

AUSTRALIAN  
CANCER  
RESEARCH  
FOUNDATION



**YOU** ARE PART  
OF SOMETHING  
EXTRAORDINARY



Thank you for joining us. You are part of something extraordinary.

You are now part of a group of passionate people all working to create a world without cancer. Your support will change lives and allow us to continue to fund world-class cancer research.

Australian Cancer Research Foundation (ACRF) relies on the generosity of individuals like you – people who are dedicated. People wanting to make a difference.

Each year in Australia over 130,000 people receive the devastating and life-changing news of a cancer diagnosis – because of you, we can continue working to reduce that number and improve the outcomes for those diagnosed.

# YOU ARE FINDING NEW WAYS TO OUTSMART CANCER

Survival rates for many types of cancer have increased by more than 20% in the past decade due to new or improved treatments brought about by research.

**This is all thanks to people like you.**



Because of people like you, we've been able to fund 73 research projects across 42 institutions. That's over \$152M worth of donations invested since 1984. This funding has led to some incredible breakthroughs.

## **Cervical cancer vaccine**

Supporters like you contributed to the seed funding for Professor Ian Frazer's development of a cervical cancer vaccine. Thanks to a national immunisation program, Australia is set to be the first country to effectively eliminate the disease.

## **The pill that melts cancer**

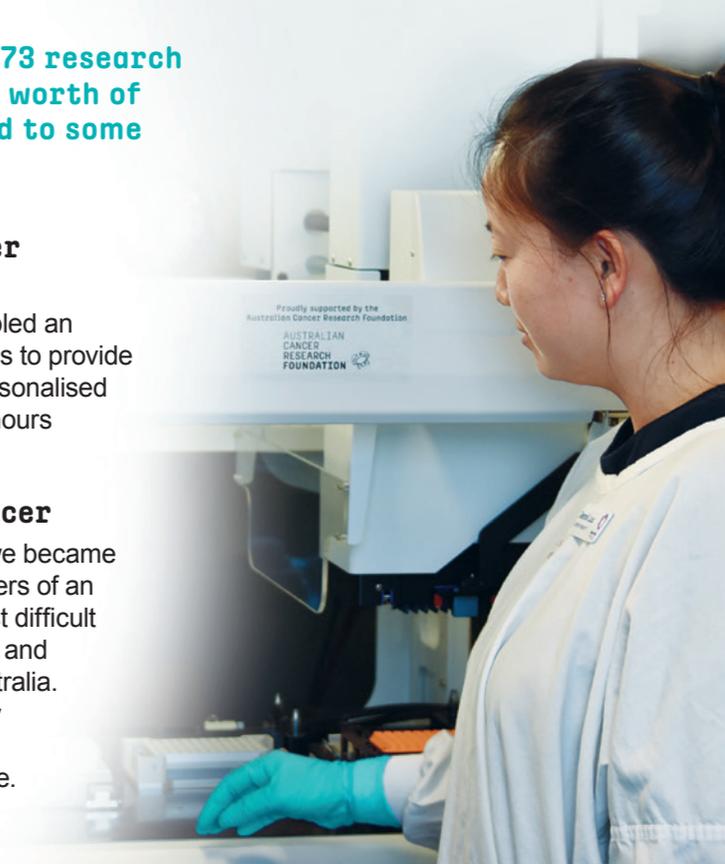
Together we have supported landmark research resulting in the discovery of the potent anti-cancer drug, Venetoclax.

## **Personalised cancer treatment**

Donations like yours enabled an ambitious project that aims to provide each cancer patient a personalised treatment plan within 36 hours from diagnosis.

## **Zero Childhood Cancer**

With your contributions, we became one of the founding partners of an initiative to tackle the most difficult cases of infant, childhood and adolescent cancer in Australia. Clinical trials are currently underway nationally and results are looking positive.



# YOU ARE SAVING PRECIOUS LIVES



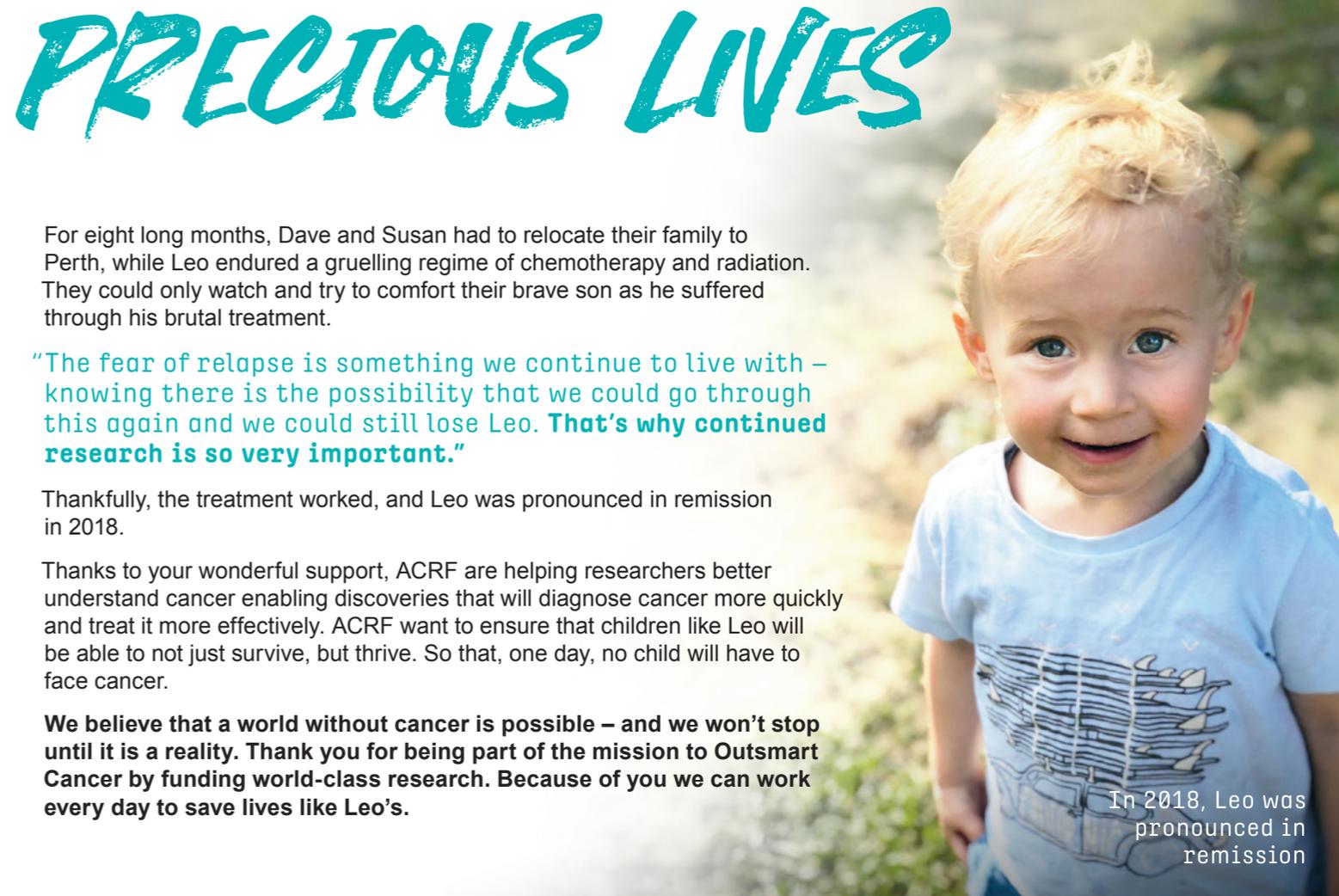
**Dave and Susan have never felt such sheer joy as when their son Leo was born – and when, just two years later, Leo was pronounced cancer-free. After a terrifying year when their baby's life had hung in the balance, they felt "truly blessed".**

Leo was not even one year old when he was diagnosed with aggressive cancer on his kidney, and had to undergo dangerous surgery to remove a 14-centimetre mass.

"For seven hours we reeled with anxiety and fear," Susan told us, "I would sit, I would stand, I would cry, I would stare, and I would pace back and forth. It was excruciating.

Nothing could have prepared us for the sight of our baby after his surgery. He was bruised and there were tubes everywhere. Dave and I were sent home for the night, but the little sleep I managed to get was filled with nightmares.

The next day we raced back to the hospital. When we got the tumour pathology results, the oncologist couldn't hide his concern. I was cold with fear as he told us Leo had been diagnosed with stage three Wilms tumour."



For eight long months, Dave and Susan had to relocate their family to Perth, while Leo endured a gruelling regime of chemotherapy and radiation. They could only watch and try to comfort their brave son as he suffered through his brutal treatment.

**"The fear of relapse is something we continue to live with – knowing there is the possibility that we could go through this again and we could still lose Leo. That's why continued research is so very important."**

Thankfully, the treatment worked, and Leo was pronounced in remission in 2018.

Thanks to your wonderful support, ACRF are helping researchers better understand cancer enabling discoveries that will diagnose cancer more quickly and treat it more effectively. ACRF want to ensure that children like Leo will be able to not just survive, but thrive. So that, one day, no child will have to face cancer.

**We believe that a world without cancer is possible – and we won't stop until it is a reality. Thank you for being part of the mission to Outsmart Cancer by funding world-class research. Because of you we can work every day to save lives like Leo's.**

In 2018, Leo was pronounced in remission

Little Leo endured eight months of gruelling cancer treatment



# YOU ARE BACKING THE BRIGHTEST MINDS

**Professor Sarah-Jane Dawson** runs the ACRF Tumour Heterogeneity Program, which received \$2M of funding from ACRF in 2016, thanks to donations like yours. She is Head of the Molecular Biomarkers and Translational Genomics Laboratory at the Peter MacCallum Cancer Centre in Melbourne.

We spoke to Professor Dawson about her exciting work.

## What was your motivation for working in this field?

My first passion was science and that has never left me. Throughout my clinical training I was looking for a field that would allow me to combine research with clinical work. In oncology I've been able to combine those two very successfully.

## What does your role involve?

I spend around 20% of my time as a consultant medical oncologist, directly involved in the care of patients. The other 80% of my working week is dedicated to cancer research.

Being able to look after cancer patients in the clinic, understand the current strengths and limitations we face with cancer management, and then tackle and address those questions in a laboratory is really exciting. Especially when we can adapt our discoveries to directly improve medical care and patient health.

## What are you working on?

I work in the field of tumour heterogeneity. This means that we are looking for differences within the tumour cells so we can identify the most suitable treatment. We are working to develop new blood tests that allow us to track and monitor cancer DNA in patients' circulation and identify these differences. This provides crucial information about the genetic makeup of an individual's cancer, how a patient is responding to therapy, and what therapies may be most effective for them.

This can have a huge impact on patients – we recently had a young woman with advanced breast cancer who was unfortunately not responding to the therapy she was receiving.

*“Through analysing her circulating tumour DNA we identified a critical change in the genetic makeup of her cancer, and realised she might benefit from an alternative therapy. She had a very good response to the new therapy and is doing very well because we had access to that technology.”*

## How is technology important to your work?

Success in science and the ability to make discoveries is dependent on technology. More than ever technology is evolving at a rapid pace and we need to stay abreast of that to be able to make new discoveries.

Having access to the best and most up-to-date technology underpins everything we do. **I'm very thankful to ACRF and its supporters for providing the sophisticated technology that makes this research possible.**

Professor Dawson in her laboratory



# YOU ARE STANDING BEHIND THE BOLDEST IDEAS

Donations like yours helped provide \$2.5M funding to establish the ACRF Image-X Institute in Sydney. Now, the Institute's work is set to revolutionise cancer imaging and provide global access to radiotherapy.

The ACRF Image-X Institute links technological innovation with cancer research and treatment to advance the science and clinical practice of cancer treatment.

Thanks to the generosity of people like you, ACRF funding has contributed to the creation, development and use of world-first cancer radiotherapy machines and treatments including:

- **The Australian MRI-Linac**, which combines imaging and targeted radiation x-ray beams, allowing for changes in the position of the tumour in real-time. This means it can selectively target the most aggressive parts of tumours; reducing negative side effects, treatment time, and costs. The MRI-Linac's split magnet MRI device is only one of its type in the world.
- **NANO-X**, which completely re-engineers radiological equipment, reducing equipment and treatment costs. There is a massive global demand for affordable radiotherapy machines – this project is ensuring that appropriate radiotherapy treatment will be affordable in the 135 countries around the world where patients currently don't have access to it.



Prof. Paul Keal and Dr Ricky O'Brien

Dr Ricky O'Brien  
at the ACRF Image X  
Institute

# WE ARE SO HAPPY YOU HAVE JOINED US

Because of donations like yours, we recently backed these incredible projects.

## ACRF Australian Centre of Excellence in Melanoma Imaging and Diagnosis

University of Queensland  
– \$9.9M – QLD

Because of supporters like you, ACRF's grant will help establish a new melanoma diagnostic centre in Queensland and place 15 three-dimensional whole-body imaging machines in urban and regional locations across QLD, NSW and VIC. These 3D imaging system take a total body image in milliseconds, sending these electronically to expert dermatologists to allow earlier detection of skin cancers.

## ACRF Centre for Integrated Cancer Systems Biology and Diagnosis

South Australian Health and Medical Research Institute  
– \$2.5m – SA

Thanks to support like yours, the ACRF will help establish a new research facility focused on delivering targeted, personalised cancer therapy for five of the most deadly cancer streams. This research will provide a deeper understanding of cancer biology and improve outcomes for cancer patients throughout Australia and beyond.

## ACRF Facility Innovative Drug Discovery

Bio21 – \$2M – VIC

Thanks to gifts like yours, ACRF's grant will provide state-of-the-art equipment for researchers to use revolutionary structural biology approaches to identify, develop, and deliver new cancer drugs. The facility will focus on developing drugs to treat cancer more effectively, with fewer debilitating side effects.

## Centre for Compound Management Logistics

Griffith University – \$2M – QLD

Thanks to people like you, ACRF's grant will fund a compound management platform for researchers across Australia to easily access and test a huge range of drug compounds, so they can identify and develop more effective cancer treatments.

**A world without cancer is possible...  
there is still much to do, together.**

## Other ways you can help Outsmart Cancer



- Become one our incredible regular givers
- Leave a gift in your Will
- Become a corporate partner or workplace giver
- Host an event
- Volunteer your time
- Shave or colour your hair
- Walk or run for ACRF
- Make a gift in memory of a loved one

TOGETHER WE CAN OUTSMART CANCER

THANK  
YOU

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