are our miracles," Mrs Hussey said.

gratitude for their survival and resilience.

"We know there are so many families who have had preterm babies. We know, that heartbreakingly, many do not get to take their babies home. We know we are the lucky ones.

"And we know that through the continued work of the Women and Infants Research Foundation, the women, mothers, and babies of WA, are in good hands."

WIRF is incredibly grateful to be a beneficiary of this special event. The Ladies Long Table Lunch was the brainchild of Liz Daly, an extraordinary supporter of the Foundation, who not only conceived the idea but also dedicated herself to organising every detail. We extend our heartfelt thanks to Liz for her generosity, vision, and commitment to our cause.

Sincere thanks also go to everyone who made this exclusive event possible—including Hillarys Yacht Club, Hillarys Boat Show and the Boating Industry of Western Australia, together with major sponsor Linneys, who is a proud advocate for women's health initiatives and a long-time supporter of WIRF.



and Boating Industry Association of WA President Sheryl Swarbrick



Science, sightseeing, and a Singaporean adventure

Long-time WIRF supporters Terry and Willie Krysyna, and Con and Marnie Paoliello embarked on a once-in-a-lifetime trip to Singapore in April, thanks to being the successful bidders on a special auction item at the 2024 WIRF Gala.

Joined by WIRF CEO Deb Portughes, Chief Scientist Professor Matt Kemp, and WIRF researcher Dr Sean Carter—Terry, Willie, Con and Marnie were treated to an exclusive behind-the-scenes tour of the National University of Singapore labs. Private lectures were delivered on WIRF's world-leading research into preterm birth prevention, and advancing treatments for preterm babies—a powerful reminder of the impact our supporters help make possible.

Beyond the lab coats and lectures, the group took time to soak in Singapore's vibrant culture—from hidden local gems to unforgettable culinary delights. It was a perfect blend of science and sightseeing.

This unforgettable experience was made possible through the generous support of Orba Travel.

Karen's lifelong legacy brings comfort to babies

In a heartwarming continuation of a century-old family tradition, enthusiastic knitter Karen Robins, is making a difference to families in need through WIRF's Baby Bundles program.

Twice a year, in time for winter and summer, Mrs Robins donates meticulously knitted playsuits, as well as other baby clothes, and essentials like nappies, wipes, baby wash, wraps, and toys, all thoughtfully sourced to provide comfort to new mothers and their babies. She

collects items throughout the year, purchasing them on sale or adding seasonal touches like Easter and Christmas-themed items.



Mrs Robins' commitment to supporting vulnerable families is a legacy passed down from her nanna, who lived across the road from King Edward Memorial Hospital (KEMH).



Teen knits warmth and hope for babies in need

Year 9 student Mackenzie Carter dedicated much of 2024 to knitting blankets with her grandmother, Marie Jack, for newborns in need at KEMH.

The duo's knitted creations were donated to WIRF's Baby Bundles program in November.

With knitting running deep in her family, Mackenzie is part of a long line of knitters.

"My great grandma taught my Nan, my Nan taught my mum, and my mum taught me," Mackenzie said.

"I picked knitting blankets for the Baby Bundles program after learning about the program from my mum's friend Paula, who is a midwife at the hospital. I wanted to create something special for the babies."

Ryley creates for a cause

Ryley, a valued member of the Proudly Productive team in Bunbury, is channelling her creativity into a meaningful cause through her small business, Made by Ryley.

With the support of her team, Ryley handcrafts beautiful keychains that are available for purchase at their onsite shop. What makes them truly special? Every dollar raised from sales goes directly to WIRF—a cause deeply personal to her.

Ryley and her twin sister, Macy, were born at just 26 weeks at KEMH. Their early start in life drives Ryley's passion for supporting premature birth research and care.

Since launching her business, Ryley has raised over \$300 for WIRF. Her creativity is not only inspiring—it's changing lives.





Stitched with love: WA Quilters Association's 30-year legacy of care

For over three decades, the WA Quilters Association has wrapped women, babies, and families in warmth and compassion through their beautifully handcrafted quilts.

These quilts bring comfort in countless ways. In the mother and baby unit at KEMH, they help foster connection between mum and baby through tummy time and shared moments. Included in our Baby Bundles, they can be used as playmats, pram covers, or comforting blankets. And in the oncology unit, patients facing long stays are gifted a quilt that brings colour, warmth, and the reassurance that someone in the community cares.

More than just fabric and thread, each quilt is a heartfelt gesture of kindness and community spirit.

Thread Together supports women in crisis

WIRF is grateful for the support of Thread Together, an inspiring organisation that rescues brand-new, unsold clothing from landfill and delivers it to those who need it most.

Thanks to their generous donations, women arriving at KEMH in crisis—often with little or no clothing—are now receiving new clothing and underwear when they need it most.

Through our ongoing efforts to help women and babies in crisis, these items are distributed by the hospital's dedicated social workers, offering dignity, warmth, and comfort during deeply vulnerable moments.

As the need continues to grow, especially during colder months, this partnership is a powerful reminder that sustainability and compassion can go hand in hand.



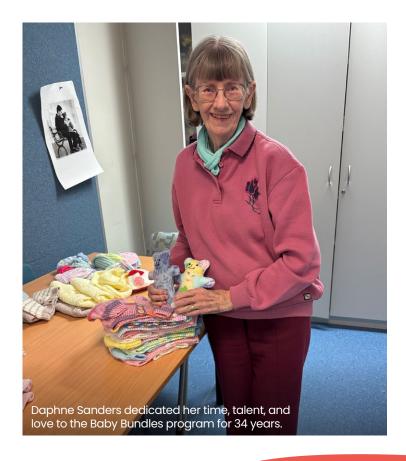
From Garden to Giving: A blooming gift for WIRF

Brian and Linda raised an incredible \$2,000 for WIRF through their Open Garden event in Kalamunda.

With the generous support of volunteers from the Darling Scarp Gardeners Club, the event came to life—complete with tea, cake, plant sales, and a raffle, thanks to a kind donation from Zanthorrea Nursery. From gate takings to baked goods, every detail contributed to this blooming success.

This is the second time Brian and Linda have opened their garden in support of WIRF. For Linda, the cause is deeply personal. Ten years ago, her grandson was born at just 25 weeks, weighing only 870 grams. Thanks to medical advancements, her grandson is now thriving, and Linda's gratitude drives her support for WIRF's mission.





34 years of giving

For an incredible 34 years, Daphne Sanders has dedicated her time, talent, and love to the Baby Bundles program, knitting beautiful garments, donating toys, and providing essential new baby clothes. In May, she announced her retirement from knitting, marking the end of an extraordinary chapter of giving.

Daphne's contributions have brought warmth and comfort to countless babies in need. She has been an instrumental figure, who worked closely with the late Margaret Lay, the founder of the Baby Bundles program, in the formative years to ensure vulnerable families received vital support.

Her generosity and kindness have left a lasting legacy, and we are grateful for her many years of service and dedication. Daphne's commitment will continue to inspire us all.

The Raine Study celebrates International Women's Day with a purpose

This International Women's Day, the team at The Raine Study chose to celebrate with purpose—collecting personal donations, such as toiletries and items of clothing, to support WIRF's Women's Care Packages, and donating funds to support the Baby Bundles program.

The Raine Study and WIRF share a special bond. Between 1989 and 1992, The Raine Study recruited many of their original 2,900 pregnant women from KEMH.

Today, WIRF proudly continues its support of The Raine Study, with WIRF researchers granted access to its invaluable, multi-generational data—spanning the original cohort, their children, and now their grandchildren.



To each and every supporter—**thank you**.

Your generosity, compassion, and belief in WIRF's work make a lasting impact on the lives of women, babies, and families.

The Foundation's work wouldn't be possible without you.



Volunteers the heart of WIRF

Celebrating over 40,000 hours of collective service

This National Volunteer Week, WIRF proudly celebrated the extraordinary contribution of its volunteer community, who together have clocked up more than 40,000 hours service in support of women, babies, and families.

The Foundation also acknowledged the vital contribution of its extended network of knitters and sewers from communities across Western Australia. These volunteers craft and donate handmade baby clothing and blankets throughout the year, ensuring that essential items reach families in greatest need.

WIRF's volunteers are more than helpers—they are community builders, comfort givers, and the kind faces behind some of the Foundation's most vital services.

From preparing baby bundles for new mothers and babies in crisis to supporting the Foundation's bustling café, gift shop, and op shop at King Edward Memorial Hospital, their reach is wide and their impact deep.

Among the volunteers being celebrated this year are many individuals who have become pillars of the WIRF family, including Maria Crawford who has dedicated 25 years of service in the WIRF café—a milestone that speaks to enduring commitment and community spirit.

WIRF is deeply grateful to our incredible volunteers their generosity, time, and passion helps the Foundation continue its vital work.



ABOVE: WIRF volunteers Liz Chidlow, Paula O'Connell (WIRF Community Engagement Officer), Marianne Bartrop, Geri Walker, Deb Salomone, Caroline Crawford, Marie-Francoise Scott, Adrienne Walsh (WIRF Café Manager), Claire Krieger, Barb Jewell, Jenny O'Hara, Helen Harrington, Jodi Clayton, Deb Portughes (WIRF CEO), Patrice Brenkley, and Maria Crawford.

LEFT: WIRF CEO Deb Portughes with Maria Crawford, who has dedicated 25 years of service in the WIRF café.

WIRF farewells Graeme Boardley, and welcomes two new Board members

WIRF bid farewell to a remarkable leader and advocate as Graeme Boardley stepped down from the Board after 16 years of dedicated service in December 2024.

The new year was marked by welcoming two highly accomplished professionals to the WIRF Board of Directors: Adjunct Associate Professor Peta Fisher and Scott Steinkrug.

Introducing Mr Scott Steinkrug

Mr Steinkrug brings a wealth of experience from his career in senior finance roles within the mining and manufacturing sectors. For 13 years, he served as Chief Financial Officer of ASX-listed



IGO Limited and its associated joint ventures, where he played key roles in business transformation, debt and equity funding, contract tenders, and strategy and culture development.

In addition to his financial acumen, Mr Steinkrug has a strong academic foundation, holding a Bachelor of Science in Pathology and Microbiology from The University of Western Australia. He is a Graduate of the Australian Institute of Company Directors and a Fellow of Chartered Accountants (Australia & New Zealand).

Mr Steinkrug's dedication to healthcare is also reflected in his volunteer work with Lifeblood Australia and as an Events Ambulance Officer with St John WA. Joining the WIRF Board, Mr Steinkrug is inspired by the Foundation's mission to achieve the best healthcare outcomes for women and their babies.

Farewell Graeme Boardley

Since joining in 2008, Mr Boardley has championed women's and babies' health, guided by his mantra: "If you promote and protect the health of women and babies, you improve the health and wellbeing of future generations."



As a midwife and nurse, Mr Boardley brought a unique perspective and passion to WIRF.

He takes immense pride in the many achievements of the Board during his tenure.

"The most rewarding aspect of my service has been working with and meeting an amazing, eclectic group of people who so willingly give their time and money to ensure the work of WIRF makes a real difference to families," Mr Boardley said.

"Hearing the personal stories of these families is the best reward anyone could hope for."

WIRF extends its deepest gratitude to Mr Boardley for his transformative leadership and commitment to improving the health and wellbeing of women, babies, and future generations. He has left an indelible mark on WIRF, and we are truly grateful for his guidance, leadership and support.

Introducing Adjunct Associate Professor Peta Fisher

Associate Professor Fisher is a healthcare leader currently serving as Area Director of Nursing and Midwifery for the South Metropolitan Health Service. With over a



decade of experience in the women's, children's, and newborn health sector at Fiona Stanley Hospital, Associate Professor Fisher has made a lasting impact on the community.

As the clinical lead for the establishment of the Fiona Stanley Hospital Family Birth Centre model of care in 2019, Associate Professor Fisher oversaw its growth as the only maternity service within a tertiary quaternary hospital in Western Australia. Her commitment to codesign and meaningful consumer engagement has positioned her as a leader in service innovation and patient-centred care.

Associate Professor Fisher's passion for advancing maternal and infant health through research inspired her to join the WIRF Board.

WIRF is thrilled to welcome Peta and Scott to the Board and looks forward to the contributions they will make to the Foundation.

Please consider giving the gift of life. Donate today.

Women give us the gift of life. We're committed to giving them and their families the healthiest future possible.

At the Women and Infants Research Foundation, one of Australia's leading medical research institutes, we're pioneering a new era of preventative medicine-addressing health challenges before they begin.

Our world-class research and healthcare programs target the most critical issues affecting women, babies, and families, including:

- preventing preterm birth
- advancing treatment for preterm babies, including development of an artificial womb
- gynaecological cancers and diseases such as endometriosis
- women's mental health

Together with our partners and supporters, we are advancing women's healthcare in meaningful, lasting ways.

Your support has already helped us make significant strides in these vital areas, and we are proud of what we've achieved together.

But there's more to do. We invite you to continue supporting WIRF as we work toward a healthier future for all Australian families.

Give the gift of life today by supporting vital research and healthcare programs focused on the most pressing challenges faced by women, babies, and families. Your generosity can help ensure healthier futures for families in need.

To donate, please visit donate.wirf.com.au or scan the QR code.



Thank you!

All donations of \$2 and over are tax deductable.



Clare's story of strength

In 2010, Wylie and Sharon faced every parent's worst fear when Clare (pictured) was born 14 weeks premature, weighing just 875 grams. With only a 60 percent chance of survival and a 90 percent likelihood of physical or mental disability, Clare's outlook was uncertain. But she defied the odds.

Through extraordinary resilience and the support of her family, Clare overcame immense challenges in her early years. Today, she is a happy and healthy 15-year-old—a testament to the power of hope, determination, and medical care.

Please watch Clare's remarkable journey in this short video.

Clare's story is a powerful reminder of what's possible when expert care meets incredible support. But for every child like Clare, there are many more who need our help. By donating today, you can help give premature babies the best chance at life. Your support can change a family's future—just like it did for Clare.



