

Annual Review Highlights 2022



Children's
Cancer
Institute

Our message to you



Like you, we believe that a life should be long. That every child should get the chance to grow up and grow old. To plan exciting futures, chase their dreams, and fulfil their potential. But cancer cuts life short for hundreds of children every year, before they've even had a chance to make their mark.

Everything we do at Children's Cancer Institute is about ensuring that every child with cancer not only survives but goes on to lead a long and healthy life. With you by our side, this year we have made exciting progress towards this goal.

More than 900 children have now been enrolled on the Zero Childhood Cancer Program (ZERO), Australia's first precision medicine program for children with cancer which we lead in partnership with the Kids Cancer Centre at Sydney Children's Hospital. Over the coming year, more children with cancer will become eligible to join ZERO so that by the end of 2023, every young Australian up to 18

years of age who is diagnosed with cancer will be able to join, irrespective of their cancer risk, cancer type, or where in Australia they live. We're going to learn the true potential of precision medicine to improve outcomes for young people with cancer, and we couldn't be more excited.

In the coming years, we anticipate enhancing ZERO's testing platform by incorporating powerful new technologies as they become available. We were therefore thrilled when the Australian Cancer Research Foundation (ACRF) Child Cancer Liquid Biopsy Program was launched in May, paving the way to the development of what we believe will prove to be a revolutionary new clinical tool.

Important discoveries were made in our other research programs, a prime example being work published by our Blood Cancers team in the *British Journal of Cancer*, presenting a new and improved way to monitor acute lymphoblastic leukaemia in children using next generation sequencing technology.

Our research teams published 100 papers throughout 2022, with 36 in high impact journals, a significant increase on 2021. We've also made moves to expand our research capability in two very important areas: drug development and childhood cancer risk prediction. We appointed some of the brightest minds from Australia and overseas to establish and lead new research programs focusing on these areas. We are now better equipped to develop new drugs for children with cancer, as well as learn why some children get cancer and if anything can be done to prevent it.

In exciting news for all of us here at the Institute, construction began on our new home, Australia's first Children's Comprehensive Cancer Centre, with naming rights awarded to Minderoo Foundation following a very generous contribution of \$20 million towards this project.

As we look towards our future home and the continued growth of the Institute, we developed an ambitious new strategy for the Institute that will ensure that we are optimally placed, more than ever, to continue to deliver the best outcomes for children with cancer and their families in the future.

Thank you so much for your support on this journey. We hope you feel proud of the contribution you've made to this progress, to ensuring that every child has the opportunity to live their life to the fullest. Together we can and will cure all children of cancer. It's not if, it's when.


Professor Michelle Haber AM
Executive Director
Children's Cancer Institute

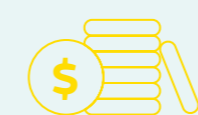
Front cover: Max was diagnosed with acute lymphoblastic leukaemia at just 3 years old.

Our Impact in 2022

\$16.4m
in research income,
highest ever


1,400 Minimal Residual
Disease tests conducted for
400 leukaemia patients



 **\$22.8m**
funds raised

\$63m total revenue

\$11m
in grant funding

 **100 publications** (up
31%) with 36 in high
impact journals (up 44%)

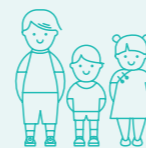
362 staff




Over 1m
website page
views, up **98%**

**3 NHMRC Investigator
Grants** (43% success
against the national average
of 15.9% success)

196 children
enrolled on ZERO
(900+ overall)



 **\$8.28m**
in media value

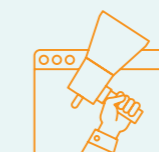
 **296,000** website
users, up 80%

**2 \$5m NHMRC Synergy
Grants** of only 10 awarded
nationally

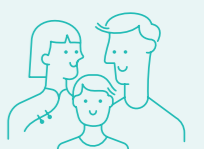


234 researchers
(including students)

34.7m
media reach



240,000 social
media followers



Note: Percentage increases are based on 2021 to 2022 figures

Our Year in Review

January

New group established to investigate childhood cancer risk We established an exciting new research group, Genomic Childhood Cancer Risk, with Dr Mark Pinese appointed as Team Leader. The new group aims to investigate the genetic basis of childhood cancer, to develop our understanding of why some children get cancer and if childhood cancer can be predicted, and even one day, prevented.

February

Virtual lab tour launched The world was brought into our labs, virtually, with the launch of our virtual lab tour. The tour is an interactive experience that includes video walkthroughs, high quality images and demonstrations from our researchers. Just another way we are bringing our research to life!



March

New research groups established Our research capability in the area of childhood cancer drug development and sarcoma biology significantly expanded this year with the establishment of three new research groups: Computational Drug Discovery Biology, led by Associate Professor Antoine de Weck, Chemical Biology and Drug Discovery, led by Dr Jean Bertoldo (pictured) and Sarcoma Biology and Therapeutics, led by Dr Emmy Fleuren.

Community comes together for 86k for a Cure Every month in Australia, 86 kids are diagnosed with cancer. Throughout March, we encouraged supporters from all over Australia and the world to walk or run 86kms (or do 86 of anything) and raise funds for our research. This inaugural event was a resounding success with around 4000 participants and \$1.4 million raised.

April

Minderoo Foundation announced naming rights partner of Children's Comprehensive Cancer Centre We were thrilled to welcome Minderoo Foundation on board as naming rights partner to Australia's first Children's Comprehensive Cancer Centre, following a \$20 million donation. Currently under construction on the Randwick Health and Innovation Precinct, our new home from 2025 will now be known as the Minderoo Children's Comprehensive Cancer Centre.

May

ACRF Child Cancer Liquid Biopsy Program launched The Australian Cancer Research Foundation (ACRF) Child Cancer Liquid Biopsy Program was launched with the goal of developing a revolutionary new tool for monitoring treatment responses and predicting relapse in children with cancer. Made possible through a \$3.5M grant awarded to the Institute by the ACRF, it is the first of its kind in Australia, and has the potential to be a 'game changer' for children with high-risk cancers.



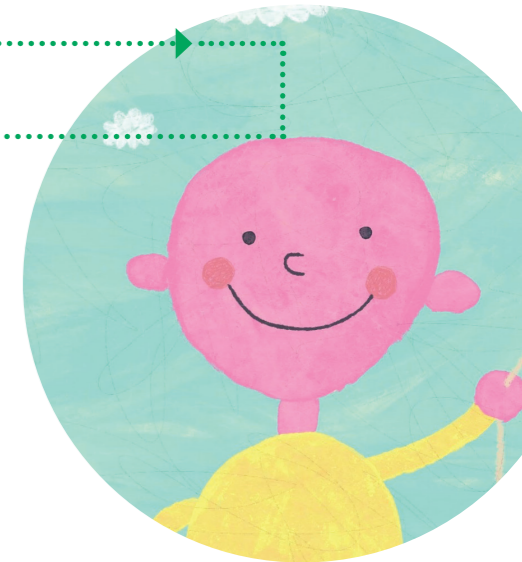
Professor Michelle Haber AM elected to Australian Academy of Science Our Executive Director, Professor Michelle Haber AM, was proud to be elected to the Fellowship of the Australian Academy of Science, Australia's most prestigious organisation of individuals elected for outstanding contributions to science and research. Professor Haber is world-renowned for her childhood cancer research leading to new clinical approaches that have improved survival and quality of life.

July

Genome sequencing provides new path to monitoring cancer in children Our minimal residual disease team published research in the *British Journal of Cancer* showing a new way to monitor acute lymphoblastic leukaemia (ALL) in children, using next generation sequencing technology. The new monitoring method not only works for different ALL subtypes, but is also likely to lead to new ways to monitor other cancers as well.

August

Launch of 'A life should be long' We launched 'A life should be long', a campaign to highlight the need for research to find a cure and safer treatments for children diagnosed with cancer. Created by the team at Orphan Creative, in association with renowned animator Julian Frost, the campaign tells the story of a little boy and his hopes and dreams for his future. A future that is in doubt because of childhood cancer.



October

CEO Dare to Cure held for first time in Melbourne The highly successful CEO Dare to Cure event was taken to Melbourne, with 100 CEOs taking part in a variety of Dares. Combined with Sydney, CEO Dare to Cure continues to raise the bar for engagement with CEOs and senior executives with \$1.7 million raised in 2022.

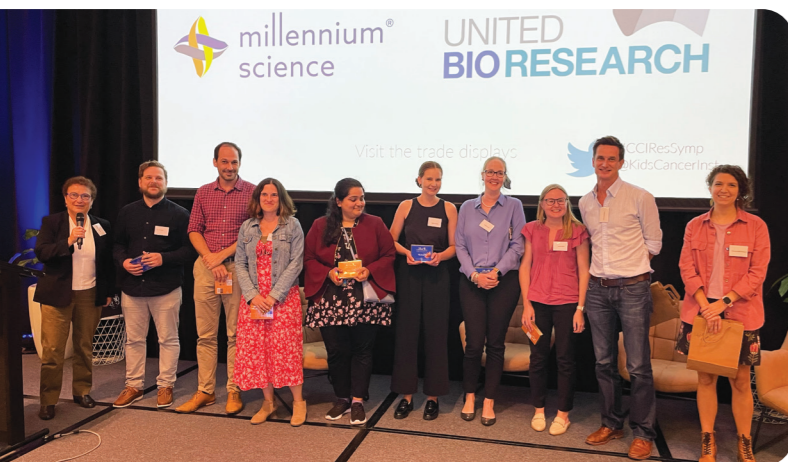
Inaugural ZERO Symposium held Exploring the theme 'Towards Precision Oncology for All', the inaugural Zero Childhood Cancer Program National Symposium was held in Sydney. Bringing together leading national and international experts at the cutting edge of cancer precision medicine research, the event was attended by close to 200 clinicians, researchers and health professionals, online and in-person.

September

Diamond Ball raises record amount For the first time in three years, we were delighted to welcome over 800 of our most special supporters to Diamond Ball. With an incredible buzz in the room, a record amount of \$1.7 million was raised.

December

Our first ever research Symposium The first Children's Cancer Institute Research Symposium brought us all together for science, careers and collaborations. It was a chance for researchers and staff of all levels to present their work and hear feedback as we all work together to improve the lives of children with cancer.



Zero Childhood Cancer begins expansion The Zero Childhood Cancer Program (ZERO) — originally only available to children being treated for high-risk cancers — began its much-anticipated expansion, starting with all children diagnosed with brain cancer. By the end of 2023, all Australians aged 0-18 years diagnosed with cancer will have access to precision medicine through ZERO.





Max's Story

At three years of age, Max was happy, healthy and enjoying day care. Described by his mum Albina as “Mr Social Butterfly, with zero inhibitions”, he was very lively and loved going out.

“He was always just happy-go-lucky,” says Albina. “As long as he was in the action, he was happy. He was always the life of the party and turned everything into a joke.”

Max showed no obvious signs of illness until he had what Albina describes as “blood clotting coming out of his nose”. After this happened on and off over a few weeks, she took Max to the GP, but the GP said he couldn't see anything.

On the morning of 15 December, when Albina and husband Alex were due to take their first day off together in years — with tickets to the

theatre and dinner booked — Max's nose started gushing blood. Albina then noticed a series of dots on this side of Max's wrist, which she now knows as petechiae.

Alex suggested they swing past Emergency “just to make sure it's OK”. By the end of the day, Max was admitted to Sydney Children's Hospital, Randwick.

Despite being told leukaemia was a possibility, Albina says she was “very much in denial” until a sobering discussion with the oncologist finally brought it home.

“He said to me: Just to be clear, we're not doing the bone marrow aspirate to see if he has leukaemia — we just need to know which type”.

Max was diagnosed with acute lymphoblastic leukaemia. He was given a good prognosis.



“The cure rates for his type of cancer are very high, and the thought that kept us going was that there were a number of treatment avenues we had available,” says Albina. “Not all cancers are like that, unfortunately.”

Max began two years of treatment. For 190 nights during the first year, Albina didn't sleep at home — something her young daughter Sophie found very hard to deal with. Through treatment with steroids and countless rounds of chemotherapy, Max somehow seemed to take it all in his stride.

During treatment, Max's minimal residual disease test results — which can give an early indication of how well treatment is working — were ambivalent, leaving Max's parents in a quandary as to whether to continue on the same path or intensify treatment. After agonising about which way to go, they eventually decided Max would go through the harder treatment. While this led to some harsh side effects, Albina says it all worked out in the end.

“I was ignorant of the reality of how invasive the treatment is, and the devastating impact it can have on families,” says Albina.

Reflecting on the experience, Albina says it taught her many valuable things, including how to take things one day at time — a foreign concept at first.

“You have to teach yourself not to worry about tomorrow. Tomorrow's problems will be dealt with tomorrow, because you've got enough on your hands to be dealing with today.”

Having witnessed the life-saving work of researchers and medical teams, Albina says she questioned what she could do, before realising everyone can help. Albina has become a passionate supporter of Children's Cancer Institute, having participated in CEO Dare to Cure in 2021 and 2022.

“What I say to people is: you can be saving lives. The battle isn't fought in miles, it's fought in inches. Each inch is hard fought for and requires funding. The more people who raise awareness and support, the faster the progress to the cure.”

“I was ignorant of the reality of how invasive the treatment is, and the devastating impact it can have on families.”

- Albina, Max's Mum



We will cure
childhood cancer.
It's not if.
It's when.



Donate today at ccia.org.au/donate

Children's Cancer Institute
PO Box 351, Randwick, NSW 2031
info@ccia.org.au | ccia.org.au
1800 685 686