

Perkins

HARRY PERKINS INSTITUTE
OF MEDICAL RESEARCH

Issue 2 2018



The Harry Perkins Institute of Medical Research is Perth's largest medical research institute dedicated to fighting the major diseases affecting adults.

perkins.org.au

YOUR IMPACT IN RESEARCH BREAKTHROUGHS AT THE PERKINS

STUNTING CANCER'S GROWTH

PERKINS researchers have discovered a ground-breaking new way to attack cancer. The collaborative team, led by Associate Professor Oliver Rackham, designed artificial proteins which pause the frenzied growth that occurs with most cancers.

Normally, a cell will grow for the allotted time needed to develop and maintain our bodies, a process measured by a molecular countdown.

Cancer cells subvert this mechanism by producing an enzyme called telomerase, which disrupts the countdown, effectively giving cancer cells free reign to grow and spread.

The new artificial protein has the ability to stop the cancer cells in their tracks, giving anti-cancer medicines a better shot at destroying the deadly cells.



MOLECULAR DISCOVERY

PERKINS researchers have made a fundamental discovery about of the structure and function of the energy 'factories' in your cells that could help provide a new way to target drug treatments.

The team published their findings about the atomic structure and behaviour of mitochondria – the microscopic machines that convert energy from our food into the cellular energy that powers our bodies.

MAJOR FELLOWSHIPS FOR PERKINS RESEARCHERS

THREE Perkins researchers have been awarded highly prestigious Research Fellowships from the National Health and Medical Research Council (NHMRC).

Professor Alistair Forrest, Associate Professor Aleksandra Filipovska and Associate Professor Oliver Rackham each received funding to help sustain their ground-breaking work for five years.



FIGHTING SUPERBUGS

THE World Health Organisation (WHO) has described antimicrobial resistance as a global health emergency and one of the biggest threats to global health, food security and development.

We need more antibiotics options to make sure we can continue to cure infections and perform surgery... that's where Dr Louis Scott is helping! His team is turning a strain of yeast into tiny microscopic laboratories that can test tens of millions of antibiotic variants at a time.

The method is giving insight into how antimicrobial resistance works and is helping to design new life-saving drugs to overcome it.

NEW IMMUNOTHERAPY COLLABORATIONS

IMMUNOTHERAPIES that work by harnessing your body's own immune system have shown great promise in a number of different cancer types.

Perkins researcher, Professor Ruth Ganss has developed new dual-therapies that can weaken tumours' defences and boost immune cells, and the revolutionary work has piqued the interest of Merck Sharp & Dohme (MSD). The pharmaceutical giant has entered into a collaborative research agreement to develop new life-saving immunotherapy drugs.



INNOVATIVE RESEARCHERS

PERKINS biomedical engineer Dr Brendan Kennedy, his research team and the start-up company OncoRes Medical, have been selected for major awards.

Breakthrough devices developed by Dr Kennedy and his team have been selected as a finalist in the WA Innovator of the Year Awards, for both the Emerging Innovation Category and the Business News "Great for State" Encouragement Award.



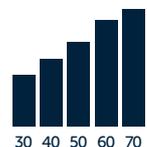
PROSTATE CANCER FAST FACTS:



1 in 7 men will be diagnosed with prostate cancer during their lifetime



Prostate cancer is the most commonly diagnosed cancer in Australian men



Risk of being diagnosed with prostate cancer increases with age

FROM OUR DIRECTOR

IT'S hard to believe that we're already so far into 2018, but I'm pleased to say that the Perkins hasn't wasted a minute of it.

Since our last newsletter, we held our Hawaiian Walk for Women's Cancer – a thrilling success with more than 450 women and men raising more than \$950,000 for cancer research at the Perkins.

In May we asked six of WA's most beloved artists to take on the challenge of decorating a lab coat in their unique style and unveiled them at a special 'thank you' event, which we named The Art of Research. The artists, Ben Juniper, Douglas Kirsop, Stormie Mills, Dean Alston, Philippa Nikulinsky and Jacob Butler (Shakey), each donated their skills to illustrate the merging of science and art with stunning outcomes.

Professor Nigel Laing AO was invited to Canberra to stand alongside Federal Health Minister Hon Greg Hunt MP, advocates and families at the announcement of \$20 million in funding for pre-conception screening for rare and debilitating birth disorders. The announcement will make an



incredible difference for couples with potentially unknown inherited diseases in their genetic history.

Our world-leading researchers also scooped numerous awards throughout the last few months. Associate Professor Kevin Pflieger won a UWA Innovation Award, PhD student Ciara Duffy won a WA Young Achiever Award and Perkins biomedical engineers Nikhilesh Bappoo and Louis Parker won major awards at the World Congress of Biomechanics, to name a few!

Thank you for supporting us in this mission. Without the ongoing support of advocates, donors and volunteers like you, our work wouldn't be possible.



Professor Peter Leedman

Director, Harry Perkins Institute of Medical Research

HOW YOU'VE HELPED

EARLIER this year I reached out to you, our most dedicated supporters, with an ambitious plan to raise \$122,645 to ensure life-saving research could continue *no matter what*.

I am so pleased to tell you that the goal was achieved. With your support and that of the incredible team at Perth Radiological Clinic, who agreed to dollar match a share of your tax donations, critical life-saving research can continue without interruption.

I was overwhelmed by the outpouring of kindness and generosity from the Perth community. Each of your donations provided a welcome reminder of just how much you believe in the Perkins, our research and the

vision we share – to keep our families together for as long as possible.

I would like to extend a special invite to everybody who has supported the Perkins to come and see firsthand the work you make possible. On **Wednesday 19th September from 4pm**, please join us at the Perkins Nedlands building for a special Supporter Tour and Tea.

RSVP by calling 6151 0700 or visit our website at perkins.org/events

**IF YOU HAVE
A HISTORY,
THIS COULD
HELP YOUR FUTURE.**

**September is prostate cancer month.
Keep an eye on your letterbox to learn more.**





Walkers show they're... **TOUGHER TOGETHER**

hawaiian
**WALK FOR
WOMEN'S CANCER**
Perkins

AN EVENT is only as good as the people in it, and the heroes that make up the Hawaiian Walk for Women's Cancer are a testimony to that.

The Perkins recently unveiled the new look and feel for the signature fundraising event, the Hawaiian Walk for Women's Cancer, at a special 'thank you' event.

The event was a celebration of the walkers and their personal motivation for taking part in the Walk – often both heartbreaking and empowering.

It's these stories that inspired the Walk's new look, which largely features these heroes who train, fundraise and challenge themselves in the name of women's cancer research.

The gritty new logo and imagery showcase the strength and courage of the walkers, many of whom have been personally touched by cancer.

Perkins Director, Professor Peter Leedman, said he was in awe of the dedication of the walkers, volunteers and supporters.

"The women and men who take part in this event trek long distances and commit to fundraising at least \$1,000 to make a major impact for research," Professor Leedman said.

"The camaraderie that you see at the Walk is incredibly moving, people cheer one another on and share their stories. Many of our walkers register as a sign of their recovery from illness, or to honour a loved one or to inspire

someone battling disease."

"The new event slogan 'tougher together' signifies that no breakthrough is a single-handed accomplishment; together we can achieve great things."

"Fundraising \$1,000 is tough, training and walking 35km in one day is really tough, and facing a cancer diagnosis is beyond tough, but together we're tougher," Professor Leedman said.

"I'd invite anyone who wants to make a big difference for women's cancer research here in Perth to support the Walk. Alone you can help, but together we're unstoppable."

See the new brand, and learn more about the 2019 Walk by visiting WalkForWomensCancer.org.au



LOCAL CANCER TREATMENT GETS PERSONAL



WA PATIENTS with the most aggressive and deadly cancers will have access to the latest in personalised drug trials thanks to a new program at the Perkins clinical trials facility, Linear Clinical Research.

Linear has begun enrolling patients in the Molecular Screening and Therapeutics (MoST) program – a world-class program that provides genetic screening to help match a WA patient with a nationally available drug that specifically targets their cancer composition.

Perkins Director and Chairman of

Linear, Professor Peter Leedman, said the MoST program would give patients precision medical care, targeting the unique genetic make-up of each person's cancer.

"The MoST program will enable West Australians to undergo treatment tailored to their individual cancer, based on their genetic profile, the characteristics of their immune system and its interactions with the tumour cells," Professor Leedman said.

"Personalised medicine is a major new frontier for science, and this initiative will enable WA cancer patients to access cutting-edge medicine without the cost or disruption of travelling interstate."

"The program gives us the opportunity to extend the lives of really ill patients who have not responded to conventional treatments."

Linear is WA's only early phase trials unit, and one of only five such facilities in Australia, offering trials to healthy volunteers and patients.

Linear is the first trials facility outside of NSW to offer the MoST program as part of the Australian Genomic Cancer Medicine Centre. Cancer patients will be able to enrol immediately in the new trials, and Linear has plans to open a new, state-of-the-art cancer ward to meet the growth in cancer drug trials.

WANTED: GADGETS FOR PATIENTS

TAKING part in a clinical trial can be rewarding or even life-saving... but it can also be isolating.

Oncology patients enrolled in important, new cancer treatment trials can spend weeks in the clinic, mostly in bed and unable to stray far from Linear doctors.

To help keep the patients comfortable and entertained, Linear staff are asking if you would help a patient by donating your old, unwanted devices.

Any donation will be welcome: iPads, Kindles, Playstations, laptops – anything that can run Netflix will become a source of entertainment for patients in need. If you have an old device that you would like to donate, please visit linear.org.au/cancertrials and click the top Donate button.

linear | Cancer Trials

RESEARCHER SPOTLIGHT: RIKKI BROWN

Tell us about your work at the Perkins.

I work in the Lab for Cancer Medicine which focuses on hard to treat cancers such as metastatic melanoma, head and neck cancer, and liver cancer.

My research involves finding out why current treatments for these cancers fail, ways to overcome therapeutic resistance and developing new treatments for cancer patients.

How do you hope that your research will help people?

Some cancers can be treated effectively when they are detected early, but many are at an advanced stage when they are diagnosed. For these cancers, there are very few effective treatment options.

I hope that my research will identify ways to make the current therapies work better or offer new treatment options that will improve the outcomes of patients. Seeing how medical research can benefit patients is really what motivates me.

What's your favourite aspect of your job at the Perkins?

Making the connections between the results you are seeing and the mechanisms that are responsible. To me it is like collecting pieces of a puzzle and piecing them together to complete a picture.

Tell us something about yourself that people don't know?

I really like jigsaw puzzles! I was recently completing a 4000-piece jigsaw puzzle and my two naughty Labradors stole the bag of puzzle pieces that I hadn't used yet and strew them all through my house and back garden. Needless to say, I haven't completed this one yet!

Rikki was recently awarded Best Oral Presentation at the Combined Biological Sciences Meeting. Congratulations Rikki!



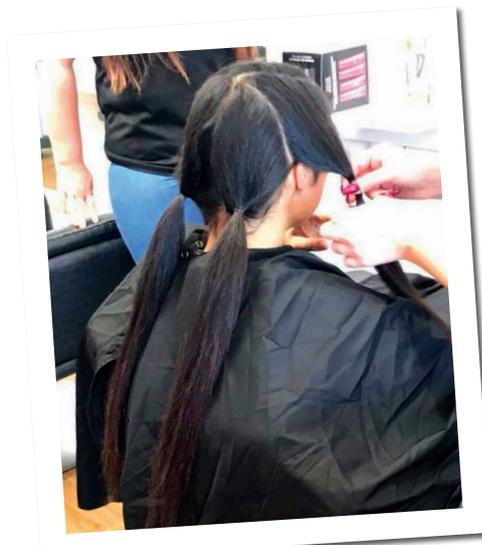
STAR SUPPORTER: GEMIMA RAHMAN

SOUTH Hedland teen, Gemima Rahman, has chopped off 40cm of her mermaid length hair to raise an incredible \$1,200 for the Perkins.

Gemima says she was inspired to support medical research by close friends and family who had been touched by cancer.

"I fundraised not only to help with a cause I have seen affect those I love but to hopefully start a domino affect, encouraging others to do the same," Gemima said.

The 16-year-old learned about the Perkins after attending a specialised STEM program at the BioDiscovery Centre. She has since chosen to pursue a career in BioMechanical Engineering.



BEFORE



AFTER

MEET ANN

LEAVING a meaningful legacy for your family and the community in which you live is a remarkable gift. Medicine cannot advance without medical research and medical research is impossible without help from people like you.

If you're considering leaving a gift in your will to support the future of medical research in WA, please reach out to our Planned Giving Officer Ann Macliver.

Ann has recently joined the Perkins following a varied background in nursing, interior design and other healthcare roles.



Ann can help give you important information about the Perkins and the impact of your gift. If you would like to speak to Ann, contact her on 6151 0745 or partner@perkins.org.au

SWEAT FOR SCIENCE

MAJOR medical breakthroughs are not a solitary achievement. It takes a village to create better health outcomes, and our community champions are energetic contributors to life-saving research. If you'd like to actively support science, you can sign up for a community fundraising event and fundraise for the Perkins.

The Perth Running Festival is your only chance to run or walk on the Optus Stadium playing surface and see yourself on the big screen!

Run or walk over the new Matagarup Bridge and along the beautiful Swan River with friends and family, and support medical breakthroughs that keep families together for longer. Learn more at perthrunningfestival.com.au

If you're looking for a once-in-a-lifetime experience, sign up for an adventure trek on the Great Wall of China with our Hike for Health. You'll be part of an incredible team of like-minded people, standing united atop the Great Wall, knowing the difference you've made to the future wellbeing of your friends and loved ones. Learn more at inspiredadventures.com.au/events/theperkins-hikeforhealth-2019



Nicole Cooper,
Senior Sales Engineer
Schlumberger

"I MAY NOT USE A MICROSCOPE

BUT I'M HELPING THE PERKINS CONQUER CANCER."

JOIN THE TEAM! CONQUERCANCER.ORG.AU • 1300 99 7433

Thank you.

As a registered charity, we rely entirely on gifts, donations and research grants to fund our critical research. Thank you to everyone who contributes to our important work.



Major Supporters



Stan Perron Charitable Trust

Ashok and Renu Kumar and family



CANCER RESEARCH TRUST



McCusker Charitable Foundation



AUSTRALIAN CANCER RESEARCH FOUNDATION



Add these dates to your calendar!

Learn more at perkins.org.au/events

Out and about

Perth Running Festival
– Sunday 7 October

MACA Ride to Conquer Cancer
– Sat 13 & Sun 14 October

At the Perkins

Community Heart Forum
– Tuesday 16 October

Wesfarmers Oration
– Tuesday 13 November



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YES, I would like to donate to the Harry Perkins Institute of Medical Research and make a difference!

All contributions to the Perkins go directly to advancing medical research. If you would like to support a specific area of research, please tell us.

Title _____ First Name _____

Surname _____

Company _____

Address _____

Suburb _____ Postcode _____

Phone () _____

Mobile _____

Email _____

- Please send me information about helping the Harry Perkins Institute of Medical Research through my will.
Donations over \$2 are tax deductible and a receipt will be issued.
- Please tick the box if you do not wish to receive information from us.

There are 3 ways you can donate:

- perkins.org.au (click "Donate Here") or
- Phone (08) 6151 0700 or
- Post this form to the Harry Perkins Institute of Medical Research
PO Box 7214, Shenton Park, WA 6008 or fax to (08) 6151 0701

I would like to make a donation today of: \$ _____

CREDIT CARD

Credit card payment – please debit my VISA

Amex Security No: CVV Code No:

Card No:

Cardholder's Name _____

Signature _____ Expiry Date: /

CHEQUE

Cheque or money orders – Please make payable to the Harry Perkins Institute of Medical Research and post to the PO Box listed above.

To see our Privacy Policy please go to perkins.org.au