QIMR’s Dr Manuel Ferreira is a geneticist on a mission. He is heading the largest Australian study of asthma genetics to find out more about the underlying causes of asthma.

“Currently, we do not know much about how genes affect the development of asthma, but we hope to help change that” said Dr Ferreira.

The Australian Asthma Genetics Consortium, kick-started by Dr Ferreira, is a collaboration of scientists from across the country working together to tackle the genetic puzzle of asthma.

“Asthma affects 1 in 10 people and through this consortium we now have the resources to scan the genome of thousands of asthma patients to identify some of the key genetic variants that affect disease risk. It has been extremely rewarding to see how asthma research groups across Australia have so efficiently joined forces to tackle this problem.

“Science, for me, has always been about the search for knowledge, asking new questions and addressing them the best we can.”

“In building the consortium, I hope that ultimately, this research can help us to identify those at a higher risk of asthma and also to develop better treatments that can help give asthma sufferers a more normal life.”

Dr Ferreira said the more we know about these genes, and how they interact with environmental factors, the more we might be able to figure out how and why asthma strikes.

Researchers will search the DNA of over 5,000 people (with and without asthma) to find the genes that increase the risk of developing asthma.
I am very pleased to have been appointed as the Acting Director of QIMR and will continue in this role until a new Director is announced.

This role will be in conjunction with my position as Head of the QIMR Cancer and Population Studies Laboratory so I am looking forward to a busy and exciting time over the next few months. It will be an honour to lead the outstanding professionals at QIMR who are committed to our vision of improving the health of the community.

Thank you to all the donors who so generously supported our recent appeal. It is wonderful to see the tremendous community spirit that prevails in Australia today and QIMR is very privileged to be the recipient of such support. It inspires us to know that there are so many people behind us and it plays a big part in our continued success.

I would especially like to thank Mr Clive Berghofer, AM who continues to be our largest individual donor and a major contributor to cancer research in Queensland.

We are entering an era of unparalleled scientific and technological advances and we will continue to work very hard to ensure your investment in us is put to its best possible use.

Professor Green has served on many national health and research committees including the National Health and Medical Research Council of Australia (NHMRC) and she is a member of the International Commission on Non-Ionising Radiation Protection and its Epidemiology Standing Committee.

In 2004, Professor Green was awarded Companion of the Order of Australia (AC) for “Service to medical research to public health including improved Indigenous health, and for leadership in the wider scientific community”.

Professor Green is Head of the Cancer and Population Studies Laboratory. This research group investigates the causes and natural histories of cancers and seek to generate evidence for their prevention. They are currently studying cancers of the skin, pancreas and other major cancers.

The primary aim is to identify the role of environmental factors in causing these cancers and how genes may modify the causal effect. Thus the focus is on causes that can be modified such as smoking, consumption of certain foods and certain dietary patterns, body weight at various ages and excessive sun exposure. Through collaborations with laboratory colleagues, metabolic and molecular markers in biological samples obtained from project participants are being analysed.

QIMR Ambassador Rupert McCall, major donor Clive Berghofer and former Director Michael Good (pictured) discuss their shared commitment to the long journey of medical discovery. Soon after this photo was taken, Mr Berghofer presented Professor Good with another cheque for $1 million to fund the important research undertaken in the Clive Berghofer Cancer Research Centre. Photo courtesy of the Toowoomba Chronicle.
Scientists have found that small changes in a particular gene may affect our ability to read and write.

Dr Margie Wright from QIMR’s Genetic Epidemiology Laboratory is excited by the prospect of this discovery.

“We found that these small changes in genetic sequence lead to a measurable difference in spelling and reading abilities,” said Dr Wright. “If we can identify these genetic sequences in young children, parents can enrol them in early remedial classes to boost their reading and writing abilities and prevent difficulties in later life.”

The study involved 790 families from primary schools in Brisbane. Twins, their parents and siblings submitted a DNA sample and were given a reading and spelling test. By comparing the twins’ genetic sequence, researchers were able to identify genetic differences between high and low scorers.

“The gene is involved in the movement of brain cells around the brain, and forming new connections. If these connections don’t form easily, the child may not learn to spell or read as quickly as their classmates.”

Two areas within the gene have been identified that alter an person’s spelling and reading ability. Another specific change has also been linked to short-term verbal memory.

QIMR researchers have found that drinking tea may decrease a woman’s risk of developing ovarian cancer.

Lead researcher Dr Christina Nagle from QIMR’s Gynaecological Cancer Group said, “Our results indicate that drinking more than four cups a day of black, green or herbal tea may reduce ovarian cancer risk by almost 30%.”

Dr Nagle said that despite previous animal studies suggesting that tea can inhibit the growth of ovarian cancer cells, the results of human studies have been inconsistent. “However, our findings support the idea that the antioxidants in tea may be beneficial against cancer in humans.”

This study surveyed approximately 2,700 Australian women (half with ovarian cancer, and half without).
New genes for heart disease found

Researchers have found new genes that are associated with cholesterol levels.

The study has found 59 new DNA regions that influence the levels of LDL and HDL cholesterol and triglycerides in the blood, key indicators of heart disease risk.

Dr John Whitfield from QIMR’s Genetic Epidemiology Laboratory said this is a significant finding.

“Our study looked at the DNA and blood lipid readings of 100,000 individuals from European, East Asian, South Asian, and African American heritage.”

“High levels of LDL (the ‘bad’ cholesterol) in the blood are an indicator of increased risk of heart attack and coronary heart disease.

So the more we know about how our genes affect these levels, the more we can understand the risk of heart disease, and identify people who are at highest risk,” said Dr Whitfield.

Individually the genes have only a small effect, but their cumulative effect leads to a higher risk of heart disease.

“We hope this kind of work will help identify new targets for drugs, and help us understand how fats are moved around in the body. The ultimate would be a genetic test that can help tailor treatments to each specific person, for example, which drug and how much of that drug would be best.”

Dairy not a heart breaker

A new Australian study has found that eating full-fat dairy may reduce the risk of cardiovascular-related death.

Dr Jolieke van der Pols said this is a surprising but not unfounded result. “There are other studies that suggest that certain fats in dairy may be protective for cardiovascular disease (CVD),” said Dr van der Pols from QIMR’s Cancer and Population Studies Laboratory.

“We found that people with the highest intake of full-fat had 70% less chance of death by heart disease than those who had the lowest intake of full-fat dairy.”

“We believe that milk fat may contain nutrients that counteract the expected negative effects of the saturated fat.”

Scientists surveyed 1,500 Australians about their dairy intake over 16 years and found intake of full-fat dairy products was not associated with cardiovascular death.

The study also found that total dairy intake had no correlation to cancer, CVD or any other cause of death.
Researchers are looking for twins like Arnold and Bernard (pictured) to help to understand how genes and environment influence how we age.

The Older Australian Twins Study investigates memory and thinking abilities as we continue to age. Both identical and non-identical twins aged 65 or older are invited to take part in the study.

If you are a twin, or know twins who may be interested in participating, please contact us on freecall 1800 81 TWIN (1800 81 8946) or email info@qtwin.org.au. All enquiries are confidential.

The year of 1952 saw Elizabeth II become Queen of England, the Winter Olympics in Norway and the Diary of Anne Frank published in English. It was also the year John Carley began, what would become a 28-year career, as a QIMR scientist.

After retiring in 1980 John has continued to support QIMR and late last year he finally made it back to the institute as part of a tour group. Alongside wife Dorothy, he reflected fondly on his work, QIMR social outings and just how much the facilities have changed in subsequent years.

“I can't imagine 700 scientists. That's a lot compared to the 15 to 20 I was working with,” John said.

John's research focused on arthropod-borne viruses including involvement in the major breakthrough of discovering and naming Ross River Fever in 1963. He also was involved with researching a disease spread by rodents among sugar cane cutters in North Queensland during the 1950s, now known as Scrubtitus.

Back then QIMR's research facility was a wooden shed with push out windows, no fly screens, no-air-conditioning and a possum that quite often took up residence in the tea room, according to John.

“Work was being done with air currents coming through open windows because it was so hot. It was not an ideal area for laboratory work at all.”

Originally from the United States, John met Dorothy in Rockhampton before his time at QIMR. After moving to America, the couple were enticed to return to Australia by family and job opportunities. Despite planning to live in Brisbane for three years, the groundbreaking research opportunities and fantastic dinner parties held by then QIMR Director Dr Ian Mackerras, quickly convinced the Carleys to stay much longer.

John said medical research is becoming more important than ever due to the presence of a host of new diseases and victims every year.

“Even though so much is now known, diseases like malaria are still killing millions of people. The more work that's done at QIMR and other places the faster more effective diagnosis and treatment methods will be found.”

Today, John and Dorothy still reside on Brisbane’s westside and enjoy reading their copy of Lifelab to keep them up to date with research going on at QIMR.
World first study to correct common Vitamin D myths

Thousands of Queenslanders who think they’re improving their health by getting a dose of vitamin D through sun exposure without skin protection could be putting their lives at risk.

The Suncorp Staff Study, conducted by QIMR has uncovered a big gap in basic knowledge about vitamin D.

As part of Suncorp’s skin cancer awareness program SunWise, the 12-month study surveyed almost 2000 Suncorp employees in Brisbane and its findings were officially revealed at an international ultraviolet radiation conference in New Zealand earlier this year.

QIMR’s Dr Rachel Neale said the study uncovered a disturbing lack of understanding about vitamin D, generally known as the ‘sunshine vitamin’, which is important to help strengthen bones and maintain bone density.

More than half those who took part in the survey believed they needed to spend more than 10 minutes a day in the sun in summer in order to attain enough vitamin D. Dr Neale said in actual fact a few minutes was all that was necessary but more information is needed about how much sun is needed in winter.

“A large percentage of those survey respondents who thought a high level of sun exposure was required to generate vitamin D were also less likely to use sunscreen,” she said.

“Our research found that wearing long sleeve clothing reduced a person’s vitamin D levels but wearing sunscreen had no effect.

“Sunscreen is an important part of protecting your skin from the sun’s harmful rays and the last thing we want is for people to stop using it. Suncorp Group Executive General Manager for Marketing Mark Reinke said it can take just six minutes to burn and the results of the study sent a very important message to employers.

“The SunWise message is a program we have been promoting visibly for the past five years both within Suncorp and through the wider community,” Mr Reinke said.

“Employers who haven’t had such a project running in their workplaces would not have exposed their staff to this same level of information and awareness so I think they would be at far greater risk of falling victim to the misconceptions that exist about vitamin D and sun exposure.

“We believe this survey has delivered a real wake-up call to Queenslanders to be SunWise both in summer and in winter.”

Suncorp have been sponsors of QIMR’s skin cancer research program since 2004.

For more information on Suncorp’s Sunwise program, go to www.suncorpsunwise.com.au.

Bequest Trusts support QIMR

The General Manager of Perpetual Philanthropic Services, Mr Andrew Thomas (left) met with QIMR researchers Dr Michael Breakspear and Professor Emma Whitelaw to discuss the new division of Mental Health research that has been established at QIMR with the generous support of the John Thomas Wilson Foundation and the EM Squires Charitable Trust both of which are managed by Perpetual.
Data # 3 golf day

Award winning Australian IT solutions company, Data#3 held their annual charity golf day on 13th May this year. Their chosen charity was QIMR and we are thrilled to receive more than $25,900 in proceeds from the day!

Some 100 players took part in the successful charity golf day at Indooroopilly Golf Course. The day took off to a great start with QIMR’s Community Relations Officer, Sara-Jane Georgeson’s inspirational speech on how QIMR makes a difference.

Another inspiration at this charity golf day was Brendan Parkes who featured in a previous edition of Lifelab after his life was saved thanks to QIMR researchers. Brendan played an outstanding game of golf alongside three QIMR team members and their team came in at third place.

On behalf of QIMR, we would like to greatly thank Data#3 for organising such a successful fundraiser and we appreciate your kind support.

Club Clipsal charity lunch

We would like to extend our grateful thanks to the team at Clipsal for generously supporting QIMR once again through their annual Club Clipsal charity lunch held at the The Gabba on 4 June. More than $6,000 was raised on the day which brings their total raised for QIMR to over $35,000! QIMR’s Professor Martin Lavin spoke to the 200 guests about the importance of our medical research.

A special thanks also to the Sebel & Citigate Brisbane, Queensland Cricket, Augustine’s on George, Hotel George Williams and Nova 106.9 for kindly donating prizes for the fundraising raffle.

Open Day success

Our great friends at Nova celebrated their fifth birthday with a public open day and street festival and also by supporting QIMR. Some 14,000 people came to the NOVA Open Day that was held in conjunction with the Teneriffe Festival. Highlights included behind the scenes tours of the radio station’s headquarters and free concerts on two huge stages featuring well known bands and great musicians.

QIMR would like to thank the team at Nova for their hard work to make this event possible and for choosing to support us. We would also like to thank the staff from Suncorp, Dibbs Barker, Qantas and QIMR who gladly helped out on the day.

Our medical research would simply not be possible without the support of community fundraising events and volunteers who raise these vital funds.

The Clive Berghofer Trophy for outstanding support of medical research was awarded this year to Mr Keith Stonestreet and Mrs Bev Mules (centre) from Stonestreet Coaches in Toowoomba. Professor Michael Good (left) and Mr Clive Berghofer (right) presented the award at a function attended by many of our wonderful supporters in Toowoomba.

QIMR scientists Rachael McGeorge and Linh Tran help out as volunteers at the NOVA Open Day.
Donate today

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Would you like further information?

☐ I am considering providing for QIMR in my Will – please send me information.
☐ I would like to take a free tour of QIMR.

Please post this form (no stamp required to:
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A receipt will be sent to you shortly.

Thank you.
Your generosity is appreciated.

Recycle for Research

Have you got an old mobile phone you no longer use?

Recycle for research and donate your phone to QIMR. Each phone will provide us with an average of five dollars for our worldclass medical research.

Contact QIMR on free call 1800 993 000 and we will send you a mobile phone envelope or a collection bin for your company.

Recycling your old phones will make a real difference to QIMR and to the environment.

We all share the benefits of medical research.

FREE PUBLIC HEALTH FORUM

Come along and hear about QIMR’s latest research in the area of mental health.

Thursday 28 October
10:00 am to 12:00pm

QIMR Auditorium
Level E, Bancroft Centre,
300 Herston Road, Herston.

Light refreshments will be served.

For catering purposes can you kindly reserve your seat by calling 1800 993 000.