LifeLab

The latest news from QIMR Berghofer

ISSUE 128 | AUTUMN 2026

Is this the moment brain cancer research turns a corner?

Eureka moment in the fight against breast cancer

Beyond the ban: Why Australia's social media crackdown misses the bigger digital threat

QIMR Berghofer

LifeLab

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Message from the Director

As I look over this edition of LifeLab, I'm reminded of the remarkable community that stands behind our research and what we can achieve together to improve health outcomes for people everywhere.

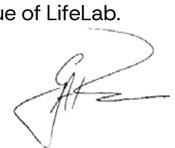
In this edition, our lead article takes us inside one of the most challenging frontiers of medical research – brain cancer. Brain cancer remains one of the most complex diseases our researchers are striving to overcome. Its impact is devastating for those diagnosed with the cancer, their families and the communities around them. The urgency of this challenge is a powerful reminder of why our work is so critical.

It also highlights something bigger: breakthroughs in any area of medical research can change lives. Whether we are tackling cancer, infectious disease, mental health, chronic illness, or population health issues, every new insight moves us closer to a healthier future. Sustained support for research across all these fields ensures we can continue to deliver the knowledge, treatments and hope that Queenslanders and all Australians rely on.

It is the people behind the science - study participants, donors, clinicians and collaborators – who help make these outcomes possible. On page six, we reflect on long-running research efforts and discoveries that simply would not have happened without this generous commitment. I want to thank you for your continued interest and support of our work.

We have more than 700 scientists at QIMR Berghofer, and so many of them are driven not only by scientific passion, but also by deeply personal motivations. Research can be a lengthy and challenging process, which makes moments of discovery especially rewarding. In this edition of LifeLab, I am pleased to share one such achievement from Professor Stacey Edwards and Professor Juliet French, our Program Director of Cancer Research. Together, they have uncovered a previously unknown RNA molecule that may offer a completely new way to treat the most common form of breast cancer. This discovery has generated real enthusiasm among our researchers and has special significance for Stacey, who lost her mother to breast cancer and has dedicated her career to tackling the disease.

Thank you to everyone who continues to support us. I hope you enjoy this issue of LifeLab.



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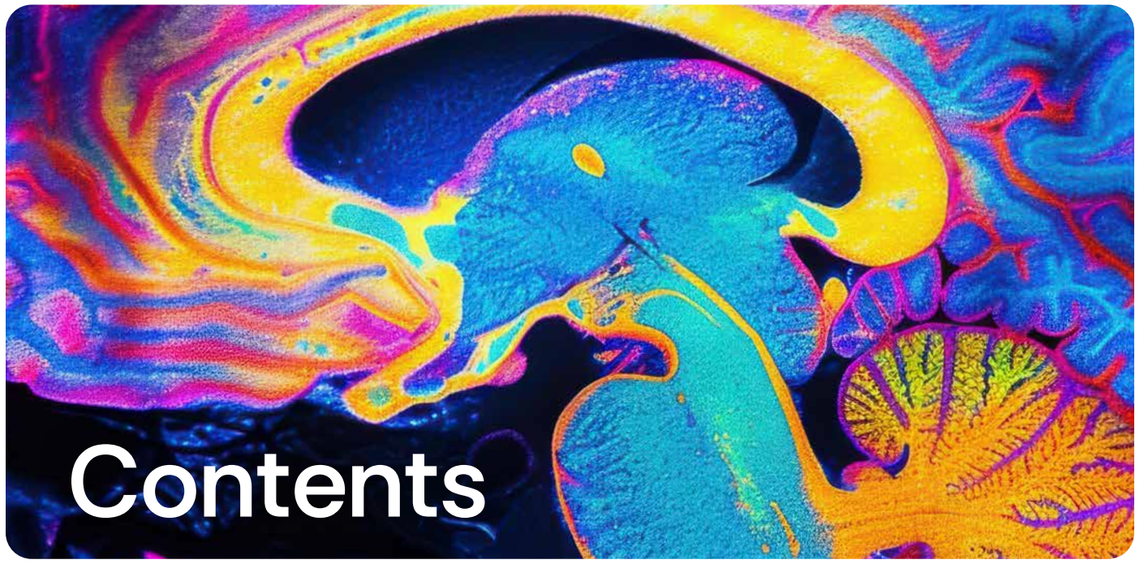
Interim Director and CEO



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Eureka moment in the fight against breast cancer

> "We knew we had something exciting, but we'd hit so many dead ends trying to understand how the RNA molecule was working. Then came the day we saw the cancer cells completely destroyed, while the healthy cells were alive. It was a true eureka moment. We could hardly believe what we were seeing, so we just kept repeating the experiment to be sure the results were real."
>
> – PROFESSOR STACEY EDWARDS

Professors Stacey Edwards and Juliet French study how our DNA and RNA work to find better ways to treat and ultimately cure breast cancer. Their research recently led to a true eureka moment with their discovery of a cancer fighting RNA molecule that could open a new way of treating the most common form of breast cancer.

"We knew we had something exciting, but we'd hit so many dead ends trying to understand how the RNA molecule was working. Then came the day in our lab when we saw the cancer cells completely destroyed, while the healthy cells were alive. It was a true eureka moment. We could hardly believe what we were seeing, so we just kept repeating the experiment to be sure the results were real," Professor Edwards said.

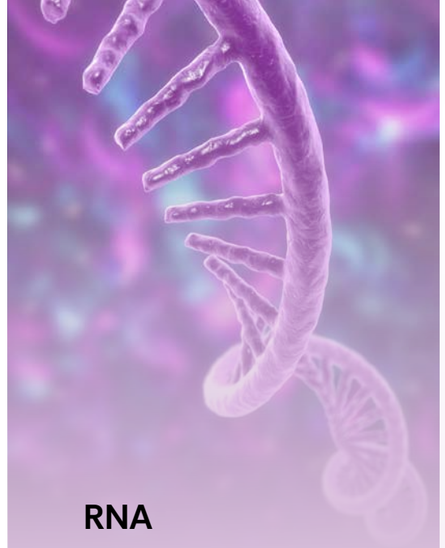
RNA molecules are like the working copies of our DNA. Advances in technology are helping uncover their role and RNA-based therapies are emerging as a highly promising new approach for targeting cancer.

The team's seven-year study, published in the journal *Molecular Cancer*, details their discovery of a previously unknown RNA molecule, that protects against hormone receptor positive (HR+) breast cancer. The team are developing their findings into a potential RNA-based therapy for HR+ breast cancer, offering hope to women with advanced disease who are no longer responding to existing drugs.

Professor French said the RNA molecule has a precise two-pronged attack: it kills HR+ breast cancer cells from within and also activates the immune system to recognise and destroy them. "Importantly, in our preclinical models, it kills only HR+ breast cancer cells, not healthy cells," she said.

Breast cancer is the most diagnosed cancer in women globally, with HR+ cancers making up around 70 per cent of cases. While current treatments have improved survival, up to a third of patients do not respond or develop drug resistance, allowing their cancer to return and spread. HR+ breast cancer is often described as a 'cold cancer' because it hides from the immune system and responds poorly to immunotherapy.

Because the new RNA also activates the immune system, it may make existing immunotherapies more effective. The team plans to test treatment combinations and is developing lipid nanoparticles to help deliver the RNA therapy directly into the cancer cells.



RNA

Ribonucleic acid (RNA) is a molecule found in all living cells. Like DNA, it carries genetic information but the two have different roles. DNA is the cell's long-term storage of genetic instructions. RNA is the short-term messenger that helps turn those instructions into action.

Analogy

If the cell is a city:

DNA = the city's central library with all master blueprints

RNA = temporary copies of specific blueprints taken to construction sites so work can happen.

What RNA does

- Reads instructions from DNA
- Carries them to the cell's protein-making parts
- Helps build proteins, needed for almost everything.

Types of RNA

There are many kinds of RNA: mRNA makes proteins, while thousands of non-coding RNAs have other roles, like controlling which genes switch on or off.

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For Professor Edwards, whose mother passed away from breast cancer at a young age, the discovery is deeply meaningful.

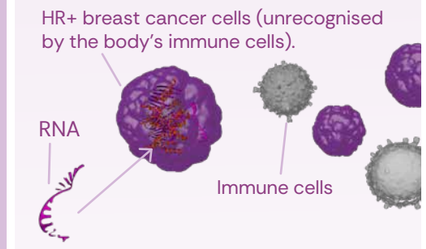
"My beautiful mum developed breast cancer when she was just 34 years old and I was only five, so I grew up seeing her go through horrible treatments. From a very young age, I knew that I wanted to do breast cancer research to help my mum and others like her.

> "Unfortunately, she passed away just as I finished my university degree, but she knew I was on my way. To now be developing something that we believe is going to make a difference is a very special moment."
>
> – PROFESSOR STACEY EDWARDS

The new discovery

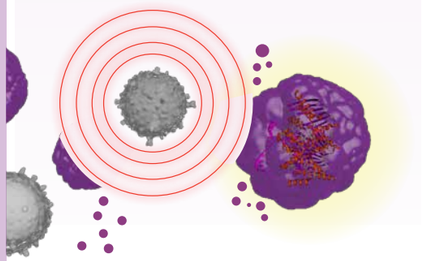
Professors Edwards and French found a previously unknown long non-coding RNA (lncRNA).

This new lncRNA appears only in HR+ breast cancer cells, not in normal breast cells. It acts as a short-lived messenger that signals to the immune system that cancer is present, making it a promising target for future cancer treatments.



Once the lncRNA is introduced to the HR+ cancer cells, it sets off a reaction that helps the cancer cell be seen by the immune cells.

The immune cells attack the cancer cells.



Find out more

The researchers acknowledge support from the National Breast Cancer Foundation of Australia and the National Health and Medical Research Council.

They are now seeking business and philanthropic partners to progress to drug development and ultimately, clinical trials. RNA-based therapies can be developed more rapidly than conventional drugs, as seen with the rapid development of RNA-based vaccines during the COVID-19 pandemic.

Get in touch to learn more: enquiries@qimrb.edu.au

Watch a video about this research.

FEATURE

What if this is the moment brain cancer research finally turns a corner?

> "For too long, brain cancer was put in the too-hard basket. As a result, survival rates have barely changed in decades while other cancers have seen major breakthroughs."
>
> – PROFESSOR BRYAN DAY

For decades, brain cancer has remained one of medicine's most devastating and least understood diseases. Survival for the most common and aggressive adult brain cancer, glioblastoma, has barely changed in more than 20 years.

"Glioblastoma is still very much an incurable disease. Most people only live 12 to 15 months after diagnosis, and that timeframe of survival hasn't changed for many decades," Professor Bryan Day, Head of the Sid Faithfull Brain Cancer Laboratory at QIMR Berghofer said.

This year could mark a genuine turning point for brain cancer research in Australia, with researchers now ready to target a protein which is believed to drive tumour growth and recurrence.

"It is really exciting to be able to share a good news story," Professor Day said. "We've helped develop a small molecule specifically for brain cancer patients, aimed at targeting this particular protein to potentially improve survival and quality of life."

The OPAL Phase 1 clinical trial will introduce the molecule known as CT-179 to glioblastoma patients for the first time, offering hope to individuals and families facing one of the toughest cancer diagnoses.

CT-179 targets a protein called OLIG2, which helps brain cancer cells grow and survive. In early studies, blocking this protein stopped tumour cells from continuing to grow.

OPAL brings together an exceptional national partnership: the Australian Brain Cancer Research Alliance (ABCARA), the Cooperative Trials Group for Neuro-Oncology (COGNO), Curtana Pharmaceuticals, and the Olivia Newton-John Cancer Research Institute.

At the core of this progress is years of pioneering research led by Professor Day who is Co-Founder and Co-Director of ABCARA, and fellow QIMR Berghofer researcher Dr Yuchen (Michelle) Li.

"For too long, brain cancer was put in the too-hard basket. As a result, survival rates have barely changed in decades while other cancers have seen major breakthroughs," Professor Day said.

For years, treatments designed for other cancers were simply trialled in brain cancer, with limited success. Only recently has the field shifted toward therapies designed specifically for the biology of brain cancer.

Brain cancer faces challenges found in no other tumour type

1. The blood-brain barrier

The brain is protected by a natural defence system called the blood-brain barrier, a wall of cells surrounding the brain's blood vessels. While it shields the brain from toxins, it also blocks many cancer drugs from reaching tumours.

2. Tumour heterogeneity – a shape-shifting disease

Brain tumours are made up of many different types of cancer cells. This makes them difficult to treat because a therapy may destroy some cells while others survive and grow again.

"Part of the challenge lies in the tumour's microenvironment. When you give a treatment, you often only reach a small pocket of the tumour," Professor Day said.

"Brain cancers are incredibly adaptable. They shift and change like a shape-shifting supervillain. You hit them with one drug and might only eliminate 30 per cent, leaving the rest to survive and return as a completely different tumour."

3. Limited funding

Brain cancer receives far less research funding than many other cancers. That means there are often fewer treatment options for patients.

"There just hasn't been enough tools in the toolkit for an oncologist treating a patient with brain cancer," Professor Day said. "In more common cancers, there are a lot more tools, a lot more therapies that an oncologist can draw from."

"There's still a long road ahead, but this is truly a time for hope. Reaching this point has taken significant effort, and we're confident it represents a meaningful step forward, not only to extend survival, but improve quality of life for patients living with brain cancer, which remains a devastating disease."

A change in strategy to turn the corner

Setbacks taught researchers crucial lessons: treatments need to be designed specifically for brain cancer, not simply adapted from other cancers.

That shift began eight years ago for Professor Day's team, when they partnered with Curtana Pharmaceuticals to develop a drug purely for brain cancer capable of crossing the blood–brain barrier and targeting OLIG2.

The OPAL Phase 1 clinical trial will first test whether the treatment is safe and determine the right dose. If successful, the trial will move to testing the drug in people newly diagnosed with glioblastoma, alongside radiotherapy.

"I think the tide has turned in how we approach brain cancer. We understand the disease well and as a field we recognise the need to design better drugs to overcome these brain cancer disease obstacles. New small molecules and antibody therapies are coming through the pipeline and there are exciting new approaches to crossing the blood-brain barrier," Professor Day said.

Breakthroughs like the OPAL trial happen when passionate researchers, partners, and supporters like you unite behind a shared purpose.

Your gift today can help researchers like Professor Day develop new treatments that give people with brain cancer more time — and more hope.

Please support life-saving research today.

- Donate using the enclosed form
- Visit donate.qimrb.edu.au
- Scan the QR code
- Or call our Supporter Line on 1800 993 000

Click here to help fund the next breakthrough.

> "...this is truly a time for hope. Reaching this point has taken significant effort, and we're confident it represents a meaningful step forward..."
>
> – PROFESSOR BRYAN DAY

FEATURE

What if the research had never happened?

So much of what we know and how we protect community health today comes from decades of dedicated research. But what if those discoveries had never been made?

What if we'd never heard of Slip, Slop, Slap?

In 1986, epidemiologist Professor Adele Green AC turned to the Nambour community to determine an important answer to a problem no one had yet measured: Australians seem to have a lot of skin cancers, but just how many people are affected – and can anything be done to reduce the incidence? What began as a local study, counting skin cancers on people, evolved over 20 years into the world's most comprehensive population research project on skin cancer.

The findings showed conclusively that regular sunscreen use reduces squamous cell carcinoma (SCC), Australia's second most common skin cancer. This evidence would help underpin one of the nation's most influential public health messages: Slip, Slop, Slap.

But what if that research had never been done?

Before the Nambour study, Queensland faced an unmeasured epidemic. Keratinocyte cancers, namely basal cell carcinoma (BCC) and SCC were widespread but invisible in the data because no one was counting them. Everyone knew the burden was big; no one realised precisely how big. And in public health, what isn't measured, rarely gets prioritised by policy-makers and rarely gets addressed.

> "When the data came through, it was of course striking to see squamous cell carcinoma (SCC) cut by such a dramatic amount with regular sunscreen use."
>
> – PROFESSOR ADELE GREEN AC

Building on the initial findings, Professor Green and her colleagues went on to conduct a large-scale community trial to assess whether sunscreen or beta-carotene supplements could prevent skin cancer, since this was not known at the time.

"When the data came through, it was of course striking to see SCC cut by such a dramatic amount with regular sunscreen use, while beta-carotene had no effect," Professor Adele Green said.

"The breakthrough showing prevention of SCC by sunscreen use was long in the making. It was truly a team effort, building on the dedication of research nurses, skilled dermatologists, a remarkable group of volunteers, a deeply invested local community and exceptional statisticians who analysed the study's data.

"The support from the community of Nambour was simply amazing: We had volunteers from two rotary clubs, the Nambour Lions Club, St John's Ambulance, Red Cross, Burnside High School, and the Nambour Hospital."

Without that trial, one simple truth might still be uncertain: Regular sunscreen use protects against skin cancer.

Without clear evidence, Australia's sun safety messaging may have developed more slowly.

And without this research, prevention strategies, policy direction and changing community habits might have taken longer – potentially leading to more Australians being diagnosed with an avoidable cancer.

What if Queensland never studied mosquito borne diseases?

Our warm, wet climate allows mosquitoes and the viruses they spread to thrive. QIMR Berghofer has led research into mosquito-borne diseases for decades, starting with Professor Ralph Doherty AO's discovery of Ross River virus in 1959.

Ross River virus remains Queensland's most common mosquito-borne illness, causing fever, joint pain and swelling, and a rash. Mosquito control and avoiding bites remain the only way to prevent infection.

The Mosquito Control Laboratory conducts advanced research into mosquito vector biology, control and surveillance, helping Australia respond to emerging disease threats. As the largest facility of its kind in the Southern Hemisphere, it facilitates research into both native and exotic mosquitoes and their ability to transmit viruses such as dengue, Zika, Japanese encephalitis, Ross River and Barmah Forest.

Professor Brian Kay testing for mosquitoes in pooling water.

What if heart disease research had never taken this innovative leap?

Professor James Hudson with an image of a cardiac organoid on screen.

Professor James Hudson's pioneering cardiac organoids, miniature models of heart tissues grown in the lab have revolutionised how we study heart disease. These organoids mimic adult human heart muscle, enabling deeper insights into the biological processes regulating heart function and enabling safer drug testing. Thousands have already been used to understand how COVID-19 causes cardiac damage, with a Phase 3 clinical trial for long COVID due for completion in 2026. Recently funded by a Snow Medical Fellowship, this work could one day enable a simple blood test that identifies the best therapy for heart failure patients.

The trays that are used to grow the organoids.

Sunsmart kids have 47 per cent fewer moles and a 75 per cent lower melanoma risk

Smart sun habits are paying off.

A long running Queensland study has found that children today develop nearly half as many moles than kids did 25 years ago signalling a likely drop in future melanoma risk.

The Brisbane Twin Nevus Study counted moles on 12-year-old twins and their siblings every year from 1992 to 2016 (more than 4,000 in total). It revealed a 47 per cent reduction in mole numbers, one of the strongest predictors of melanoma, especially in fair-skinned people. This decline is expected to lead to a 75 per cent reduction in melanoma risk, a major public health achievement.

Researchers link this decline to reduced childhood sun exposure before age 12, a critical period for mole development. This shift aligns decades of effective sun safety education driven by campaigns like Slip, Slop, Slap which were based on QIMR Berghofer research.

Professor Nick Martin counting moles on children during his research in the 1990s.

Blood cancer drug to boost malaria survival

A new clinical trial led by QIMR Berghofer, in collaboration with University of Sunshine Coast Clinical Trials Network has found the medication, ruxolitinib, currently used for some blood disorders could help the body fight malaria more effectively, by boosting recovery and strengthening people's immune systems against future infections.

Malaria kills more than 600,000 people each year and three quarters of those deaths are in children under the age of five. Current treatments for malaria work by killing the parasite that causes most malaria deaths, Plasmodium falciparum, transmitted through the bite of an infected female *Anopheles* mosquito.

However, even with these treatments, fatality rates from severe malaria remain high.

While patients develop some immunity after infection, this protection is often incomplete, leaving many vulnerable to reinfection.

Head of QIMR Berghofer's Clinical Malaria Group Associate Professor Bridget Barber says the research overcomes a key hurdle.

"While antimalarial treatments are effective at killing the parasite, they don't directly address the inflammation that contributes to severe illness and death," she said.

> "These findings suggest that we may be able to improve clinical outcomes by targeting the host inflammatory response as well as the parasite itself."
>
> – PROFESSOR BRIDGET BARBER

QIMR Berghofer's Program Director of Infection and Inflammation Professor Christian Engwerda says the results are encouraging.

"One of the biggest challenges in efforts to eliminate malaria is the limited efficacy and duration of protection provided by current vaccines. By boosting the immune system without causing detrimental inflammation with drugs like ruxolitinib, we may be able to overcome these challenges," Professor Engwerda said.

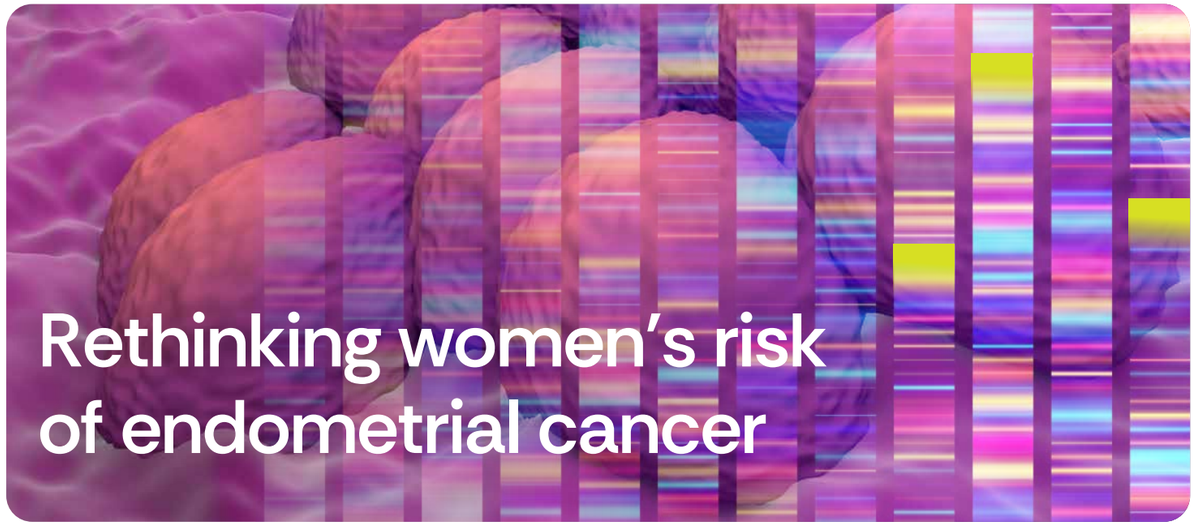
Further studies in malaria-endemic regions will be needed to determine whether these findings translate into improved outcomes for patients most affected by the disease.

Citizen science program for mosquito surveillance under development – community input needed!

QIMR Berghofer researchers are designing a citizen science program for backyards across Queensland to contribute to a state-wide mosquito surveillance effort, ensuring we detect disease-carrying species early and act quickly when (not if) they enter our communities.

Members of our community are needed to help co-design this program, specifically the instructional materials for the DIY sugar baits, how to share the results, and how the program should influence public health messaging.

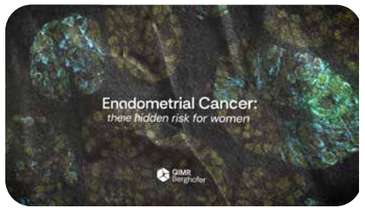
If you are interested in being involved and can attend a co-design workshop, follow the link here.



Rethinking women's risk of endometrial cancer

Associate Professors Tracy O'Mara and Dylan Glubb.

Watch a video about this research.



A major new study has found genetics play a powerful role in endometrial cancer risk – challenging the long held belief that obesity is the primary driver. The findings could lead to better screening of the women most at risk of developing the disease.

Endometrial cancer is the most commonly diagnosed gynaecological cancer, with more than 14,000 Australian women currently living with it. Cases have doubled in the past 25 years, with rates increasing among women aged 25-44.*

In the new study, researchers from the Cancer Genetic Susceptibility lab at QIMR Berghofer analysed data from more than 129,000 women, and found even for those that have a 'healthy' BMI, women in the top third of genetic risk are twice as likely to develop the disease.

When women have both a high genetic risk and a BMI indicating obesity, the risk jumps nearly five fold.

This is the first evidence that genetics and body weight operate separately, and that combining both factors can improve prediction risk for endometrial cancer.

Lab head Associate Professor Tracy O'Mara says the findings show a re-think is required about which women are at risk.

"These results are fascinating to us, because I think a lot of the time people dismiss endometrial cancer risk if you're in a normal BMI category, when in reality there is still a group of people at higher risk of developing cancer," she said.

> "These results really drive home the message that genetic risk matters even for women who are not overweight."
>
> – ASSOCIATE PROFESSOR TRACY O'MARA

"These results really drive home the message that genetic risk matters even for women who are not overweight."

Previously, doctors relied on obesity as the main way of measuring cancer risk, with genetic testing reserved for rare hereditary conditions such as Lynch syndrome, an inherited condition that raises the likelihood of developing particular cancers.**

Associate Professor O'Mara says their work focuses on the DNA a person is born with and how that influences cancer risk, noting that early detection leads to better outcomes.

Her colleague, Associate Professor Dylan Glubb, says the results could have global implications. "Research like this could help identify thousands of high-risk women globally who are currently missed by existing approaches. There are women out there who might benefit from early monitoring or prevention strategies."

The researchers are also eager to build on genetic discoveries in endometrial cancer to help identify opportunities for drug development.

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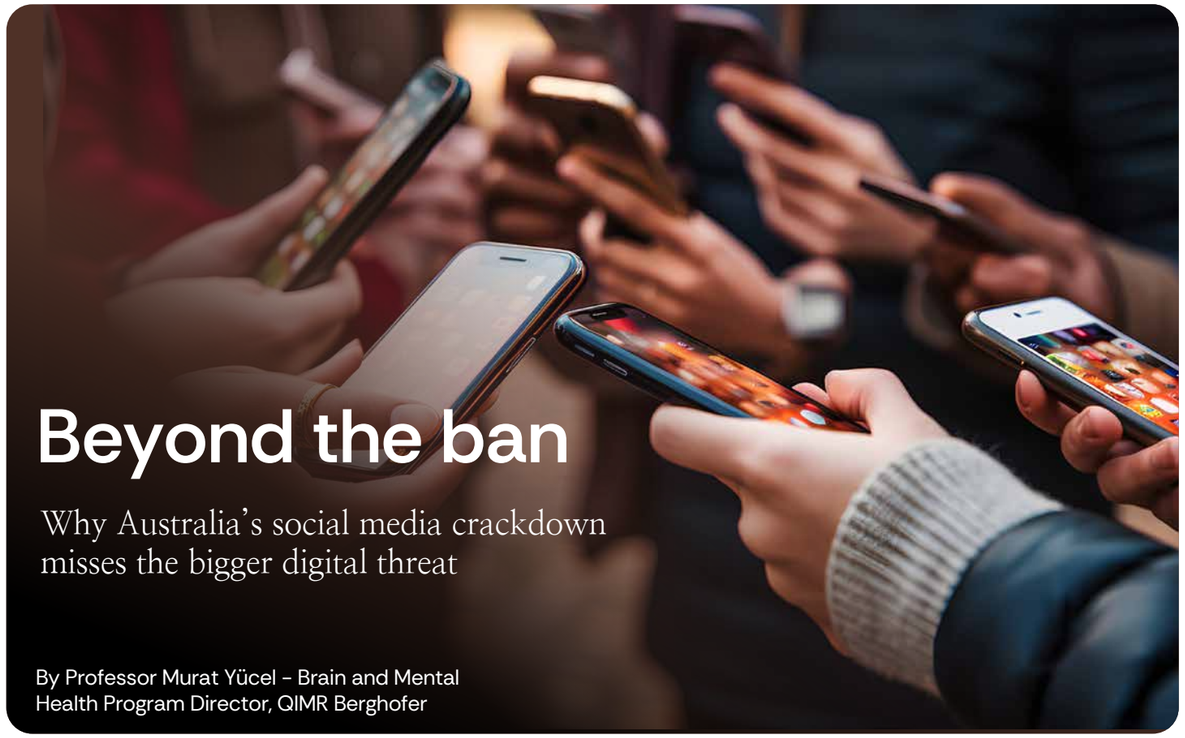

Beyond the ban

Why Australia's social media crackdown misses the bigger digital threat

By Professor Murat Yücel - Brain and Mental Health Program Director, QIMR Berghofer

"Digital literacy must be treated as essential education. Young people need to understand how platforms manipulate attention and how to manage their digital habits. This is not about fear; it is about building agency."

– PROFESSOR MURAT YÜCEL

Australia has entered new territory as the first country to ban social media for under 16s. With the first summer and school term under the ban behind us, early reactions have been mixed. While the policy signals decisive intent, it risks overshadowing a deeper, more complex issue: the internet itself is engineered to be addictive.

From infinite scroll to algorithmically curated feeds, today's digital ecosystem is built to capture and hold attention. Increasingly, it is evolving beyond attentional capture toward the formation of emotional bonds – systems that learn users' preferences, moods, and vulnerabilities, and respond in ways that simulate understanding, validation, and connection. In doing so, the internet is no longer just competing for time and focus; it is beginning to occupy relational and emotional space, deepening engagement in ways that more closely resemble attachment than distraction. For young people whose brains are still developing, this creates a unique vulnerability. And the problem goes far beyond Instagram or TikTok. Problematic use of the internet spans gaming, gambling, compulsive shopping and more. These behaviours activate the same neural reward pathways involved in substance addiction, blurring the line between online engagement and dependency.

Yet problematic internet use remains complicated. Its prevalence is difficult to quantify, given inconsistent definitions and research that is largely correlational. Excessive internet use often coexists with conditions like anxiety, depression or ADHD, making it hard to determine cause and effect. For many young people, digital worlds become a refuge, temporarily easing distress while deepening it in other ways.

Crucially, not all screen time is harmful. For young people in rural areas or low-income communities, digital spaces provide vital connection, support and educational access.

Online interactions can reduce feelings of isolation, particularly for those facing adversity. Paradoxically, these same groups can also be the most vulnerable to online harms and misinformation. This wide variability underscores why blanket policies, such as the social media ban, struggle to meet the diverse needs of young people.

"Young people are resourceful, and bypassing restrictions is often easier than policymakers anticipate. Over enforcement risks pushing adolescents into less regulated corners of the digital world."

– PROFESSOR MURAT YÜCEL

So where to next? Prohibition alone cannot solve the problem.

Instead, a coordinated response is needed, one that shifts the focus from restriction to empowerment.

First, ethical tech design must be prioritised. Infinite scroll, autoplay and push notifications are not neutral features; they are deliberate choices that encourage excessive engagement. Governments can incentivise healthier defaults such as time limits, friction points, and greater transparency in algorithms.

Second, digital literacy must be treated as essential education. Young people need to understand how platforms manipulate attention and how to manage their digital habits. This is not about fear; it is about building agency.

Third, prevention is paramount. Evidence based treatments for problematic internet use remain limited. Clinicians often adapt cognitive behavioural therapy to help people regulate online use, but large scale trials are still needed. There are no approved medications for 'internet addiction', although treatments for ADHD or mood disorders may help in overlapping cases. Until research advances, prevention through design, education and community support offers the greatest impact.

The digital world is not separate from young people's lives; it is part of their lives. Now that Australia has embarked on this unprecedented policy experiment, the real question is not simply whether a ban will work, but how do we create a digital environment that supports young people's wellbeing rather than undermining it?

To move forward, Australia must look beyond the ban and confront the architecture of digital addiction itself, shifting from prohibition to empowerment and building a healthier digital future for the next generation.

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Author Profile: www.qimrb.edu.au/about/our-people/professor-murat-yucel

OUR PEOPLE

Meet new lab head, Associate Professor Matthew H Law

As head of the Genetics and Skin Cancer Lab, Associate Professor Matthew H Law is helping to uncover the genetic clues that shape a person's risk of developing skin cancer and using that knowledge to develop more targeted screening approaches.

"I'm also incredibly grateful for the generosity of the public – you can't build datasets of a million people without a million individuals willing to contribute their time and DNA."

- ASSOCIATE PROFESSOR MATTHEW H LAW

What research are you involved in?

Our research investigates why people develop skin cancer, with a particular focus on inherited genes. Working with collaborators across the world, we help assemble some of the largest datasets of their kind, tens of thousands of skin cancer cases and hundreds of thousands of healthy volunteers, to identify the parts of our DNA that raise a person's risk.

As well as working out what is happening in our bodies to change our risk of cancer, our team use this genetic information to better predict who is most at risk. The aim is to be able to better target prevention, and skin screening, to those people who need it most.

What has inspired your career in research?

I've always been drawn to biology and science. My PhD explored the molecular genetics of schizophrenia, but during my first post-doctoral role, I realised something important: I enjoyed the analytical 'dry lab' work far more than the 'wet lab' experiments. So, when Professor Stuart MacGregor advertised a statistical genetics postdoc at QIMR Berghofer, I took the leap, and I've never looked back.

How have you been supported in your research?

I wouldn't be where I am without the outstanding mentors I've had at QIMR Berghofer. I always encourage students and postdocs to keep searching until they find the right mentor, and I do my best to model the guidance I've been fortunate to receive.

I'm also incredibly grateful for the generosity of the public – you can't build datasets of a million people without a million individuals willing to contribute their time and DNA. And our Institute's staff play an essential role too, from helping secure grants to running our powerful computing systems and specialised lab equipment, to enabling us to share our work with the community.

What if Queensland had never heard of the Slip, Slop, Slap campaign?

The answer, unfortunately, is simple: far more illness and far more lives lost. Even though my research focuses on the genetics of skin cancer, protecting ourselves from UV exposure remains the most powerful way to reduce risk. Keep Slip, Slop, Slapping (and Seek and Sliding).

Clinical trials and research studies

Clinical trials and research studies play an integral role in medical research and the impact it can have on the lives of people around the world. Here are some of the studies currently underway and recruiting at QIMR Berghofer.

PaCNOD Pilot Study

The PaCNOD Pilot Study is a first step towards evaluating whether people diagnosed with type 2 diabetes should be screened for pancreatic cancer. Occasionally, pancreatic cancer can trigger the development of type 2 diabetes in older adults. Early assessment could enable the cancer to be found before it has spread outside the pancreas. This study is the first phase of a large-scale study to determine whether screening people with new-onset diabetes would be beneficial.

Researchers are seeking volunteers aged 55 years or older who have recently been diagnosed with diabetes.

For more information, visit **www.qimrb.edu.au/studies/pacnod**

Genetics of Glaucoma Study

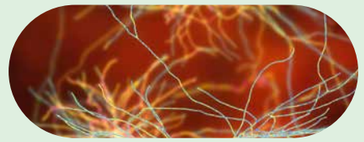
If you're aged 50–70 years and have a family history of glaucoma (affected parent and/or sibling) but no personal history of the disease, we invite you to be part of our study.

For more information, visit **www.qimrb.edu.au/clinical-trials-and-research-studies/genetics-of-glaucoma-study**

Living with Anxiety Study

The purpose of the Living with Anxiety Study (LwA Study) is to try and improve our understanding of the genetic and environmental factors that increase a person's risk of developing an anxiety disorder and also the genetic factors that influence how well, or poorly, a person responds to treatment.

www.livingwithanxiety.org.au



Genetics of Epilepsy Study

The GenEp Study seeks to uncover the genetic reasons why anti-seizure medications help some people, why others continue to have seizures, and why certain individuals experience side effects such as fatigue or brain fog. Understanding these differences will guide improved, more personalised epilepsy treatment.

Adults with epilepsy or recurrent seizures are invited to participate.

www.qimrb.edu.au/studies/genetics-of-glaucoma-study

For more information about all current trials and studies, please visit www.qimrb.edu.au/studies or click here.

SUPPORTING RESEARCH

The Faithfull legacy

Helping spare other families the heartbreak of brain cancer

Top: Sid Faithfull and Christine Sadler; bottom: Professor Bryan Day and Dr Yuchen (Michelle) Li.

Christine Sadler's long standing support for brain cancer research at QIMR Berghofer is driven by deeply personal experience. Her commitment honours her late husband, Sid Faithfull, who passed away from brain cancer, and reflects a shared determination held by Christine and their children, Bradley, Arran and Jessie to help spare other families the heartbreak they endured.

In Sid's memory, the Sid Faithfull Brain Cancer Laboratory has become one of Australia's leading centres dedicated to studying the most aggressive and deadly forms of brain cancer.

With survival rates for diseases like glioblastoma remaining remarkably low for decades, the laboratory's mission is to uncover new knowledge, improve treatments and ultimately transform the outlook for people diagnosed with brain cancer.

Under the leadership of Professor Bryan Day, researchers focus on understanding brain tumour biology, tackling treatment resistance and accelerating the development of more effective therapies. Christine's sustained philanthropy has been vital in supporting this work, providing the stability and flexibility required to pursue innovative research with real clinical potential.

By transforming personal loss into purpose, Christine continues to honour Sid's legacy and empower researchers to push boundaries, advance treatments, and offer renewed hope to families facing brain cancer now and in the future.

Closing the gender funding gap in medical research

One significant challenge of medical research isn't scientific – it's the gender funding gap. Despite leading innovative and impactful work, female researchers in Australia continue to receive far less support than their male counterparts, with men securing, on average, two and a half times more grant funding. This inequity slows careers, limits opportunities, and ultimately hinders scientific progress.

The Josephine Circle was created to help change this.

Through this collective giving initiative, members directly support outstanding female scientists at QIMR Berghofer, providing the resources, recognition and confidence needed to drive breakthrough discoveries and build long term research careers. Members play an important role in championing women who are shaping the future of medical science.

As part of The Josephine Circle, members enjoy invitations to exclusive events, updates from researchers, involvement in the grant selection process, and recognition across QIMR Berghofer publications, all while amplifying their impact through collective giving.

Last year, The Josephine Circle awarded two inaugural grants totalling $200,000 to an early and a mid career female researcher. These transformative grants provide support at critical moments, helping researchers progress their work, secure further funding and lead future discoveries.

The Josephine Circle inaugural grant recipients, Dr Chandra Choudhury (left) and Dr Suzy Ossipow.

By coming together, members are creating a more equitable future and ensuring brilliant female researchers have the opportunity to thrive.

Driving breakthroughs in brain cancer treatment

William and Hilde Chenhall Research Trust

The William and Hilde Chenhall Research Trust has been a valued supporter of QIMR Berghofer since 2010, contributing more than $2.3 million to accelerate vital research. Their latest three year commitment, $240,000 per year, continues this legacy, supporting:

- Associate Professor Corey Smith's (pictured, right) glioblastoma research, and
- our broader cancer research program.

Their ongoing support is a powerful reminder of what's possible when dedicated partners stand beside us: bold ideas thrive and discoveries move forward.

In Associate Professor Smith's lab, support from the Chenhall Trust is helping drive major advances against glioblastoma, one of the most aggressive and challenging brain cancers.

Understanding why some patients live longer

Clinical trials using T cell immunotherapy are helping researchers uncover why a small group of patients with glioblastoma experience significantly longer survival after treatment. By studying the immune profiles and treatment responses of these patients, researchers are gaining insights that could lead to more effective therapies for everyone diagnosed with this devastating disease.

Boosting the power of T cells

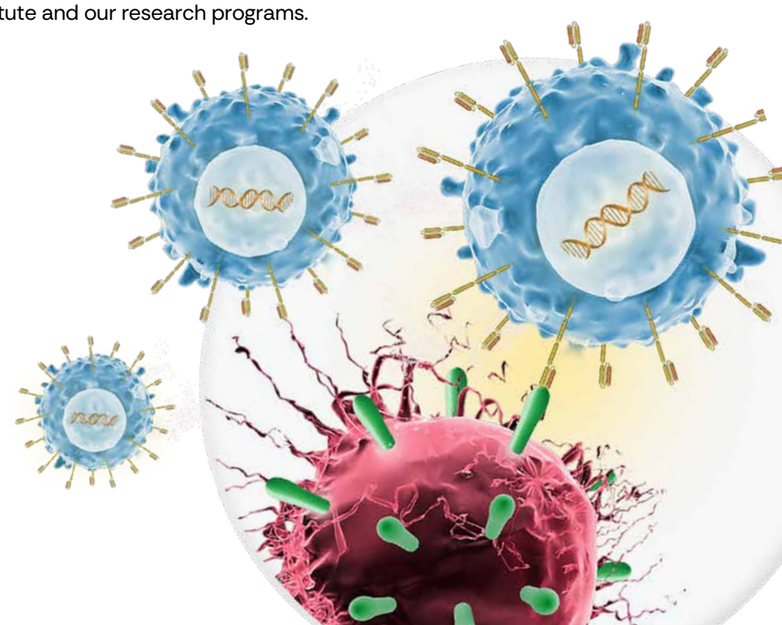
Associate Professor Smith's team is also developing a new strategy to target a subset of T cells – enhancing their ability to recognise and destroy brain cancer cells.

Shaping the Next Generation of CAR T Cell Therapy

The team is also refining the manufacturing process for our next generation of CAR T cell therapy designed specifically for glioblastoma. This new method focuses on producing T cells that are stronger, more targeted, and more effective once they enter the challenging environment of the brain.

The Chenhall Trust was awarded the Clive Berghofer Humanitarian Award at QIMR Berghofer's 2025 Annual Awards day in recognition of their philanthropic support. This award recognises members of the community who actively raise awareness and/or funds for the Institute and our research programs.

The Clive Berghofer Humanitarian Award 2025 was presented in recognition of The Chenhall Trust's philanthropic support and was accepted on the Trust's behalf by Associate Professor Corey Smith.



Thank you

Thank you to the incredible community of supporters who power life-saving research at QIMR Berghofer. Your generosity makes discoveries possible.

You're the heart of research

Every February, QIMR Berghofer celebrates Thankuary, a week dedicated to recognising the donors whose generosity powers our life saving research.

From 9–13 February, staff and scientists reached out with handwritten cards, phone calls, tours of research labs and personal visits to share the message: You're the heart of research.

While we're grateful for our supporters every day, Thankuary is a chance to pause and reflect on the generosity that drives discovery. It's a reminder that behind every breakthrough are people who believe in the power of research to change lives.

As part of the celebrations, several longtime supporters joined a special 'Boardroom Lunch & Lab Tour' with Dr Lachlan Harris, Team Head of The Cancer Neuroscience Laboratory. His team is working at the cutting edge of science, translating insights from fundamental neuroscience into new approaches for understanding and treating cancers, particularly glioblastoma, the most common brain tumour in adults.

Behind every discovery is a community of supporters who believe in the power of research.

Among the donors were Drs Joanna Tait and Beres Wenck, long-time champions of QIMR Berghofer, whose generosity has supported research for many years. Most recently, they helped fund the work of researcher Chandra Choudhury in Dr Harris' laboratory, contributing to important progress in brain cancer research.

We also had the pleasure of Dr Ross Forgan-Smith's company, who has maintained a close connection with the Institute over many years. Over his career, Ross received recognition for his laboratory's collaboration with QIMR Berghofer virus research. His connection to the Institute runs deep – he personally knew founding directors Dr Edward Derrick, Professor Ralph Doherty AO and Dr John Pope, and visited the original laboratories in Victoria Park.

Long time donors Tony and Patrina Bosso also enjoyed the lunch and Lab tour. The Bosso family have been supporting Professor Steven Lane and his research for many years in honour of Patricia Rae Bosso.

Thank you to all of our kind supporters. Whether you fundraise for us in your community, donate monthly, or give when you can, you truly are the heart of research.

Left: Researchers and staff love writing notes of thanks to our donors; Right: A group of supporters enjoyed a hands-on experience in the Education Lab.

Are we coming to your community in 2026?

In 2026, we are travelling to Cairns, the Gold Coast, Sunshine Coast, Townsville and Rockhampton for events with our QIMR Berghofer community.

Click through to our events page for more details.

Community honours Lincoln – 10 years on

On February 8th, the Powell family marked a significant milestone with the 10th Annual Lincoln's Day. Held at the Dolphins Club, Redcliffe, the event brought the community together for another year of fundraising in memory of the Powells' son, Lincoln.

What began 10 years ago as a tribute to a much-loved son, father and friend, has grown into a deeply meaningful annual tradition. Guests gathered to enjoy a beautiful high tea, sharing laughter and conversation in celebration of Lincoln's life and the legacy his family and friends continue to build in his honour.

To see this event reach its tenth year is a testament to the strength, generosity and determination of Lincoln's parents, Peter and Wendy, their loved ones and the wider community who stand beside them. Through their dedication, Lincoln's memory continues to drive progress, transforming love into action and remembrance into hope.

Congratulations to the Powell family who have raised over $120,000 over a decade, to support vital work within the Sid Faithfull Brain Cancer Laboratory.

Peter and Wendy Powell with QIMR Berghofer's Community Fundraising Officer, Isla Paul.

Lincoln's Day event at the Dolphin's Club, Redcliffe.

Celebrating women's contribution to research on International Women's Day

This year's International Women's Day theme was Balance the Scales, highlighting the need for fair, inclusive, and justice for every woman and girl. At QIMR Berghofer, we marked the occasion by celebrating the remarkable contributions women make to research and to improving health outcomes for communities everywhere.

We were honoured to welcome Lisa Curry AO as our guest speaker. As a triple Olympian, best-selling author, and ambassador of QIMR Berghofer's Eating Disorders and Genetics Initiative (EDGI2 Study), Lisa brought a powerful and deeply personal perspective to the event. She spoke movingly about her connection to the EDGI2 Study following the tragic loss of her beloved daughter, Jaimi, who passed away from an eating disorder in 2020.

Thank you to everyone who joined us as we celebrated the invaluable contributions of women in research and reflected on the impact we can collectively have on health and wellbeing.

Clockwise from top: Lisa Curry AO talking about her daughter Jaimi; Lisa Curry AO and Professor Sarah Medland OAM; Lisa Curry AO presenting.

Fundraise for medical research

Click here to discover more and start your own fundraiser, or contact our Community Fundraising Officer, Isla Paul. Phone: 0407 245 809 Email: Isla.Paul@qimrb.edu.au

QIMR Berghofer

Breakthroughs happen when passionate researchers, partners, and supporters unite behind a shared purpose.

By backing QIMR Berghofer, you help drive the discoveries that change lives and bring us closer to a future where devastating diseases have better answers.

Please support life-saving research today

- Donate using the enclosed form
- Visit donate.qimrb.edu.au
- Call our Supporter Line on 1800 993 000

www.qimrb.edu.au