80TH ANNIVERSARY
SPECIAL EDITION

LifeLab

The latest news from **QIMR Berghofer**

ISSUE 125 | WINTER 2025

Celebrating 80 years of medical research in Queensland.

Powerful therapy saving lives of immunocompromised patients

Global project brings hope for new childhood brain cancer treatment

The race to outpace melanoma

QIMR Berghofer

80 years of pioneering medical research

LifeLab

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Message from the Director

Welcome to the third special collector's edition of LifeLab, celebrating 80 years of QIMR Berghofer.

Our feature story in this edition highlights a powerful cellular therapy developed right here in Queensland. The therapy offers a chance at recovery for immunocompromised patients who would otherwise have run out of options. In this story, you will meet Koby, who received this immunotherapy when he was just eight years old and made a truly remarkable recovery. This therapy is a testament to the impactful medical research that has taken place at QIMR Berghofer since 1945.

Also featured are researchers in the Sid Faithfull Brain Cancer Laboratory at QIMR Berghofer, who are leading a global project which has shown that a potential new therapy for the most common childhood brain cancer, medulloblastoma could be more effective, less toxic and improve outcomes for young patients.

We also continue our exploration into the Institute's pioneering research in Queensland, focusing this edition on the 1990s and 2000s.

These decades were transformative for medical research and gave rise to discoveries that impacted health and wellbeing in Australia and across the globe. In particular, our work on liver disease put the Institute on the map as a global leader in hepatology research.

Celebrations for our 80th anniversary continue across Queensland and it's not too late to celebrate with us in person! I encourage you to come along to one of our upcoming Brisbane-based or regional gatherings to meet with our researchers and learn how your support is making a difference.

The celebratory year will then culminate with our Gala Dinner on 1 November, the exact date when the Institute was established in 1945. Please join us, seats and tables are now open for registration.

As always, thank you for your commitment to better health and wellbeing through medical research – and I hope you enjoy the third of our four-part anniversary edition of LifeLab!

Professor Fabienne Mackay
Director and CEO

Hut 8, an old World War II army building in Victoria Park/Barrambin, where the Institute was established in 1945.

Contents

80th Anniversary Gala Dinner | 1 November 2025

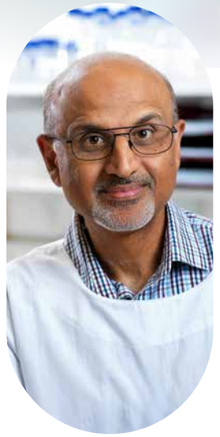
visit **qimrb.edu.au/galadinner** to secure your tickets

See back cover for more details

FEATURE

Powerful therapy saving lives of immunocompromised patients

A powerful cellular therapy that targets out–of–control viral infections has saved the lives of dozens of critically–ill, immunocompromised Australians who have received the treatment on compassionate grounds.



Professor Rajiv Khanna AO.

▶ WATCH

Watch a video about our cell therapy.

Researchers at QIMR Berghofer have developed an extraordinary type of immunotherapy, and it's saving the lives of immunocompromised patients who have exhausted all other options of treatment.

Professor Rajiv Khanna AO and his team from the Tumour Immunology Laboratory have developed a cellular therapy that targets viral infections.

What is cellular therapy?

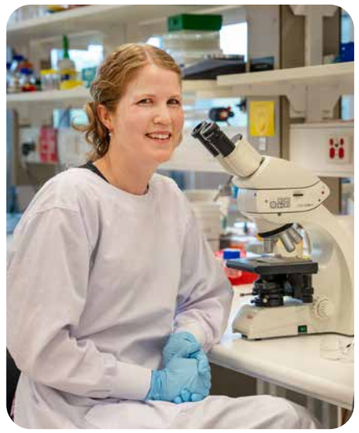
Cellular therapy, also known as adoptive therapy, uses immune cells isolated from blood collected from healthy donors. Immune cells that can recognise viruses of interest are then selectively expanded and banked for future use in patients whose immune systems are compromised due to genetic reasons or transplant procedures.

The therapy is produced at QIMR Berghofer's cell therapy manufacturing facility, Q-Gen Cell Therapeutics, in Brisbane, and targets common viruses, such as Epstein–Barr virus, cytomegalovirus, BK polyomavirus, John Cunningham virus, and adenovirus.

In healthy people, these viruses usually cause mild or no symptoms, but for immunocompromised patients, they can be catastrophic.

Cellular therapy has been in development for more than 25 years, and previously used the patient's own cells. As the cell therapy manufacturing process takes eight–12 weeks, including quality testing, using healthy donor cells reduces waiting time for patients by allowing the cells to be pre-banked. In addition, one batch of cell therapy grown from a healthy donor can be used to treat many patients, with an AI-based algorithm used to match the patient with the best batch of cells.

Cellular therapy has emerged as a highly effective tool to treat cancer, autoimmune diseases, and infectious diseases. However, it has not yet been approved by the Therapeutic Goods Administration (TGA) for the treatment of severe viral infections.



Dr Michelle Neller.

QIMR Berghofer is currently running a clinical trial of a cellular therapy for those who have suffered infectious complications following a transplant.

However, for extremely severe cases of viral infection in immunocompromised patients, where all other options have been exhausted and the patient is critically ill, this therapy is being supplied under the TGA's Special Access Scheme, which allows the patient access to the (currently) unapproved cell therapy as a last resort for treatment.

The healthy donors of the cells that are being tested in the trial have given extended consent for the use of their cells on compassionate grounds.

QIMR Berghofer is the sole supplier of this therapy for compassionate use in Australia. The research team collaborates with leading clinicians in more than 25 hospitals around Australia to supply the cellular immunotherapy under the Special Access Scheme.

Clinical trials manager, Dr Michelle Neller, says requests for the cellular therapy under the scheme are a priority.

"When we receive a request through the Special Access Scheme from a hospital, we drop everything. We move them through as quickly as possible because we know those patients are really unwell. They only come to us when the patient has no other options," she said.

Professor Khanna would like to see TGA approval of the use of this cellular therapy for viral infections so the therapy can be made more widely available to critically ill Australians.

> "Our breakthrough cellular therapy to target viruses has minimal side effects and has been effective in saving the lives of many children and adults who had otherwise run out of options."
>
> – PROFESSOR RAJIV KHANNA AO

"Many patients are coming to us at a very late stage of disease and have undergone multiple treatments, so the success rate is around 65 per cent. We believe more lives could be saved if patients received the therapy earlier," he said.

Professor Khanna would also like to see a national cellular therapy repository built, with access for all hospitals across the country.

A need for healthy donor cells

The program is in need of healthy donor cells, particularly from donors of diverse ethnic backgrounds. Contact Stem Cell Donors Australia for more information on how to donate: **www.stemcelldonors.org.au**.

Koby's story

Koby was just eight years old when he caught a life-threatening viral infection following a bone marrow transplant.

Koby was given just 10 per cent chance of survivival after contracting adenovirus after a bone marrow transplant.

His mother Jodi recalls, "Koby breezed through his bone marrow transplant, but then he caught adenovirus. For weeks he was isolated in hospital and getting infusions to try and get on top of the virus or at least hold it at bay until his own cells could start tackling it, but he kept getting weaker and the doctor said he only had a 10 per cent chance of pulling through."

Jodi was told of the special cellular therapy from QIMR Berghofer, but that it was only available through compassionate request. "We didn't know if he would even survive the wait for the request to be approved, and for the cells to be transported to Perth," Jodi said.

The request was approved, and Koby (pictured left) received his first infusion of the virus-specific cellular therapy. "After just one week he was a different child. He was about to die, and then he was well. Just like that. Within two weeks they were talking about discharging him from hospital. The virus was just...gone," Jodi recalls.

Koby is now happy and healthy, head of his school house and captain of his soccer team after most of his early life on the sidelines due to his illness.

> "We're incredibly grateful that cellular therapy gave us a second chance with our exceptional, compassionate Koby, and for all the incredible moments since."
>
> – JODI, KOBY'S MUM

Koby, with mum Jodi, is healthy and happy after receiving cellular therapy through the Special Access Scheme.

FEATURE

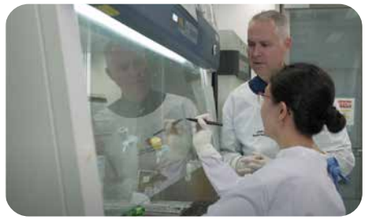
Global project brings hope for new childhood brain cancer treatment

A worldwide collaboration is showing positive signs for one of the deadliest diseases in children.

Dr Yuchen (Michelle) Li and Professor Bryan Day.

▶ WATCH

Watch a video about our childhood brain cancer research.



A world-leading research collaboration between QIMR Berghofer and Emory University in the United States has shown that a potential new therapy for childhood brain cancer effectively infiltrates and kills tumour cells in preclinical models.

The team has hailed the findings as potentially transformative for the treatment of the most common childhood brain cancer, medulloblastoma, and could apply to other brain cancers such as glioblastoma (GBM) and diffuse intrinsic pontine glioma (DIPG).

Researchers collaborated with US biopharmaceutical company, Curtana Pharmaceuticals, which has developed an experimental drug, CT-179. The researchers found that the drug effectively targets the protein OLIG2, which is a known stem cell marker crucial in the initiation and recurrence of brain cancers.

Paediatric brain cancer

Brain cancer is the second leading cause of death in children in the developed world.

For the children who survive, standard treatments have long-term impacts on their development and quality of life, particularly in small children and infants.

When medulloblastoma recurs, the prognosis is usually extremely poor.

Professor Bryan Day, who leads QIMR Berghofer's Sid Faithfull Brain Cancer Laboratory and is Co-Director of the Children's Brain Cancer Centre in Australia, described the findings as a breakthrough.

"Brain cancer is an incredibly tough puzzle to solve. As researchers, what gets us out of bed every day is trying to solve that puzzle.

> This global research could potentially lead to new combination therapies that are less toxic, more effective, and improve outcomes for these young patients."
>
> – PROFESSOR BRYAN DAY

"Our study demonstrated that the drug CT-179, used in combination with standard radiation therapy, prolonged survival in a range of preclinical medulloblastoma models, delayed recurrence of the disease, and increased the effectiveness of radiotherapy. We are now seeking funding to advance to first in-human clinical testing of CT-179 in patients with brain cancer," Professor Day said.

QIMR Berghofer researcher Dr Yuchen (Michelle) Li, who was joint first author on the study paper, "Suppressing recurrence in Sonic Hedgehog subgroup medulloblastoma using the OLIG2 inhibitor CT-179" (*Nature Communications*, February 2025), is hopeful this translational research can improve the quality of life of children with brain cancer in future.

"The blood-brain barrier is a big obstacle in terms of treating brain cancer. As a small molecule drug, CT-179 can penetrate the blood-brain barrier and could also be taken orally, making it easier to administer to young patients," Dr Li said.

"In our experimental models in the lab, the drug hangs around in the brain. When used in combination with radiotherapy, the hope is that overall treatment is more effective and less toxic, which reduces the long-term, therapy-induced side effects that have such an impact on patients.

"This has been a long-running study and it is very rewarding to see it published. We are incredibly grateful for the funding support that helped make this research possible, including from Queensland's Children's Hospital Foundation in Australia," Dr Li said.

Global collaboration

The results come from a global effort, with QIMR Berghofer leading the study in collaboration with scientists from Emory University, Karolinska Institute in Sweden, University of North Carolina at Chapel Hill, and SickKids in Toronto, Canada.

LISTEN

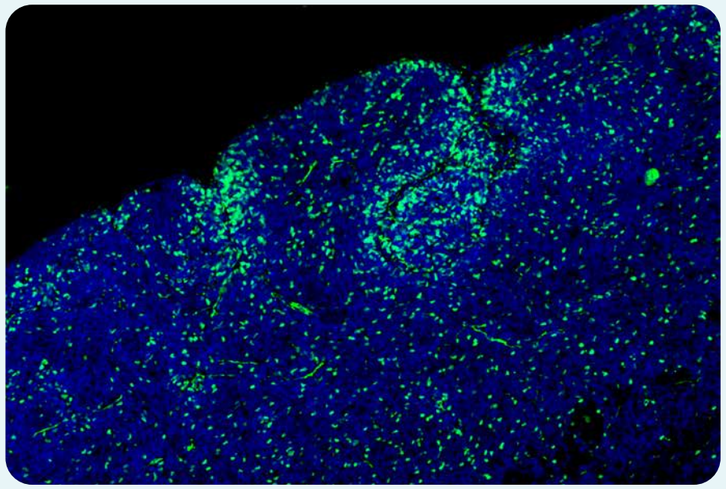
Listen to BodyLab, QIMR Berghofer's podcast with Professor Bryan Day.

Support this research

We are seeking funding to support the initiation of a first-in-human clinical trial for this promising new therapy. Funding will enable us to conduct safety and efficacy assessments in adults with brain cancer.

Your support will play a pivotal role in advancing medical innovation and bringing new treatment options closer to those in need.

Contact us at supportus@qimrb.edu.au.



Medulloblastoma – the most common childhood brain cancer

The blue colouring in the image on the left, shows healthy and malignant cells in medulloblastoma tumour tissue in preclinical models in the lab. Problematic cancer stem cells are coloured green – the research has shown these cancer stem cells have a "marker" that can be targeted (the OLIG2 protein), and that the combination of the experimental drug CT-179 and radiation therapy was effective in attacking these cells in the lab models.

Source: Timothy Gershon, "Targeting Stem Cells in Medulloblastoma", *Research Communities by Springer Nature*, February 2025.

FEATURE

Celebrating 80 years of medical research in Queensland – Part 3

In this third instalment of our four-part anniversary series, we explore the 1990s and 2000s at QIMR Berghofer.

80th Anniversary Event Calendar

Upcoming events:

- **19 July:** Brisbane Open House
- **22 July:** Townsville Donor and Community Event
- **1 November:** Gala Dinner (Brisbane). Seats and tables now open for registration.

Scan the code for the full calendar of events or visit **qimrb.edu.au/80th-anniversary**

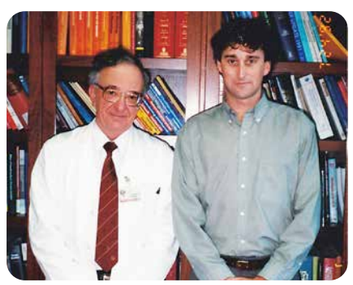
1990s

In 1990, Professor Lawrie Powell was appointed Director of the Queensland Institute of Medical Research (QIMR).

An internationally recognised hepatologist and clinician researcher, Professor Powell steered the Institute towards research that would be used more readily in the clinic.

In 1991, staff officially moved from the Bramston Terrace building at the back of the Royal Brisbane Hospital campus (QIMR's home since 1977) and into the new 11-storey Bancroft Centre (pictured above). The Bancroft Centre was purpose built thanks to a $30 million allocation from the Queensland Government.

Along with Professor Powell, Professors Graham Cooksley and June Halliday arrived at QIMR as the co-leaders of a large team specialising in liver disease and iron research. For Professor Halliday, it was a welcome return, having started with the Institute as a scholarship student back in the early 1950s. Other significant members of this team included three PhD students who would go on to play significant roles in the Queensland and Australian biomedical community: Dr Dean Moss, now CEO of Uniquest, and Professors Gregory Anderson and Grant Ramm, who both went on to establish independent research groups at QIMR. Professor Anderson was appointed Deputy Director of QIMR in 2011, and Professor Ramm took over the role in 2021. Professor Ramm is currently the Institute's Deputy Director and Chief Scientist.



Professor Lawrie Powell, Director of QIMR 1990–2000, left, with then PhD student, Professor Grant Ramm (currently Deputy Director).

A decade of discoveries

During this decade, the Institute was at the forefront of many liver disease discoveries. These included implementing family screening programs to improve early detection of hereditary haemochromatosis, establishing the QIMR haemochromatosis patient database and national patient support group Haemochromatosis Australia, and explaining how haemochromatosis causes iron overload and chronic liver disease.

In 1997, Professor Powell was instrumental in leveraging State and Federal funding, instigated by American philanthropist Chuck Feeney. Mr Feeney's Foundation, The Atlantic Philanthropies, donated $27.5 million to fund construction of a new building for the Institute's Cancer Research Centre.

This provided the space for scientists to grow their life-saving research. Notable researchers of this period include Professor Kay Ellem for cancer immunotherapy, Professors Jacqui and Peter Upcroft for their work on Giardia (a parasite that can infect the small intestine), Professor Brian Kay for his work in mosquito and arbovirus research, Professor Allan Saul and Professor Michael Good for research into malaria, Professor Martin Lavin in Ataxia Telangiectasia (a genetic condition affecting the nervous system), and Professors Kum Kum and Rajiv Khanna for their work on cancer cell biology and immunotherapy, respectively.

An all staff photo taken in 2006.

2000s

Professor Michael Good was Director from 2000–2011.

Professor Michael Good AO was appointed director of QIMR in 2000. He had been working on malaria and rheumatic fever and with the turn of the century, the Institute moved swiftly to meet the challenges of the time.

Professor Good remembers the wisdom of his immunology PhD supervisor, Sir Gustav Nossal, who said: "You don't dabble in science, you focus on an area and stick to it. People who make breakthroughs don't do it overnight; they do it over a lifetime."

Clive Berghofer AO in front of the Clive Berghofer Cancer Research Centre.

In 2001, the Comprehensive Cancer Research Centre opened, the first cancer research facility of its kind in the southern hemisphere. The following year, Toowoomba philanthropist Clive Berghofer AO donated $1 million annually for five years and the centre was renamed the Clive Berghofer Cancer Research Centre in his honour.

Professor Good's philosophy was: "If your research reveals something that could be useful as a vaccine or a treatment, I believe it is your responsibility to develop it as a product as no-one else will have your passion." Such a philosophy paved the way for further development.

In 2002, Q-Pharm commenced trading as a "spin-out", joint venture enterprise between QIMR and The University of Queensland, conducting contract clinical research for the biotechnical and pharmaceutical industries as well as in-house vaccine and drug research.

Looking to a new frontier in treatment, in 2004, Q-Gen Cell Therapeutics was established as a commercial arm for the contract manufacture of cell-based therapies.

During this decade, several of the Institute's researchers made global impacts including Professor Nick Martin who initiated the international ENIGMA Consortium which brings together a collaborative network of researchers in imaging genomics, neurology and psychiatry and Professor Georgia Chenvix-Trench who initiated the international Consortium of Investigators of Modifiers on BRCA1/2 (genes that increase risk of breast cancer when mutated).

The 2000s also saw an increased focus on public health and education in areas like malaria, scabies and mosquito-borne viruses. Professor Don McManus led research and education into neglected tropical diseases at this time.

▶ WATCH

Watch our special anniversary video.

SUPPORTING RESEARCH

Double celebration for QIMR Berghofer and Clive Berghofer AO in Toowoomba

"Health is the most important thing in life – without health you have nothing."

– CLIVE BERGHOFER AO

We recently marked QIMR Berghofer's 80th Anniversary and the 90th birthday of Clive Berghofer AM, the Institute's most generous benefactor, with a special double celebration in Mr Berghofer's hometown of Toowoomba.

Held at Queensland Museum Cobb+Co, the event was the first stop in a series of regional 80th Anniversary events scheduled for 2025. It was also a perfectly timed opportunity to celebrate Mr Berghofer and the Toowoomba region's extraordinary contributions to medical research.

Clive Berghofer AO, seated centre, with members of QIMR Berghofer.

Mr Berghofer shared with the 100-strong crowd that he made his first donation to the Institute after two of his employees passed away from cancer.

"Health is the most important thing in life - without health you have nothing," Mr Berghofer said.

"With that, you need good facilities to help look after people's health, because there are so many people who need help."

QIMR Berghofer's Director and CEO, Professor Fabienne Mackay, paid tribute to Mr Berghofer's generosity.

"Clive is our hero and without his remarkable contributions we wouldn't be able to undertake the impactful medical research that we do," Professor Mackay said.

From all of us at QIMR Berghofer– thank you, Clive!

80th year celebrations on the Gold Coast and Sunshine Coast

We continued our 80th anniversary celebrations across Queensland, with locals coming to our Gold Coast and Sunshine Coast events to show their support and join the festivities.

Attendees mingled with scientists and staff from QIMR Berghofer and gained insights into the history of the Institute and the lifesaving medical research being undertaken.

At the Gold Coast event, clinical neuropsychologist Professor Mural Yücel, Director of QIMR Berghofer's Brain and Mental Health program, announced plans to bring the world's largest study into problematic internet use to Australia.

Professor Murat Yücel spoke at our Gold Coast event.

Associate Professor Michelle Wykes spoke at our Sunshine Coast event.

International Women's Day

Pioneering surgeon, scientist, and inventor of a revolutionary spray-on skin, Professor Fiona Wood AO, shared her inspiring journey at our rescheduled 2025 International Women's Day event in May.

Professor Wood captivated a diverse audience of scientists, staff, and supporters and offered valuable insights into her career as both a surgeon and researcher. She recounted her transformative experiences providing burns care and shared her quest to continue to improve physical—and also psychological—outcomes for survivors.

Professor Wood's story is a testament to the 2025 International Women's Day theme of *March Forward*, as she continues to push the boundaries of science, medicine, and leadership and pave the way for the next generation of women in science.

Professor Fiona Wood AO (pictured left with QIMR Berghofer CEO and Director Professor Fabienne Mackay) captivated the audience with her International Women's Day keynote speech.

The Josephine Circle

Founding members of The Josephine Circle gathered for the first time, after attending QIMR Berghofer's International Women's Day event.

The Josephine Circle, established earlier this year, is a female philanthropic community designed to support female researchers. Named after pioneering parasitologist Dr Josephine Mackerras (nee Bancroft), an integral researcher at the Institute from 1947-1961, The Josephine Circle provides female researchers with transformative grants to help address the gender funding gap that persists in medical research.

To be part of this very special collective giving initiative, supporting and connecting with female researchers, please visit **qimrb.edu.au/support-us/the-josephine-circle**.

Above: L-R Founding members Barbara, Jane, Robyn, Maureen, and Gwen (absent) at the first meeting of the Josephine Circle.

A final gift to medical research – a lasting legacy

After many years supporting medical research at QIMR Berghofer—including research into neurodegenerative diseases and brain cancer—Pam Webb left a lasting legacy through a generous final gift in her estate.

Pam's first gift to the Institute was in 1996 and her final gift of more than $460,000, in honour of her father W.A. McKay (pictured, right), will go towards Professor Amanda Spurdle's Molecular Cancer Epidemiology Laboratory which studies the genetics of cancers, including breast, ovarian, and endometrial cancers.

We are very grateful for Pam's tremendous generosity.

For more information on leaving a gift in your will to fund the development of important medical research, please visit **qimrb.edu.au** or call 1800 993 000.

Pam's final gift was in honour of her father W.A. McKay.

L-R: Pam Webb, with a QIMR Berghofer staff member, her mother Phyllis McKay and sister Barbara McKay in 2000.

The race to outpace melanoma

Australia (and Queensland in particular) is widely recognised as the skin cancer capital of the world. Thousands are sadly diagnosed each year with melanoma, the deadliest form of skin cancer.

Understanding the cancer that affects so many Queenslanders, has led researchers at QIMR Berghofer to conduct some of the world's largest studies on skin cancer.

▶ WATCH

Watch a video about our melanoma research.

Where we've come from: Past medical research

Genetic discoveries

With support from donors, researchers at QIMR Berghofer helped identify key melanoma risk genes, including CDK4, MITF, and POT1. This has allowed doctors to better understand who is most at risk and how melanoma behaves at a genetic level.

Early detection & prevention

Donor-funded research has helped our researchers' groundbreaking studies prove that early-life sun exposure significantly increases melanoma risk. This work has helped strengthen public health campaigns like Slip, Slop, Slap.

QSkin Study

In 2011, QIMR Berghofer launched QSkin, one of the world's largest skin cancer studies with the help of generous people like you. More than 40,000 Queenslanders have taken part, allowing researchers to track how melanoma develops, who is most at risk, and how to detect it earlier.

But there is still so much more to be done to catch diseases like melanoma earlier and treat them more effectively.

Dan undergoing treatment for melanoma.

Dan's story: Melanoma can move fast

In 2018, Dan's wife noticed a nasty looking mole on his back. It was diagnosed as melanoma and quickly removed along with a number of lymph nodes. For five years, all the regular scans came back clear. Then suddenly, in October of 2023, Dan collapsed at work, his left side convulsing uncontrollably. Brain scans revealed two tumours and one had already haemorrhaged.

Dan's melanoma had not only returned, but rapidly spread to his brain. He was rushed into surgery to remove the largest tumour, and recovered well. But not long after, his speech started to deteriorate.

Scans revealed that in the four weeks since the first tumour had been removed, the second tumour had grown from one to seven centimetres.

Dan was diagnosed with stage 4 BRAF-positive melanoma, and it had metastasised to his stomach, lungs, and lymph nodes. The melanoma wasn't curable, but it was treatable. Since then, he has been through a gruelling course of further surgery, radiation, immunotherapy and drug combinations.

In January this year, Dan's scan miraculously showed no active cancer. But he knows he's not in the clear. Eventually his current medication will stop working and the melanoma will become resistant to it. He knows he's here today because of past medical research, but he's relying on continuing medical research and a clinical trial to be here tomorrow.

Dan with his family.

Research must move faster: Help vital medical research move forward

Dan is making the most of every precious moment, and so must we. For 80 years, we have existed to advance medical research that improves health and wellbeing—discovering breakthroughs, detecting diseases early, and developing better treatments for the future.

Please help us catch diseases like melanoma earlier, treat them more effectively and give families like Dan's more time.

You can help fund tomorrow's medical breakthroughs by donating today. You can give securely over the phone by calling us on 1800 993 000 or by **visiting us online**.

The next wave of melanoma treatments

Researchers at QIMR Berghofer are working on the next breakthroughs which include:

- Personalised treatments, where treatments are genetically tailored to ensure every patient receives the most effective intervention for their unique diagnosis;
- Innovative therapies for advanced melanoma, like small-molecule inhibitors that could improve survival rates for treatment-resistant melanomas;
- Refining the Melanoma Risk Predictor, an online tool that identifies those most at risk – helping more people catch melanoma before it spreads.

Professor David Whiteman AM (pictured below) leads QIMR Berghofer's Cancer Control Group, which undertakes research into the environmental and genetic factors that cause melanoma as well as research into early diagnosis, treatment and survival.

The Group's QSkin study, the largest of its kind, has helped people understand their risk before it's too late, using tools like the Melanoma Risk Predictor.

Take our Melanoma Risk Predictor

QIMR Berghofer has developed an online program to calculate your risk of developing a melanoma over the next three and a half years. **Click here to check your risk level.**

Note: The Melanoma Risk Predictor is not intended to be used as a substitute for your doctor's advice. You should always consult your doctor if you think you might be at risk, particularly if you have noticed a new or changed skin lesion.

Raising awareness of HPV-related throat cancer in men

Rates of this little-known disease are increasing.

Associate Professor Annika Antonsson.

Human papilloma virus (HPV)-related throat cancer is on the rise and expected to increase for at least the next 30 years, even as more people receive the Gardasil vaccine. Most people contract oral HPV without symptoms, and for some, the virus can linger asymptomatically in the throat and other sites of sexually transmitted infection for decades before causing cancer.

Heterosexual men face the highest risk, partly due to biological factors and changing sexual behaviours. Yet, awareness of how HPV spreads—which is mainly through oral sex and possibly deep kissing—remains low, and there are no screening tests for early detection.

QIMR Berghofer virologist Associate Professor Annika Antonsson is determined to change this. Her research explores the prevalence of HPV in the mouth and throat, the associated risk factors for cancer, and the urgent need for better prevention and early detection.

With throat cancer treatment often causing lifelong side effects, Associate Professor Antonsson's work underscores the need for open conversations, universal HPV vaccination, and an increased awareness of this growing public health issue.

Did you know?

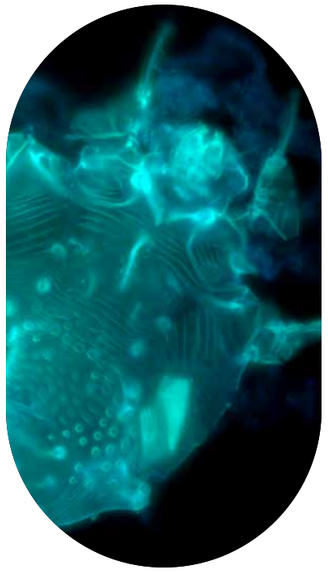
- Many people (around 10 per cent) will have an oral HPV infection, but the majority will clear their infections and will not develop throat cancer
- Scientists don't fully know how long HPV can be asymptomatic before developing into throat cancer
- Four to five per cent of individuals in the Australian population have an oral HPV infection that can potentially cause cancer in the long-term
- People with oral HPV infection may typically have more sexual partners (in particular, oral sex partners)
- Smoking is a risk factor for persistent oral HPV infections

Signs and symptoms of HPV-related throat cancer:

- Pain
- Swelling
- A hoarse voice
- A sore throat that doesn't get better
- Coughing all the time
- Difficulties swallowing
- Unexplained weight loss

Source: Cancer Council Australia

This is not intended as a substitute for medical advice. Please see your doctor if you have any concerns.



Scabies in focus at World Health Organization in Switzerland

Scabies Senior Group Leader Associate Professor Katja Fischer and Senior Research Officer Dr Deepani Fernando recently presented their research at a World Health Organization (WHO) global meeting on skin-related neglected tropical diseases held in Geneva, Switzerland.

Scabies is one of the most common infectious skin disorders worldwide and affects around 25 per cent of the population in remote parts of Australia.

> "This was a great opportunity to shift scabies into the limelight."
>
> – ASSOCIATE PROFESSOR KATJA FISCHER

The condition is highly contagious and often leads to secondary bacterial infections, which can cause local skin and tissue infections, long-term morbidity due to renal damage and rheumatic heart disease and, in severe cases, death.

Associate Professor Fischer was named Co-Chair of the WHO's Discovery Research Working Group for Skin-related Neglected Tropical Diseases at the event, a well-deserved recognition of her leadership in the field.

> "As an early-career researcher, presenting my work on scabies at the WHO was a remarkable opportunity to spotlight this often-overlooked disease on a global stage."
>
> – DR DEEPANI FERNANDO

(Right) Dr Deepani Fernando (on the left) and Associate Professor Katja Fischer (on the right) arrive in Geneva, Switzerland to present their research at the World Health Organization (below).

Celebrating awards and honours

We are proud to share news of some recent accolades for our scientists. Their achievements speak to the impact and quality of their research.

Professor Fabienne Mackay honoured at 2025 NHMRC Awards

QIMR Berghofer's Director and CEO, Professor Fabienne Mackay, was awarded 2025 National Health and Medical Research Council (NHMRC) Ethics and Integrity Award.

Presented every two years, this prestigious award recognises an individual or an organisation who has made a significant contribution to supporting the highest standards of ethics and integrity in Australian health and medical research.

Professor Mackay was presented with the award at an NHMRC ceremony in Canberra in March.

Medal for cardiac bioengineering breakthroughs

Professor James Hudson, Cardiac Bioengineering Senior Group Leader, was awarded the 2025 Jacques Miller Medal for Experimental Biomedicine by the Australian Academy of Science.

The award recognises Professor Hudson's work developing cardiac organoids - miniature models of human heart tissue - that have revolutionised research into heart function and opened doors for potential new drug therapies for heart disease.

Prestigious grant to help beat brain cancer

Tumour Immunology Laboratory Senior Research Officer, Dr Paulo Martins, is one of six researchers awarded a prestigious Mark Hughes Foundation Centre Innovation Grant this year.

This funding will support Dr Martins' research into the use of chimeric antigen receptor (CAR) T cell therapy for glioblastoma, with the aim of progressing to clinical trials.

Early career researcher achievements

Cardiac Drug Discovery Research Officer, Dr Harley Robinson, was named a finalist for the Konica Minolta Career Achievement Award as part of the 7NEWS Young Achiever Awards for her work in the areas of prostate cancer, COVID-19 and heart failure.

Cardiac Bioengineering MD-PhD student, Andrew Laskary, was awarded the Gaston Bauer Heart Failure Prize at the Cardiac Society of Australia and New Zealand's 72nd Annual Scientific Meeting. Andrew presented the Cardiac Bioengineering Lab's research which was recently published in the *Heart, Lung and Circulation* Journal.

Sophie Hamann, who is completing her PhD in Associate Professor Antiopi Varelias' Transplant Immunology Laboratory, received a prestigious Trainee Abstract Award from The American Association of Immunologists. This award supported Sophie to travel to Honolulu to present her research at the premier annual immunology conference for the Society, attended by world-leaders from around the globe.

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.

Focussed Ultrasound Study

QIMR Berghofer is recruiting participants for a new study aiming to improve our understanding of the brain in healthy individuals and contribute toward the development of new treatments for disorders like Obsessive-compulsive disorder (OCD) and addiction.

Using a non-invasive, safe brain stimulation technique called Focussed Ultrasound (FUS), our researchers will examine your risk-reward decision making behaviour through a variety of computer-based tasks.

For more information about participating, please **click here**, or email Alex Wilson at alex.wilson@qimrb.edu.au.

EDGI2 Study

The Eating Disorders Genetics Initiative 2 (EDGI2) aims to identify the hundreds of genes that influence a person's risk of developing the complex, devastating illnesses of anorexia nervosa, bulimia nervosa, binge-eating disorder, and Avoidant Restrictive Food Intake Disorder (ARFID).

QIMR Berghofer's Professor Nick Martin and his team are aiming to recruit more than 4,000 Australians into the study, which involves analysing DNA from saliva samples.

Triple Olympian Lisa Curry is lending her voice to the study, after her beloved daughter Jaimi tragically passed away from an eating disorder in 2020.

"There's no quick fix for eating disorders. So if you are aged over 18 years and have experience with an eating disorder, past or present, I urge you to volunteer for EDGI2 and be part of the solution," said Ms Curry.

For more information about participating, please visit **www.edgi2.org.au**.

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

Thank you

We are grateful to those in the community who support and fundraise for us.

We couldn't do it without you.

Thank you to our newest donors

For the past eight decades, countless compassionate supporters have helped QIMR Berghofer to advance medical research in Queensland.

In May, new donors were welcomed to meet some of the researchers they support, hear updates on their work, and tour our labs. It was a special opportunity to forge new connections and celebrate life-saving science.

Thank you to everyone who joined us for this year's *May We Thank You* event. As we reflect on how far we've come as an Institute over the past 80 years, we are incredibly grateful for the generosity of our supporters.

Some of our newest donors attended our May We Thank You event, meeting with researchers and staff and touring our lab facilities.

Join our team for Bridge to Brisbane 2025!

Lace up your sneakers and join Team QIMR Berghofer for the 2025 Bridge to Brisbane!

This is more than crossing the finish line, it's about becoming a champion for medical research. Every step you take will stride us toward important medical research at QIMR Berghofer.

Please help us reach our goal.
Click here to join the team or donate.

Institute Ironman raises money for medical research

QIMR Berghofer's very own Hunter Webb competed in the IRONMAN Australia event in Port Macquarie this May, raising nearly $600 for medical research!

As a Safety Advisor at the Institute, Hunter said he is inspired every day by his colleagues' commitment and dedication uncovering medical discoveries. For him, the race was not just a chance to test his personal limits, but an opportunity to give back and support the pioneering research he sees making a difference every day.

The iconic race in Port Macquarie was a gruelling course with Hunter placing 48th out of 864 in a fantastic time of 8:52:24.

Hunter Webb proudly wearing his one-of-a-kind QIMR Berghofer branded racing suit.

"The race absolutely pushed me to my limits, but it's nothing compared to the challenges faced by those battling illness and disease," he said.

A huge thank you to Hunter for his incredible efforts and congratulations on completing the IRONMAN Australia challenge!

Jan Brown from the Buck Off Melanoma team and QIMR Berghofer's Joseph Stewart at the Bowen River Rodeo.

Rodeo raises funds for melanoma research

Our wonderful community fundraisers up north have raised more than $150,000 for melanoma research at QIMR Berghofer!

Hundreds of people showed their support at the Bowen River Rodeo in June. A tremendous thank you to Jan Brown and the Buck Off Melanoma team who made this possible.

These funds will support critical melanoma research to move forward at the Institute. Our Corporate and Community Fundraising Associate, Joseph Stewart, was honoured to attend the event in person to acknowledge and celebrate the Buck Off Melanoma team's incredible fundraising efforts.

Thank you Buck Off Melanoma!

The Buck Off Melanoma team (pictured with Joseph Stewart), raised more than $150,000 for melanoma research.

Fundraise for medical research

You too can make a difference in medical research like Hunter and the Buck Off Melanoma team.

To learn more about community fundraising opportunities, scan the QR code, visit **qimrb.edu.au/support-us/fundraise-for-us**
or contact Joseph Stewart on 0477 954 648 or joseph.stewart@qimrb.edu.au.

You are cordially invited to

QIMR Berghofer 80th Anniversary Gala Dinner

Saturday 1 November 2025

Royal International Convention Centre
Brisbane Showgrounds

Join us for a special evening as we celebrate 80 years of pioneering medical research that has helped change lives across Queensland, Australia, and the world.

This gala dinner will honour eight decades of ground-breaking medical research, commemorate our history, and provide an insight into the future of QIMR Berghofer.

The night promises an unforgettable experience, with fine dining, live entertainment, inspiring speeches, and special fundraising opportunities.

Tickets selling fast!

visit **www.qimrb.edu.au/galadinner** to book your seats and tables.

1945 2025