24th Jeans for Genes Day

Denim never goes out of style and neither does Jeans for Genes Day. Thousands of smiling volunteers across the country braved a chilly morning, stood for hours near train stations or shopping centres, and even entertained work-day crowds to attract attention for their favourite charity. Thanks to our generous supporters, we have raised over $1.2 million so far, with the tally growing as people and businesses bank the funds they've raised. All of us at Children's Medical Research Institute are grateful for your heartfelt support.

You're making it possible to one day cure many genetic conditions with gene therapy, and in just a few years, improve cancer diagnosis and treatment planning. Thank you, and we hope to see you all again for the 25th Anniversary of Jeans for Genes next year!

Healthier kids, brighter futures
Gifts for kids (young or young at heart) not to mention a beautiful new selection of Christmas cards are on offer in the latest catalogue.

Don’t forget to get involved in the Great Cycle Challenge this year. Not only can you help raise funds for CMRI’s cancer research, you can achieve your cycling goals – cross country, in the gym or on your stationary bike at home. It’s easy to participate.

— You can now shop online at shop/cmri.org.au
— Visit greatcyclechallenge.com.au

From the Director

This post-Jeans for Genes edition of Under the Microscope is a perfect time to share my personal thanks. Every volunteer, denim-wearing student or workplace participant, and every individual who donated is critically important to CMRI’s work. Not only are the funds raised vital, but we at CMRI are inspired to keep working harder when we see so many people around Australia joining us on this national “Day” to help make a difference against childhood diseases. You lift the spirits of our team when the research is difficult and gruelling. Thank you.

Scientific research isn’t conducted in isolation. We depend both on public support, and on collaborations with other research organisations within Australia and around the world. CMRI recently signed a multi-partner agreement with Sydney Science Park, which ensures major universities, hospitals and medical research institutions will work together more effectively as Western Sydney expands and brings in new science, innovation and employment opportunities.

The potential for exciting advances through medical research has never been greater. I expect to be able to tell you about more in the near future.

Sincerely,

Roger Reddel
Lorimer Dods Professor and Director, CMRI

Visionary Genetic Research
by Professor Robyn Jamieson

My team has the ambitious goal of restoring vision in patients with inherited blindness, especially those where no current treatment exists. This means understanding the genetic causes of blindness, including how the affected genes should normally work, and then devising a means of correcting the problem. This includes using the most advanced gene therapy techniques available. But first, these methods need to be developed and refined, so they can correct eye diseases as complex as retinal diseases and macular degeneration, which are expected to affect 196 million people globally by 2020.

We have a long road ahead, and recent achievements in model systems in the laboratory give us hope that this ambitious goal is achievable.

Some other recent achievements we want to share are our successes with genomic sequencing and gene identification in retinal diseases and congenital cataracts. Both of these are a significant cause of childhood and adult blindness worldwide, but the genetic causes can vary widely, which hampers diagnosis. Using genomic sequencing methods, we have achieved the ability to diagnose the underlying genetic problem in 50-70% of cases. Our approach has now been implemented in the clinic, and so it is now available to patients throughout Australia and around the world.

— Read more online at cmri.org.au/Research/Research-Units/Eye-Genetics
Committee & Community news

CMRI scientists had fun meeting the kids as they explained DNA to 4,000 primary school students and ~3,000 families who visited the Australian Museum during National Science Week festivities this year.

Q & A

Brett Tully, Scientific Software Engineer

Q: What do you do?
A: I’m a mechanical engineer and mathematician and use mathematics to understand and predict the world around us. I also design things that impact the physical world.

Q: How did you wind up at Oxford?
A: In 2007, I was granted a Clarendon Scholarship. I gave up aerospace studies to study how tissue and fluid interact in the brain. This is important for diseases such as dementia. I later jumped topics again and started a company that is developing technology related to fusion energy.

Q: What drew you to CMRI?
A: The idea of ProCan is so simple – you can understand its potential almost immediately. In my experience, that usually means the work that needs to be done to execute the idea is gruelling but incredibly rewarding. It is important for me that the work I do has a wider benefit. I always thought it was going to be difficult to find something as important and interesting in Australia as what I was doing in the UK, but I jumped at the chance to work at CMRI.

Denim Dinner

It was a black-tie affair, with a touch of denim, at the 24th Jeans for Genes Denim Dinner, held at The Star on a Saturday evening.

Hundreds attended the celebrity-filled charity gala, which was hosted by TV personalities, Kylie Gillies and Larry Emdur. Notable names included: model, Erin Holland; MKR stars, Betty Banks and David Vu; Fox Sports presenter, Jess Yates; radio star, Michael ‘Wippa’ Wipfli; fitness gurus, Michelle Bridges and Steve ‘Commando’ Willis; Olympic swimmer, Leisel Jones and Daniel Kowalski; and actors, David Berry, Lincoln Lewis and Johnny Ruffo.

Spectacular performances by Joel Jackson, Johnny Ruffo, and the cast of Kinky Boots had the crowd up on their feet. Some of our most loyal supporters were recognised, with Jeanswest taking out the Corporate Partner of the Year award, and Mr Adrian and Mrs Nancy Fonseca taking home the Philanthropic Support of the Year award.

A Suzuki car was raffled and an exciting live auction had attendees digging deep, with all funds going to CMRI.

Committee & Community news

Northern Beaches Committee Theatre Party – Tuesday, 3rd October, 1pm.

Strathfield Quiz night, Concord Community Centre – Friday, 13th October, 7pm.

Judith Hyam Fashion Show, North Rocks Senior Hall – Saturday, 21st October, 11am.

Wagga Wagga Christmas Fair, Racecourse – Friday/Saturday, 27th – 28th October.

Strathfield Committee Bus trip to Nan Tien Buddhist Temple, Wollongong – Friday, 13th November

Gerringong Quilt and Craft Show, Town Hall Fern Street – Friday - Sunday, 10th - 12th November.

Canberra Luncheon, Merryville Homestead Murrumbateman – Wednesday, 15th November, 11am.

Judith Hyam Weekend to the Hunter Valley Christmas Lights – Saturday/Sunday, 18th – 19th November.

— Contact info@cmri.org.au for more information on upcoming events.
On Thursday, 17th August, Children’s Medical Research Institute held a ProCan® Update and Naming Ceremony. This exciting event followed on from the 2016 Venetian Masquerade Ball, held at the home of our major benefactors, Dr David and Mrs Linda Penn, where funds raised went towards our ProCan project.

Guests were treated to personalised tours of the ProCan Laboratory, an overview by Professor Roger Reddel, Lorimer Dods Professor and Director of Children’s Medical Research Institute and an update by Professor Rosemary Balleine, Head of ProCan Cancer Pathology.

Professor Balleine, explained that cancer is currently diagnosed by a Pathologist who examines tissue under the microscope, often applying a range of special tests including the detection of specific proteins.

ProCan will provide a novel approach to diagnosis. It will detect thousands of proteins in a cancer sample and then use powerful computers to analyse and compare different cases. By surveying a wide range of cancers in adults and children, ProCan will assemble a huge knowledge base that will reveal patterns of similarity and difference that can guide the management and treatment plans for an individual patient.

The evening also was an opportunity to recognise the incredible support of Dr. David & Mrs Linda Penn, Mr Jeffrey & Mrs Stephanie Mueller and Mr Adrian & Mrs Nancy Reardon Fonseca as Philanthropic Partners of ProCan. All had pledged their commitment to the ProCan project at the Masquerade Ball by purchasing Barocycler machines. We unveiled the named plaques that will be placed on these machines, to acknowledge the generosity of these families.

For more information on becoming a Philanthropic Partner of ProCan please contact Andrew Kelly, Head of Fundraising, at akelly@cmri.org.au or 02 8865 2800