CHILDREN'S
Leukaemia & Cancer Research
Foundation (Inc.)

ANNUAL REPORT

2016 / 2017

For over thirty years the Children's Leukaemia & Cancer Research Foundation (Inc.) has been raising funds for research into childhood cancers.

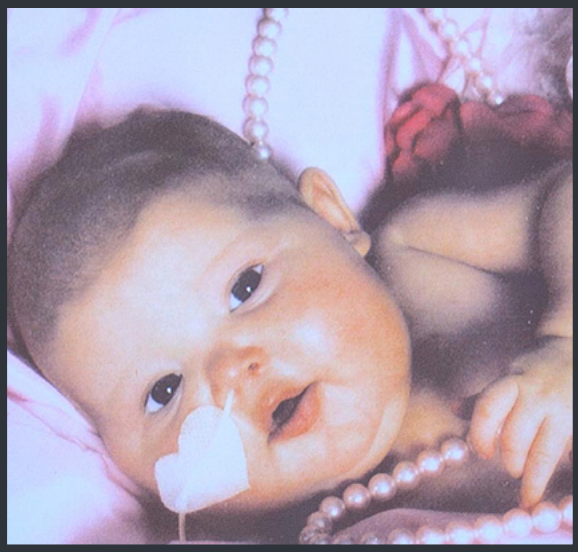
The Foundation relies on the generous support of the community to continue its vital research, as we do not receive State or Federal funding.

WHO ARE WE?

The creation of the Foundation was inspired by nine year old Jennifer Harper, who was diagnosed with leukaemia in 1977. When her father, Peter Harper, discovered that there was no research into children's leukaemia being done in Western Australia, he set out, together with other parents of children with cancer, to raise funds for this purpose. Sadly Jennifer passed away in 1978.

Australia has one of the highest incidences of childhood cancer worldwide. One in 500 Australian children will develop a cancer before 15 years of age – that's 600 Australian children diagnosed every year. Childhood cancer is the single greatest cause of death from disease in Australian children, with three children losing their lives to cancer every week. In Australia, childhood cancer is second only to breast cancer in terms of the number of years of life lost by the disease.

The quest to find cures for childhood cancer is one of medicine's greatest success stories. Fifty years ago only two percent of children with



cancer survived. Medical research alone has improved overall survival rates to 80 percent. With childhood cancer still the leading cause of death from disease in Australian children, there is more work to be done. There are still particular childhood cancers – such as brain tumours and neuroblastoma – with survival rates as low as 50 percent.

CLCRF has a commitment to ensure this ground-breaking research continues so that the future generations will be the ones to live cancer free. The Foundation relies on the generous support of the community to continue its vital research, as we do not receive State or Federal funding.

TABLE OF CONTENTS

Committee of Management

AS AT 30/06/2017

Mr Geoffrey CATTACH
(Chairman)

Mr Philip BRUCE
(Vice Chairman)

Mr Kim WILLIAMSON
(Treasurer)

Mr Justin BRUCE
(Secretary)

Mr David CATTACH

Mr Kimon ANDERSON

Professor Cathy COLE
(Nominee of Princess Margaret Hospital)

Professor Ursula KEES
(Nominee of Telethon Kids Institute)

Mr Michael PARKER

FOUNDER
Mr Peter HARPER

TRUSTEES
Children's Leukaemia & Cancer Research Foundation (Inc)

Administration Staff

Mrs Andrea ALEXANDER
(Executive Officer)

Mrs Wendy KEARNS
(Executive Assistant)

Miss Katelyn LUSH
(Administrative Assistant)

Chairman's Report

It is with pleasure that I once again report to members on the operations of the Children's Leukaemia & Cancer Research Foundation (Inc) for the year ended 30th June 2017.

The economy continues to challenge us in terms of both community and corporate support however we have managed to maintain and, in some instances, increase our research funding given our excellent accumulated fund position.

Finance:

After consultation with the Foundation's auditors, we have adopted a different mode of financial reporting for 2017 that is consistent with "Not for Profit" (NFP) organisations as distinct from commercial trading enterprises.

Accordingly, rather than a specific profit or loss each year we report on fundraising achieved less the cost of that fundraising with the difference being applied to funding current research projects with support from accumulated funds if required. The Treasurer will go into more detail of both the reporting format and the financial outcomes in his report.

Funding of Grants:

I am pleased to report that for the period under review our Foundation has been able to maintain the high level of research funding during 2016/17, a snapshot of the research grants currently being funded are as follows:-

(i) **Triennial Block Grant 2015 – 2018**
Researcher: Professor Ursula Kees
Titled: *Testing New Drugs for Infant with High Risk Leukaemia* amounting to Grant: $1,396,313.

(ii) **$1M Recognition of Excellence Funding Grant 2013 – 2017**
Researcher: Professor Ursula Kees
Titled: *Molecular Genetics of Childhood Tumours* amounting to $1,000,000.

(iii) **CLCRF Fellowship Grant**
Researcher: Associate Professor Alex H Beesley
Titled: *Targeting Therapy and Disease Outcomes in Paediatric Cancers* amounting to $557,167.

(iv) **Woolworths (WA) Fellowship**
Researcher: Dr Mark Cruickshank
Titled: *Identifying Molecular Abnormalities in Childhood Leukaemia to Improve Treatment* amount to $39,957.

(vii) **NUT Midline Carcinoma**
Researcher: Dr Anja Stirweiss
Titled: *Novel Therapies for Patients with Drug Resistant NUT Midline Carcinoma* amounting to $104,981.

(viii) **CLCRF Fellowship Grant**
Researcher: Dr Mark Cruickshank
Titled: *Molecular and Immuno-Therapy Targets for High Risk Leukaemia* amounting to $387,680

(ix) **Therapeutic targets for High Risk Leukaemia**
Researcher: Dr Mark Cruickshank amount to $199,317

(x) **Publication Costs**
Researcher: Associate Professor Alex H Beesley
Titled: Publication costs of NMC Manuscript (Genetics) amounting to $12,000.

We are extremely grateful and accordingly extend our congratulations to Professor Ursula Kees and her dedicated team of researchers for their continued achievements both locally and internationally.

Telethon Trust:

Recently we were invited to become "A MILLION DOLLAR PARTNER" of Telethon, a partnership that was formally announced during Telethon 2017 when the magnificent sum of over $36M was raised through the Western Australian community.

I want to clearly advise our own very generous and loyal donors that nothing has altered in our research funding arrangements as we already contribute around $1M annually to research projects undertaken at the Telethon Kids Institute and it is these funds that represent the "Million Dollar Partnership".

The advantage to our Foundation is that the million dollars that we already contribute annually to research funding is the trigger, under the Telethon Trust Agreement with CLCRF, to generate an additional minimum sum of $250K – and dependant on circumstances, up to $500K – annually from Telethon, to support additional research into childhood cancers in collaboration with the Telethon Kids Institute. Accordingly, this is a wonderful boost to our overall fundraising and, as a consequence, an additional boost to our research endeavours.

Telethon Kids Institute:

Once again we are proud to acknowledge the wonderfully cooperative working relationship we enjoy with the Telethon Kids Institute and, in particular, extend our thanks and appreciation to Professor Jonathon Carapetis, the Institute's Director, and Tim McInnis, Head of Development.

TELETHON KIDS INSTITUTE
Discover. Prevent. Cure.

Marketing Strategy & Development:

We have been very fortunate with the appointment of Kylie Dalton and Michele Seymour of Absolute Edge Media (AEM) to create, manage and coordinate all of the Foundation's social media, digital communications streams, marketing, branding and promotion over the past four years.

AEM have been instrumental in creating new income streams and in particular, the very successful innovative and creative "Dance for a Cure" and the inaugural Quiz Night. AEM are working closely with the CLCRF researchers and our Ambassadors to bring public awareness to our cause.

Accordingly, I am pleased to announce that we have extended AEM's contract until 30th June 2018 to bring it in line with triennial block grant funding and we look forward to the continued development of community and media relationships.

Community Activities:

Once again we are amazed at the wonderful and diverse support we receive from benefactors, businesses and the community at large.

Whilst such contributions will be individually acknowledged in our Executive Officer's Report, I would pay particular mention of the wonderful contribution of the Rotary/Lions Bike Trek which this year raised the magnificent sum of $34,371 (this figures includes funds received in the 2017/18 year) and since its inception in 2004 has raised a total of $678,371.

I congratulate members of our Community Fundraising Committee, under the chairmanship of Justin Bruce who have worked cohesively with Kylie Dalton and our own Foundation staff together with the many volunteers who assisted in our fundraising endeavours. I would also like to acknowledge that it is not just monies that are raised from these events but the awareness created which in turn initiates even greater support of our research endeavours.

Corporate Support Committee:

I would also like to commend our Corporate Support Committee under the Chairmanship of Kimon Anderson, who has undertaken the challenge of creating new income streams from the corporate sector.

It is exciting to experience the evolution of the "Bench to Bedside" programme that is now up and running as well as the innovative and exciting "Board Room Series" designed to meet with 'captains of industry and commerce' in order to create an awareness of our future research funding requirements.

It is sincerely hoped that the ultimate success of these strategies will be a definitive signpost to our future successes and financial viability.

Governance Issues:

I reported in last year's Annual Report that the Foundation was addressing governance issues, in particular, with regulations with the new ACNC Act (Australian Charities & Not for Profit Commission) and the drafting of a new Constitution which requires updating after 30 years and the need for compliance with the ACNC.

It is pertinent to note that the purpose of the ACNC is to set out a minimum standard of governance and to promote public trust and confidence in registered charities.

Accordingly, I am pleased to report that a "Special General Meeting" was held on the 9th October 2017 where our newly drafted Constitution was formally adopted.

This Foundation is indebted to Allion Lawyers who have gratuitously, over the past three years, undertaken to oversee the drafting of the new constitution.

We are also indebted to R Scales & Company and Warlows Legal who provided additional services and necessary advice regarding compliance with Public Ancillary Fund guidelines.

Patron:

We are extremely pleased that Justin Langer, our inaugural Patron, has, once again, agreed to continue in this role for the next appointment period of 2018.

We were extremely fortunate to have Justin accept the position of our first Patron and it is no surprise that he still holds this position. Notwithstanding his many commitments he has always given his support to the Foundation whenever called upon.

Ambassadors:

I am also extremely pleased to advise that Dr Ros Worthington OAM and Radio personality, Lisa Fernandez, along with the Rt. Hon Lord Mayor Lisa M. Scaffidi are continuing in their role of Ambassadors to the Foundation.

Our CLCRF Ambassadors, who, together with our Patron, Justin Langer, help provide a public and community awareness of the Foundation. This year we are pleased to announce that former Telethon Child, Georgia Lowry has agreed to be our "Young Ambassador" assisting generally in our fundraising endeavours but more specifically as the 'standard bearer' of our Young Scientific Fellowship Program.

Georgia is a wonderful role model to other children who are dealing with cancer and uses her experiences on her journey to inspire a whole new generation of child cancer patients with hope.

We are excited that all our Ambassadors will support our Foundation in any way they can and help showcase the need for continued funding into childhood cancer research.

Professor Ursula Kees:

As a Foundation whose mission is to promote medical research into childhood leukaemia's and cancers and to encourage and advance investigation into the cause, prevention, diagnosis and treatment of these types of illness, our lifeblood and focus is always on money - the more money we can raise the more research we can fund.

However equally, if not more important, are the people who carry out the research and in our particular case we have had an outstandingly dedicated and tremendously loyal person whom CLCRF have funded for over 30 years and I refer to Professor Ursula Kees who last month retired from her role as Head of the Division of Leukaemia and Cancer Research in the Telethon Kids Institute.

Ursula's achievements in her chosen field of research has resulted in both international and national recognition and has been, without doubt the most defining point of our successes over the past 30 plus years as the face of the CLCRF. In fact, it is impossible to think of her not being a continuing part of our Foundation. And nor would we allow that.

Accordingly, it is with the greatest of joy that I can announce to you, our members, today that Ursula has been appointed to our Board of Management, following the resignation of one of our Board Members. So we are not going to have to say goodbye and we are comforted in knowing that Ursula will continue to have a strong influence on the Foundation that she has dedicated her life's work to.

Professor Kees contribution to children's leukaemia research and to this Foundation cannot be overstated and there are going to be many deserving accolades made in the immediate future. As a consequence of her service to TKI she will headline a Symposium in her honour in Perth early next year that involves international speakers that will enhance the cause of childhood cancers and international awareness. This Foundation recently held a dinner for her close associates and there are a number of additional recognition activities planned that will remain secret rather than spoil the surprise when they happen. One of those accolades may even happen today!!!

It is needless to say that Ursula is and always will be considered in the highest possible way by this Foundation for her wonderful past and continuing contribution to research into childhood cancers. She is a great researcher and she is a great lady whom we are proud to call our friend.

Foundation Staff:

Our Foundation is fortunate to have competent and enthusiastic staff looking after our administrative needs. Such is there enthusiasm that there is no such thing as a 9 to 5 work environment nor is it a surprise to see them as part of team contributing their time over the weekends.

To Andrea, Wendy and Katelyn I extend my personal appreciation for your passion towards the Foundation, your expertise and efficiency plus outstanding loyalty in your collective administrative roles.

Committee of Management:

I also wish to extend my appreciation to the dedicated and enterprising members of our Committee of Management who give freely of their time and provide outstanding business acumen. One of the hallmarks of our committee over a long period of time has been stability however time does have its own influence notwithstanding restructuring arising out of our current constitutional review.

Accordingly, it is a personal sadness that we farewell David Cattach, who through the commitments of a growing family and a growing business, has had to curtail extra-curricular commitments which resulted in his recent resignation from the Committee of Management.

As said earlier, every downside has an upside and David's position, in accordance with constitutional allowance, casual vacancies can be filled until election processes come into play and in this regard Professor Ursula Kees was appointed to the Board of Management.

CONCLUSION

Our Foundation has now been in existence for 37 years, during this period of time we have raised in excess of $31m, the research we have funded has made wonderful advances in the treatment of childhood cancers, our membership continues to grow and best of all we have able to save young lives and give them the opportunity of a future.

To all of you who have supported and contributed to this success, please accept our sincere thanks and grateful appreciation.

I wish everyone a very Merry Xmas and look forward to an exciting and challenging New Year.

Geoffrey R Cattach AM
CHAIRMAN **4 December 2017**

Executive Officer's Report

I am pleased to report to the Members of the Children's Leukaemia & Cancer Research Foundation (Inc) for the financial year 2016/2017.

Corporate Benefactors

Toolmart

We have been fortunate, over the past few years, to be one of two beneficiaries of funds from Toolmart's Tradie Expo, held annually at Ascot Race Course. During the 2017 weekend Foundation volunteers raised $6,240 from donations at the gate.

Additional donations of $4,081 were also received via the 'Toolmart's Loyalty Program' catalogue sales and proceeds from vending machine sales at Toolmart locations.

Wellard Group

The Wellard Group continued to support the Foundation with a donation of $25,000. Donations of $3,300 were received via the Wellard 'Star of the West' Campdraft held in November 2016.

Benefactors

Bequests:

Brown Hazel – WA	$ 50,000
Burton Marion – NSW	$ 2,000
Conway Jilna – WA	$ 10,000
De Gennaro Daisy – WA	$ 29,575
Edwards Ruth – VIC	$ 110
Higgins Sheelah J – NSW	$ 11,046
King A – ACT	$ 1,000
Lesslie John – NSW	$ 82,508
Olsen Ellen – NSW	$ 33,276
Orlowski Lieselotte – WA	$310,401

The Foundation was not aware of these gifts until the benefactors had passed away.

2017 Dance for A Cure Quiz Night

Our inaugural Dance for A Cure Quiz Night was held on Saturday 17 June at the Perth Demons Football Club Lathlain Function Centre. The goal of this quiz night was to build funds to support the future Dance for A Cure events and hopefully raise more attention to our Foundation.

Those attending pitted their wits against our Ambassador Table with Dr Ros Worthington OAM, Lisa Fernandez, Kerrin Hampson, Katey Higgs and Zoe Manuel.

A raffle, silent auction and Heads N Tails game were a huge hit with everyone digging deep to participate and a profit of $11,000 was made from this night.

Our sincere thanks to Perth Demons and their staff, to Mark Gibson our MC, our Ambassadors, our hard working volunteers and to the many businesses who donated prizes and funds.

Mr John Hughan $53,000

Mr Hughan has been a passionate supporter of CLCRF for many years.

Tate Family Foundation $25,000

This donation represents the sixth year the of Tate Family's commitment towards the $1M Recognition of Excellence grant.

Stan Perron Charitable Foundation $10,000

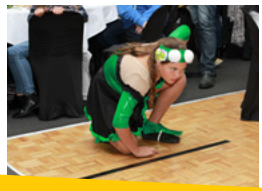
Mr Perron and his Foundation have been very loyal supporters of the Foundation since 1996.












To these individuals and organisations, we extend our sincere thanks for their generous support of the Foundation. There were many others who have provided support and financial assistance during 2016/2017. Their generosity is greatly appreciated. Donations of $500+ are listed elsewhere in this report.

2016 Dance for A Cure

Once again, the families of Perth turned out for the annual Dance for a Cure event – held in Forrest Place, Perth on Sunday 30 October.

The Dance was supported by Channel 9 with event Ambassador, Lisa Fernandez, and with Foundation Patron, Justin Langer appearing in our official TV commercial, encouraging the community to get involved. Louise Momber, also from Channel 9, was thrilled to MC on the day and commented how incredible this event was for families. She was visibly moved by the experience.

Our thanks to our dedicated team of volunteers – without their support we could not put this event on.

2017 Family Night Out

Families and friends came together to rock out under the stars to the sound of PINKED at the family night out at Perth Zoo on Saturday 18 March.

The Perth Zoo once again allowed our families to enter before the concert commenced allowing them to explore the zoo until the show started. Our families were entertained by Mal and Judi from Awesome Balloons and the face-painters were kept very busy. Sony Pictures Australia supplied the children with colouring-in pages and donated some family passes to the latest Smurf movie.

The concert would not have been possible without support from the Perth Zoo, the staff of Absolute Edge Media and our wonderful CLCRF volunteers.

With a wonderful level of publicity and promotion CLCRF experienced great PR during the ticket sales time frame although there was, again, a small loss on this event. We are now looking at improving the way we run the Family Night Out in the coming years to bring more families to the future events.

Tele-Marketing Raffles

There were three raffles completed during the year ending June 2017. Revenue from these raffles totalled $264,678 which, after expenditure, resulted in a surplus of $84,362. Donations received via the raffles were included in the revenue figure. Although the surplus figure was down compared with last year, it must be noted that there are many other charities now utilising this type of fundraising.

Our raffles continue to increase our profile in the community around Australia. The Royal Life Saving Society WA (RLSSWA), through its call centres in Manjimup and Bridgetown, continue to undertake our telemarketing calls and the Hello Call Centre look after the administration of the raffle funds.

It should be noted, that these raffles are on a cost recovery basis and RLSSWA make NO profit from the services provided to the Foundation. We are extremely grateful to RLSSWA for their continued support of our cause; this relationship goes back well over 16 years to 2001.

Donation Appeal Campaigns

From each raffle campaign the Foundation has been able to establish a database of donors in addition to raffle supporters. Tax and Xmas donation appeals were sent to this donor database in 2016/17, as well as to a select number of donors from the Foundation database.

All four campaigns were successful and represent an effective complimentary fundraising program to the raffles. Net cash received from the campaigns was $78,607, which was lower than last year. Given the state of the economy this is understandable.

2016 South West Bike Trek

The Foundation's 13th South West Bike Trek kicked off in Mandurah on Monday the 10th October and finished in Augusta on Saturday the 15th, covering 600 kilometres.

This event would not be possible without the support of the many service clubs, shires, companies and individuals. A total of $29,285 (under community activities) was raised from the trek.

Romsey House – Christ Church Grammar

The Foundation has a very long history with Romsey House at CCG dating back to 1991. That's over 26 years Romsey House have been supporting CLCRF.

In late 2016 Romsey House held their annual fundraiser for CLCRF and decided to run a Quiz Night. Through the generous donations of the Romsey families, a number of raffles and silent auctions a total of $9,020 was raised. CLCRF is truly indebted to the students, parents and staff for their ongoing commitment to our cause.

Community Fundraising

During the 2016/17 period $205,352 was raised from community based activities.

The fundraising creativeness of supporters continues to astound me, with cupcake baking in Kununurra, eleven-year-old Zavier's Big Hair Chop, annual canoe paddle for the Mandurah Over 55's Canoe Club, Carter Dunn's head-shave, Community Pod coffee sales, Night Market for CLCRF at East Fremantle Yacht Club, Balga Friday Markets, the employee fundraising via Wood & Grieve Engineers who organised a Christmas morning tea, boot camp group fitness classes and St Patricks Day fundraiser - just to name a few.

This figure also included Bench to Bedside donations, entertainment book sales, Friends of Finlay donations, merchandise and event sales, annual donation from NIBA, regular giving from donors and service club support.

Workplace Giving

This area of support has increased since 2015/16. CLCRF is registered with Good 2 Give Workplace Giving which enables employees to make pre-tax donations to registered charities direct from their pay.

CLCRF also received donations directly from a number of companies for their employees. A total of $18,553 (under community activities) was received via this method of giving.

Regular Giving

A number of CLCRF supporters chose to donate on a regular basis during 2016/17. Donations received from these gifts totalled $12,375 (under community activities).

Website

www.childcancerresearch.com.au

As part of their service to CLCRF, Absolute Edge Media are updating our new website regularly with details of events, stories, etc. This is critical for when someone types children's leukaemia in google – our web address is right at the top of the page – so it's very important to have a website that is current and relevant for the charity.

It is worth noting that during the period under view $23,832 was donated via the website. This is an increase of over $4,800 from last year.

We are currently working on the CLCRF shop that will allow the public to purchase our merchandise directly from the site bringing in more funding.

Foundation Update

Two editions of the Foundation Update were published during the period under review. Thank you to Michele Seymour from Absolute Edge Media for her expertise in this area of graphic design and support with the creation of stories.

We believe it is important for the members who receive these newsletters to be kept up to date with what we are working towards and achieving each month.

Social Media

https://www.facebook.com/CLCRF

Currently CLCRF has 3,574 Facebook followers (82% women and 17% men) and provides a powerful communication platform for our members & supporters. This also allows us to engage further with our supporters and reach a wider audience. Most of our followers, 3119, are from Australia.

Content of our page is varied and includes:

- information about events
- supporters who choose CLCRF to fundraise for
- donations received
- items relevant to childhood cancer
- CLCRF Flashbacks. Stories from our over 30-year history
- competitions
- social content

https://twitter.com/CLCRF

We currently have 133 followers on Twitter. The Twitter account is mainly used when at events eg Dance for A Cure, Swan River Run, Family Night Out.

These social media platforms have proved to be of great benefit to the Foundation.

Membership

As at 03/11/17, the Foundation has 584 members of which 251 are financial for the 2016/17 period. With the acceptance of the new Constitution, it is important the members stay financial, so they can vote and/or attend the AGM.

Fund Raising Platforms

Support for the Foundation has continued to come from many people around the world. CLCRF's fundraising profile continues to be strong via the online fundraising entities such as Everyday Hero, Go Fundraise and My Cause.

Funds raised via these platforms totalled $25,515 during 2016/17. The Everyday Hero Giving Hub built into the website is being regularly used by supporters when creating their own events.

CONCLUSION

This has been another year of challenges in the not-for-profit environment.

It is worth noting that according to the Australian Charities & Not-For-Profit Commission (ACNC) 2016/17 report – there are over 54,000 charities registered with the ACNC and during that same period 2,887 new charities were registered. In WA alone we have 1,553 charities registered.

With our future association with Telethon, I would hope that the 2017/18 year provides new avenues of fundraising and promising connections made.

In February 2017 Wendy and I attended the Fundraising Institute of Australia's international conference on the Gold Coast. Our thanks to the Committee for their support of this professional development.

My whole-hearted thanks to my Executive Assistant, Wendy Kearns, and our Administrative Assistant, Katelyn Lush, for their tireless efforts, commitment and support during the past year. We make a great team and I am very proud of both of you.

Also to the entire team at Absolute Edge Media who go above and beyond for the Foundation and we believe will continue to do so in 2018. Their support is invaluable.

Our Board of Management continue to provide me with support and guidance. It is an honour to work for such a dedicated group of people.

I would like to take this opportunity to wish everyone a very Merry Christmas and a safe and peaceful 2018.

Andrea Alexander
EXECUTIVE OFFICER

3 November 2017

CHILDREN'S LEUKAEMIA & CANCER RESEARCH 2016/2017

Funding: **Triennial Block Grant (2015 - 2018)**

Researcher: **Professor Ursula R Kees**

Title: **Testing New Drugs for Infants with High-Risk Leukaemia**

Leukaemia is the most common cancer in children, in particular acute lymphoblastic leukaemia or ALL. Leukaemia is a cancer of the blood. The leukaemia cells multiply uncontrollably, such that they crowd out the healthy blood cells. International research over the past fifty years has led to massively improved cure rates. Around 90% of childhood and adolescent leukaemia patients can expect to be cured of their disease. In sharp contrast, newborns and children less than 12 months at diagnosis face a dismal outlook with an event-free survival rate of less than 40%. For this reason, we call them high-risk leukaemias. In an attempt to find better therapy for these patients, international study groups have conducted many therapeutic studies, and the babies were given more intensive therapy. Unfortunately, this led to a large number of toxic deaths of patients, and did not improve overall survival. We urgently require novel therapies. Understanding the biology of this disease holds the key.

To study the biology we investigated the genetic features of the leukaemia cells from babies, and performed genetic analyses using state-of-the-art next generation sequencing technology. We gained novel insight into genes that are involved, their contribution to disease progression and resistance to chemotherapeutic drugs. We confirmed that a gene called MLL is not in its normal position on chromosome 11 where it normally is located, but chromosome 11 is broken at the site and fused to part of another chromosome. We know that such fusions are only present in the leukaemia cells and not in the patient's normal cells, and confer poor prognosis for the patient. We also found that infant patients inherited extremely rare versions in other genes that are known to play a role in cancer. Importantly, these molecular studies identified several known cancer-causing genes. This knowledge allows us to select modern drugs that target these altered genes to improve treatments of babies with leukaemia.

We used the leukaemia specimens from the patients to generate cell lines, so that the cells can be kept alive in the laboratory. These cell lines allow us to determine which drugs are effectively killing the leukaemia cells. We have generated a panel of nine cell lines and used the same methods to analyse their genetic features, as was done for the leukaemia cells from the patients. This confirmed that the cultured cells showed the identical fusions of the MLL gene as present in the leukaemia cells from the patients. We then screened the panel of cell lines against 150 approved cancer drugs, which is the first comprehensive assessment of drug response in leukaemia cells from babies. The information obtained clearly showed that some of the currently used drugs are not very effective at killing the leukaemia cells in the test tube.

However, some of the novel drugs, e.g. Romidepsin were very effective, yet are not used in contemporary protocols for patients. In order to determine whether these new drugs would be able to enhance the efficacy of currently used drugs we conducted a large screening experiment. We tested each new drug in combination with eight cytotoxic drugs that are currently used in treating babies with leukaemia. Of the 24 drug combinations tested, 12 showed enhanced killing of the leukaemia cells. Now we are extending these studies to cell lines from other patients. One of these successful drug combinations was further tested in our preclinical model system. We could demonstrate that this therapeutic approach effectively reduced the leukaemia burden in vivo – the drug combination was more powerful than each drug alone. Our studies have identified new drug combinations that could be of benefit for babies with leukaemia. Our results have been presented to the international infant acute lymphoblastic leukaemia study group, and our findings will be proposed for integration into future international clinical trials for infants with acute lymphoblastic leukaemia.

These and other studies have generated a number of research publications and have allowed us to leverage additional funding to support the work. These details are provided on the next page:

Additional Funding Leveraged:

- National Health and Medical Research Council Early Career Fellowship (2018-2021): Combinatorial Therapeutics in High-Risk Infant Acute Lymphoblastic Leukaemia (Kotecha RS, $344,657).
- The Kid's Cancer Project Grant (2017): Combinatorial Therapeutics in High-Risk Infant Acute Lymphoblastic Leukaemia (Kotecha RS, $133,537).
- Cancer Council Western Australia (2017): Early Cancer Researcher of the Year 2017 (Kotecha RS, $10,000).
- The Kid's Cancer Project Grant (2016): Improving the Treatment for Infants with Leukaemia (Kees UR $126,680).
- Telethon - Perth Children's Hospital Research Fund (2015-2017): Combinatorial Therapeutics In High-Risk Infant Acute Lymphoblastic Leukaemia (Kotecha RS, Kees UR, Cruickshank, MN, Lassmann T, $237,180)
- The Kid's Cancer Project Grant (2015): Improving the Treatment for Infants with Leukaemia (Kees UR $115,000).
- NHMRC Project Grant ID1011499 (2011-2015): Targeting Drug-Resistance in Childhood Leukaemia (Kees UR, Lock RB, Beesley AH, $626,732).

Recent Publications:

Cruickshank MN, Ford J, Cheung LC, Heng J, Singh S, Wells J, Failes TW, Arndt GM, Smithers N, Prinjha RK, Anderson D, Carter KW, Gout AM, Lassmann T, O'Reilly J, Cole CH, Kotecha RS, **Kees UR**, 2017. Systematic chemical and molecular profiling of MLL-rearranged infant acute lymphoblastic leukemia reveals efficacy of Romidepsin. Leukemia Leukemia 2017, 31(1):40-50.

Fransecky L, Neumann M, Heesch S, Schlee C, Ortiz-Tanchez J, Heller S, Mossner M, Schwartz S, Mochmann LH, Isaakidis K, Bastian L, **Kees UR**, Herold T, Spiekermann K, Gokbuget N, Baldus CD, 2016. Silencing of GATA3 defines a novel stem cell-like subgroup of ETP-ALL. J Hematol Oncol. 2016, 9(1):95.

Yadav BD, Samuels AL, Wells JE, Sutton R, Venn NC, Bendak K, Anderson D, Marshall GM, Cole CH, Beesley AH, **Kees UR**, Lock RB, 2016. Heterogeneity in mechanisms of emergent resistance in pediatric T-cell acute lymphoblastic leukemia. Oncotarget 2016, 7(37):58728-58742.

Somers K, Chudakova DA, Middlemiss SM, Wen VW, Clifton M, Kwek A, Liu B, Mayoh C, Bongers A, Karsa M, Pan S, Cruikshank S, Scandlyn M, Hoang W, Imamura T, **Kees UR**, Gudkov AV, Chernova OB, Haber M, Norris MD, Henderson MJ, 2016. CCI-007, a novel small molecule with cytotoxic activity against infant leukemia with MLL rearrangements. Oncotarget 2016, 7 (29):46067-46087.

Wells JE, Howlett M, Halse HM, Heng J, Ford J, Cheung L, Samuels AL, Crook M, Charles AK, Cole CH and **Kees UR**, 2016. High expression of connective tissue growth factor accelerates dissemination of leukaemia. Oncogene 2016, 35(35):4591-600.

Richmond J, Carol H, Evans K, High L, Mendomo A, Robbins A, Meyer C, Venn NC, Marschalek R, Henderson M, Sutton R, Kurmasheva RT, **Kees UR**, Houghton PJ, Smith MA and Lock RB, 2015. Effective targeting of the P53/MDM2 axis in preclinical models of infant MLL-rearranged acute lymphoblastic leukemia. Clinical Cancer Research 2015, 21(6): 1395-1405.

Kotecha RS, **Kees UR**, Cole CH and Gottardo NG, 2015. Rare childhood cancers - an increasing entity requiring the need for global consensus and collaboration. Cancer Medicine, 2015, 4(6): 819-824.

Longville BA, Anderson D, Welch MD, **Kees UR**, Greene WK, 2015. Aberrant expression of aldehyde dehydrogenase 1A (ALDH1A) subfamily genes in acute lymphoblastic leukaemia is a common feature of T-lineage tumours. British Journal of Haematology 2015, 168(2):246-57.

Stirnweiss A, McCarthy K, Oommen J, Crook ML, Hardy K, **Kees UR**, Wilton SD, Anazodo A, Beesley AH, 2015. A novel BRD4-NUT fusion in an undifferentiated sinonasal tumor highlights alternative splicing as a contributing oncogenic factor in NUT midline carcinoma. Oncogenesis 2015 Nov 9;4:e174. doi: 10.1038/oncsis.2015.33

Welch MD, Howlett M, Halse HM, Greene WK, **Kees UR**, 2015. Novel CT domain-encoding splice forms of CTGF/CCN2 are expressed in B-lineage acute lymphoblastic leukaemia. Leukemia Research 2015, 39 (8): 913-920.

Wells JE, Howlett M, Cheung LC, **Kees UR**, 2015. The role of CCN family genes in haematological malignancies. Journal Cell Commun Signal. 2015 9, (3):267-278.

Kotecha RS, Gottardo NG, **Kees UR** and Cole CH, 2014. The evolution of clinical trials for infant acute lymphoblastic leukemia. Blood Cancer Journal 2014. 0 4, e200.

Wells JE, Howlett, M. Cole CH and **Kees UR**, 2015. Deregulated expression of connective tissue growth factor (CTGF/CCN2) is linked to poor outcome in human cancer. International Journal of Cancer, 2015, 137(3): 504-11.

Cheung LC, Strickland DH, Howlett M, Ford F, Charles AK, Lyons KM, Brigstock DR, Goldschmeding R, Cole CH, Alexander WS and **Kees UR**, 2013. Connective tissue growth factor is expressed in bone marrow stromal cells and promotes interleukin-7-dependent B lymphopoiesis. Haematologica, 2014.99(7):1149-1156.

Samuels AL, Beesley AH, Yadav BD, Papa RA, Sutton R, Anderson D, Marshall GM, Cole CH, **Kees UR** and Lock RB, 2014. A pre-clinical model of resistance to induction therapy in pediatric acute lymphoblastic leukemia. Blood Cancer J, 2014 4, e232.

de Kock L, Sabbaghian, N, Druker H, Weber E, Hamel N, Miller S, Choong CS, Gottardo NG, **Kees UR**, Rednam SP, Van Hest LP, Jongmans MC, Jhangiani, S. Lupski, JR, .Zacharin M, Bouron-Dal Soglio D, Huang, A., Malkin D, Priest JR, Perry A, Mueller, S, Albrecht S, Malkin, D, Grundy RG and Foulkes WD, 2014. Germ-line and somatic DICER1 mutations in pineoblastoma. Acta Neuropathol. 2014 Oct; 128, 583-595.

Hooper CM, Hawes SM, **Kees UR**, Gottardo NG and Dallas PB, 2014. Gene expression analyses of the spatio-temporal relationships of human medulloblastoma subgroups during early human neurogenesis. PLoS ONE 9(11): e112909. doi:10.1371/ journal.pone. 0112909

Samuels AL, Heng JY, Beesley AH and **Kees UR**, 2013. Bioenergetic modulation overcomes glucocorticoid resistance in T-lineage acute lymphoblastic leukaemia. British Journal of Haematology, 2014. 165, 57-66.

Beesley AH, Stirnweiss A, Ferrari E, Endersby R, Howlett M, Failes TW, Arndt GM, Charles AK, Cole CH and **Kees UR**, 2013. Comparative drug screening in NUT midline carcinoma. British Journal of Cancer, 2014.110(5):1189-98.

Welch MD, Greene WG and **Kees UR**, 2013. Hypomethylation of the CTGF gene locus is a common feature of paediatric pre-B acute lymphoblastic leukaemia. British Journal of Haematology, 2013, 162(4):537-41

Beesley AH, Firth MJ, Anderson D, Samuels AL, Ford J and **Kees UR**, 2013. Drug-gene modeling in pediatric T-cell acute lymphoblastic leukemia highlights importance of 6-mercaptopurine for outcome. Cancer Research, 2013, 73(9):2749-59.

Thompson-Wicking K, Francis RW, Stirnweiss A, Ferrari E, Welch MD, Baker E, Murch AR, Gout AM, Carter KW, Charles AK, Phillips MB, **Kees UR** and Beesley AH. Novel BRD4-NUT fusion isoforms increase the pathogenic complexity in NUT midline carcinoma. Oncogene, 2013, 32(39):4664-74.

Funding: **Million Dollar Recognition Award (2012 – 2017)**
Researcher: **Professor Ursula R Kees**
Title: **Molecular Genetics of Childhood Tumours**

Most children and adolescents who are diagnosed with cancer suffer from leukaemia, in particular acute lymphoblastic leukaemia or ALL. More than 50 years ago a few clinicians pioneered the use of what we now call chemotherapy - drugs that are toxic and preferentially attack leukaemia cells. A tremendous international cooperation by clinicians and scientists identified drug combinations that can eliminate the ALL cells and cure the patients. Steady progress has pushed the cure rate in some childhood patients to 95%, yet close to 40% of deaths occur among patients who are expected to have a very good response to multi-drug therapy, and be cured. The burden of disease, calculated in "person years of life lost" due to disease, is 67 years for children with cancer, compared to 16 for breast cancer patients. Patients with leukaemia are treated with up to twelve different chemotherapeutic drugs. These regimens are very toxic to normal cells of the patients, and lead to short and long-term sequelae. Patients who survive childhood leukaemia suffer from these effects all their lives. Sadly, in some patients the disease comes back and the patients relapse. Most relapses of ALL occur in the bone marrow where the disease originates. At the time a patient is diagnosed, the bone marrow does not contain many normal cells, but instead is almost totally replaced by ALL cells. The cause of relapse is often due to the fact that the chemotherapeutic drugs are no longer toxic for the leukaemia cells - because they have changed their genetic features somewhat and as a result have become resistant. We have recently discovered that leukaemia cells use another escape method, and this is triggered by a response in the normal cells and bone cells that surround them (commonly called the microenvironment) in the bone marrow. It ultimately leads to protection of leukaemia cells by the microenvironment. We discovered that ALL cells have the capacity to influence their environment. Almost all of them show high levels of a gene called connective tissue growth factor, or CTGF for short. We found out that the ALL cells rapidly secrete CTGF such that cells in the vicinity receive a CTGF signal. This finding prompted us to determine whether the growth of

the leukaemia cells is dependent on the co-operation with the surrounding cells. We established a model system that allows us to analyse such mechanisms in vivo.

We studied the development of the leukaemia and found that destruction of the bone is commonly seen in children with leukaemia, and many patients suffer from bone pain at diagnosis, yet little is known about the association of bone loss and the progression of leukaemia. We have successfully developed a model that allows the comprehensive investigation of the bone cells and surrounding normal cells in the bone marrow during the development of leukaemia. Importantly, this model recapitulates the human disease and clinical symptom of increased bone fragility and reduced bone mineral density in children with a diagnosis of ALL. We first investigated the development of the disease in our model system and monitored each population of the surrounding normal cells. We could show clearly that during the initial phases the leukaemia cells did not expand, however the environment was remodelled to facilitate the subsequent support of the cancerous growth. Notably, the normal production of blood cells and immune cells in the bone marrow were affected during the leukaemia development. The combined reactions of the surrounding cells appear to trigger expansion of the leukaemia cells, and this happened very rapidly. Understanding the cascade of events opens up new avenues to interfere with the disease process and to design new therapeutic approaches. Our goal is to find inhibitors of these mechanisms to stop the development of leukaemia.

We next examined the bone cells in this model, in collaboration with the experts in bone biology at The University of Western Australia. We discovered that the bone-eating cells were highly active during the development of leukaemia. We tested zoledronic acid, an inhibitor of bone-eating cells, that has the capacity to reduce bone loss in patients with other conditions. We found that treatment reduces leukaemia progression and extends survival in our model. Unlike chemotherapeutic drugs, zoledronic acid is safe and well tolerated by children, and is already in clinical use in children for a wide variety of indications. Our findings suggest that it is a promising avenue to restore the normal microenvironment in the bone marrow to control cancer progression. Our current studies are designed to find out whether zoledronic acid could improve treatment outcome when combined with currently used chemotherapeutic drugs.

These and other studies have generated a number of research publications and have allowed us to leverage additional funding to support the work. These details are provided below:

Additional Funding Leveraged:

- Telethon-Perth Children's Hospital Research Fund (2017-2019): Zoledronic Acid to improve outcome of children with high risk leukaemias (Cheung LC, Kotecha RS, Tickner J, Kees UR, $242,470)

- Cancer Council WA (CCWA) Collaborative Cancer Grant Scheme (2017): Dissecting the leukaemia microenvironment (Cheung LC, Mullin B, Tang D, Kotecha RS, Tickner J, $43,395)

- Competitive Working Group Project Grant at Telethon Kids Institute (2016): The bone marrow microenvironment during leukaemogenesis' funded by Telethon Kids Institute (Cheung LC, Foley B, Tickner J, He B, Kees UR, Cole C, $25,000)

Recent Publications:

Cheung LC, Tickner J, Skut P, Howlett M, Foley B, Wells JE, He B, Singh S, Chua G, Kotecha RS and **Kees UR**, 2017. Dissecting the pre-B leukemia bone marrow microenvironment reveals new therapeutic opportunities (submitted)

Wells JE, Howlett M, Halse HM, Heng J, Ford J, Cheung L, Samuels AL, Crook M, Charles AK, Cole CH and **Kees UR**, 2016. High expression of connective tissue growth factor accelerates dissemination of leukaemia. Oncogene 2016, 35(35):4591-4600.

Kotecha RS, **Kees UR**, Cole CH and Gottardo NG, 2015. Rare childhood cancers - an increasing entity requiring the need for global consensus and collaboration. Cancer Medicine, 2015, 4(6): 819-824.

Longville BA, Anderson D, Welch MD, **Kees UR**, Greene WK, 2015. Aberrant expression of aldehyde dehydrogenase 1A (ALDH1A) subfamily genes in acute lymphoblastic leukaemia is a common feature of T-lineage tumours. British Journal of Haematology 2015, 168(2):246-57.

Welch MD, Howlett M, Halse HM, Greene WK, **Kees UR**, 2015. Novel CT domain-encoding splice forms of CTGF/CCN2 are expressed in B-lineage acute lymphoblastic leukaemia. Leukemia Research 2015, 39 (8): 913-920.

Wells JE, Howlett M, Cheung LC, **Kees UR**, 2015. The role of CCN family genes in haematological malignancies. Journal Cell Commun Signal. 2015 9, (3):267-278.

Wells JE, Howlett, M. Cole CH and **Kees UR**, 2015. Deregulated expression of connective tissue growth factor (CTGF/CCN2) is linked to poor outcome in human cancer. International Journal of Cancer, 2015, 137(3): 504-11.

Cheung LC, Strickland DH, Howlett M, Ford F, Charles AK, Lyons KM, Brigstock DR, Goldschmeding R, Cole CH, Alexander WS and **Kees UR**, 2013. Connective tissue growth factor is expressed in bone marrow stromal cells and promotes interleukin-7-dependent B lymphopoiesis. Haematologica, 2014, 99(7):1149-1156.

Samuels AL, Beesley AH, Yadav BD, Papa RA, Sutton R, Anderson D, Marshall GM, Cole CH, **Kees UR** and Lock RB, 2014. A pre-clinical model of resistance to induction therapy in pediatric acute lymphoblastic leukemia. Blood Cancer J, 2014 4, e232.

Samuels AL, Heng JY, Beesley AH and **Kees UR**, 2013. Bioenergetic modulation overcomes glucocorticoid resistance in T-lineage acute lymphoblastic leukaemia. British Journal of Haematology, 2014, 165, 57-66.

Welch MD, Greene WG and **Kees UR**, 2013. Hypomethylation of the CTGF gene locus is a common feature of paediatric pre-B acute lymphoblastic leukaemia. British Journal of Haematology, 2013, 162(4):537-41

Beesley AH, Firth MJ, Anderson D, Samuels AL, Ford J and **Kees UR**, 2013. Drug-gene modeling in pediatric T-cell acute lymphoblastic leukemia highlights importance of 6-mercaptopurine for outcome. Cancer Research, 2013, 73(9):2749-59.

Funding: **CLCRF Project Grant (2016)**

Researcher: **Dr Anja Stirnweiss**

Title: **Novel Therapies for Patients with Drug Resistant NUT Midline Carcinoma**

Rare cancers represent roughly 20% of all human cancers and are associated with worse survival than are so-called frequent tumours. Patients often experience delays to accurate diagnosis, inadequate treatments and fewer opportunities to participate in clinical trials. NUT midline carcinoma is one of those rare cancers with 200 people affected worldwide. Patients range from newborns to the elderly, but the disease is most often diagnosed in children and adolescents. To date, there are no survivors, and better treatments for this devastating disease are desperately needed. One major focus of our research is thus to find effective therapies to improve the fatal outcome for NUT midline carcinoma patients.

In NUT midline carcinoma the patient's genetic material is incorrectly repaired, which joins two genes (called BRD4 and NUT) and creates a new hybrid gene that causes the cancer. Importantly, drugs that are specifically designed to block the function of BRD4 called iBETs, have recently been developed. Since this treatment is likely to be the standard treatment for NUT midline carcinoma patients in the future, we have analysed the effects of an iBET called JQ1 in two of our pre-clinical NMC mouse models. By monitoring disease progression in these mice we were able to show that the iBET treatment tripled the survival time. The acquired data is now forming the basis to benchmark the efficacy of other promising drug candidates.

Our data from the pre-clinical mouse models is very encouraging, however we also have evidence suggesting that resistance may limit the therapeutic benefit of iBETs. This has important clinical ramifications given that iBETs are currently assessed worldwide in 21 clinical trials for cancers such as leukaemia, brain tumours, aggressive breast cancers and NUT midline carcinoma. In our laboratory we have used a unique collection of cells, obtained from NUT midline carcinoma patients, to identify drug-induced changes in gene expression. We then performed a correlation analysis to identify changes that are unique to iBET-resistant cells.

Network analysis, which assesses how those genes are functionally connected to each other, highlighted the oncogene FOS to be a central player of the gene network that is associated with drug resistance. Removal of this gene

from the resistant cells showed that FOS is not a driver of resistance, but an ideal marker to predict if the cancer cells will respond to iBET treatment. Ultimately, assessment of FOS could be used in the clinic to predict which patients will benefit from iBET treatment.

Dr Stirnweiss also collaborated with Dr Bree Foley from the Tumour Inflammation Group at the Telethon Kids Institute to see if the patients own immune cells could be used to kill NUT midline cancer cells. Interestingly, we have shown that an immune cell type called 'Natural Killer Cells' is very potent in attacking NUT midline carcinoma cells. The central question is now how this action could be promoted in patients to reduce their tumour burden and ultimately increase survival.

Manuscript Submitted:

Stirnweiss A, Oommen J, Cole CH, Kees UR, Beesley AH. Molecular-Genetic Profiling and High-Throughout In Vitro Drug Screening in NUT Midline Carcinoma - An Aggressive and Fatal Disease. (Under Review in Oncotarget)

Manuscripts in Preparation:

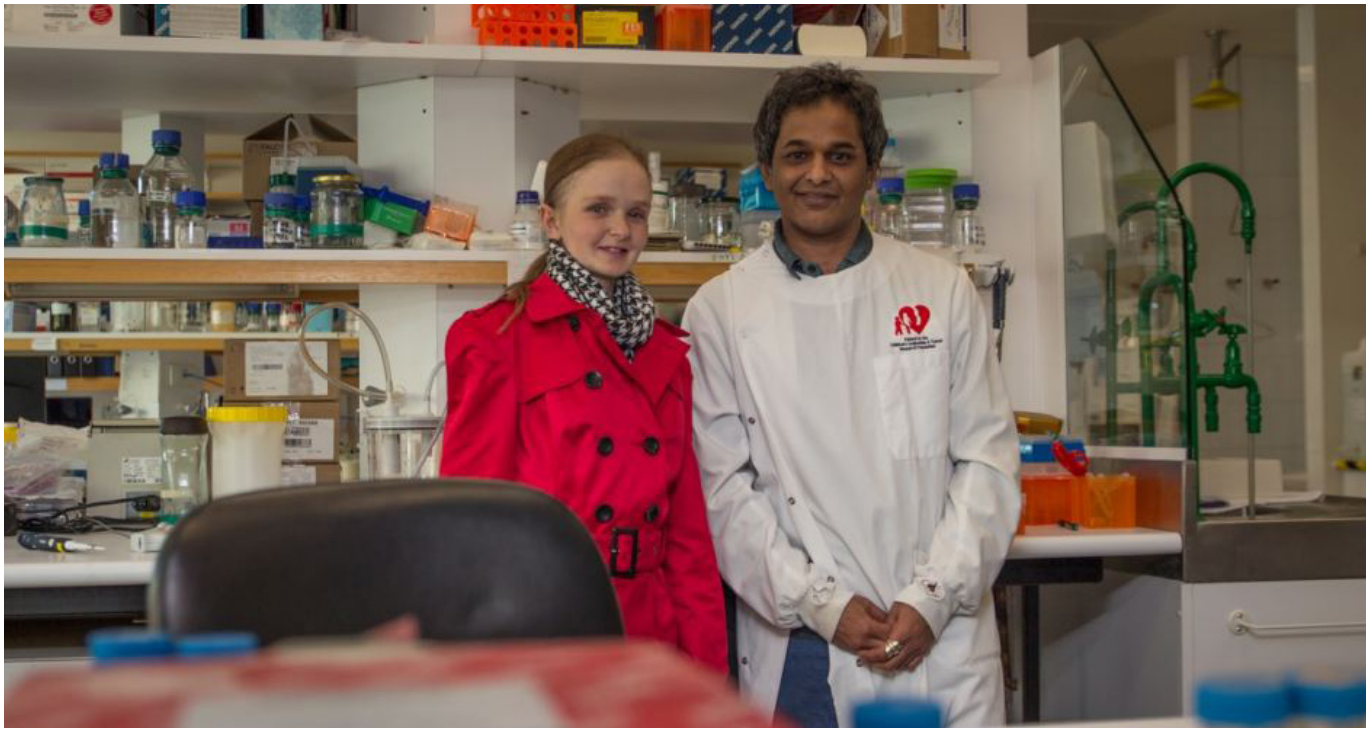
Stirnweiss A, Dholaria H, Oommen J, Hardy K, Kotecha RS*, Beesley AH*. Successful Treatment of a Pediatric Undifferentiated Carcinoma with Multimodal Therapy. [* Joint last-authorship]. (Anticipated submission March 2018)

McEvoy M, Oommen J, Cole CH, Kees UR, Beesley AH, Stirnweiss A. The Role of FOS in iBET-resistant NUT Midline Carcinoma. (Anticipated submission July 2018)

Funding: **Woolworths Fellowship/CLCRF Fellowship**

Researcher: **Dr Mark Cruickshank**

Title: **Molecular targets for high-risk leukaemia (2016-2017)**



While the survival rate for patients with childhood leukaemia has improved dramatically, approaching 5-year survival of 95% for some patient groups, several sub-types of leukaemia are refractory to current treatments. Furthermore, in cases where treatment is successful, the toxicity of the drugs results in severe acute side effects and long-term morbidity. Strikingly, in patients less than 18 months at the time of diagnosis, the survival rate is only 30%. In many studies more intensive therapy was administered to infants to improve survival. Unfortunately, this led to a large number of toxic deaths, and did not improve overall survival. We urgently need to find novel therapy for these patients. Since treatments using highly toxic chemotherapies are not successful, understanding the biology of this disease holds the key.

Dr Cruickshank was awarded the CLCRF Woolworths Fellowship from 2012-2015 and was responsible for co-directing research detailed under the CLCRF Triennial Block Grant and the Million Dollar Recognition Awards together with Prof Ursula and A/Prof Alex Beasley. He has been centrally involved in building the infant leukaemia research program. In these studies, the CLCRF-research team have been investigating the novel genetic and molecular features of infant leukaemia and performing extensive pre-clinical drug development using patient derived cell lines.

We reported the establishment of these cell lines using bone marrow cells from leukaemia patients (grown in the test tube to generate cell lines) and reported how they have helped us to identify novel agents that enhance the efficacy of current chemotherapies. This work culminated in publication of a paper in the prestigious journal, *Leukemia*.

As part of his Fellowship he has conceived and written several Project Grant and Collaborative Grant applications that have been funded within Telethon and by external funding agencies. He has 3 high impact journal articles arising from his Fellowship describing the results of his research, with two others under submission. He has been responsible during his Fellowship for presenting research from the laboratory to community groups and scientific audiences, both in Australia and overseas, acknowledging the support from the CLCRF at each opportunity.

In 2017 he was successfully awarded a CLCRF Project Grant and a three-year extension to his fellowship. Ongoing studies undertaken in the previous year are summarised below.

Funding: **Molecular targets for high-risk leukaemia**

Researcher: **Dr Mark Cruickshank**

Title: **Are there Germ-line Molecular Targets in High-Risk Leukaemia?**

In this study, we analyzed the largest collection of infant leukaemia samples (n=42) with next-generation sequencing data, many of which have been sequenced at two levels: the DNA and RNA. The patient sequencing data was compared to a large collection of normal controls that have also been sequenced totalling 64,752 adult with no history of a chronic paediatric condition. Since infant cancers have very few acquired mutations we examined their inherited DNA sequences (that is from normal cells of the patients) in a way typically used to identify genetic syndrome-causing mutations. By using these methods, and comparing gene variants in the control population, we detected a cancer-gene known as KEAP1 with an elevated number of rare protein-changing variants in infant leukaemia patients. In addition, we observe three highly connected genetic pathways with an elevated number of rare alleles – these include the RAS-pathway, the DNA-repair pathway and epigenetic-regulatory pathway. Individual patients were found to carry more rare gene variants in these pathways than control individuals. We have been testing if these gene-variations found in patients are capable of driving leukaemia pathogenesis in combination, using an *in vitro* mouse model system.

Funding: **Molecular targets for high-risk leukaemia**

Researcher: **Dr Mark Cruickshank**

Title: **Novel insights into evolution of infant leukaemia from massively-parallel- sequencing data**

Infant cancers typically have very low numbers of mutations so their cancer genome typically is similar to the inherited constitutional genome of the patient. Infant cancers provide a unique window into the evolution of cancer because there are fewer confounding factors to consider compared to older patients. To gain a better understanding of leukaemia evolution we sequenced a cohort of infant patients diagnosed at Princess Margaret Hospital and closely analysed their somatic and germ-line mutation profiles.

Most patients (5/6) showed the expected "silent genomic landscape" with very few differences in the leukaemia genome, however one patient had over 10,000 single base substitutions, the most mutated infant cancer genome ever discovered. Further scrutiny of the somatic mutations demonstrated that the initiating mutation most likely occurred in the MSH2 gene, which plays an important role in repairing DNA-mismatches. Remarkably, rather than being randomly distributed, the somatic mutations predominantly target common variants in the human population suggesting that most of these somatic mutations are not driving the disease. In addition to this highly mutated case, the study cohort consisted of monozygotic twin infants. There were 4 identical somatic point mutations and an identical Mixed lineage leukemia (MLL) gene fusion transcript in both co-twins. These data suggest the co-twins' had a shared pre-natal blood supply allowing transfer of leukaemia which evolved during pregnancy. Altogether, these results provide novel insights into the evolutionary dynamics of infant leukaemia.

Funding: **Molecular targets for high-risk leukaemia**

Researcher: **Dr Mark Cruickshank**

Title: **Are next-generation epigenetic targeting drugs effective therapies for childhood leukaemia?**

We recently reported characterisation of a panel of infant ALL (diagnosis age <1 year) cell lines with a genetic alteration causing a rearrangement of the MLL gene (MLL-R) (Cruickshank et al. 2017). This patient group is associated with a poor prognosis and frequent chemo-resistance at diagnosis. We tested a library of approved anti-cancer compounds which identified histone deacetylase (HDAC)-inhibitors as novel drugs capable of killing the leukaemia cells and also enhancing the activity of a key chemotherapy, cytarabine. In collaboration with commercial partners GlaxoSmithKline, we have subsequently tested the panel of cell lines to identify effective "targeted" compounds focusing on drugs that inhibit two key molecular processes – epigenetic modifications and MAPK (mitogen-activated protein kinases, also known as the Ras-Raf-MEK-ERK pathway) regulators. Our screen has identified two promising epigenetic targeting agents, GSK591 and iBET151. Both agents are in clinical trials for many cancer types but have not been tested against MLL-R pediatric ALL previously. We also tested a range of MAPK-inhibitors, however none were broadly effective against the cell line panel even in cell lines harbouring RAS-activating mutations that normally predict sensitivity to this drug class. These modern compounds are highly specific as they target particular gene products altered in leukemia cells. Therefore, these "targeted" drugs offer the potential to kill leukemia cells with less toxic effects on the patient. Further studies are now required to determine if any of these drugs show efficacy in animal models of disease.

Findings from research conducted during Dr Cruickshank's Fellowship have been presented in the following scientific forums and community groups:

- October 2017: "Infant leukaemia: are we targeting a one-hit wonder". Invited presentation for Murdoch Childrens Research Institute; Functional Genomics Seminar Series.
- August 2017: "Infant leukaemia: are we targeting a one-hit wonder". Invited presentation for University of Western Australia; Molecular Sciences Seminar Series.
- March, 2016 "Expression of rare alleles at cancer predisposition loci in MLL-rearranged infant acute lymphoblastic leukaemia". 6th New Directions in Leukaemia Research (NDLR) meeting.

Together these studies have generated a number of important research publications and have allowed us to leverage additional funding to support the work:

Additional funding leveraged

ACRF equipment grant (2017): ACRF Centre for Advanced Cancer Genomics (CI A Forrest, AI Dr Cruickshank $1,750,000).

Department of Health, Telethon – Perth Children's Hospital Research Fund 2016 (Round 5) (2017): Precision medicine for relapse leukaemia (CIA Dr Cruickshank, $234,170)

Cancer Research Trust, Collaborative Cancer Research Grant (2017): Single Cell Cancer Genomics Consortium (CIA Forrest, AI Dr Cruickshank, $3,750,000)

Kids Cancer Project (2016): Combinatorial therapeutics in high-risk infant acute lymphoblastic leukaemia(CIA Kees, Dr Cruickshank, Dr Kotecha, $100,000)

Recent Publications:

Cruickshank MN, J Ford, LC Cheung, J Heng, S Singh, J Wells, TW Failes, GM Arndt, N Smithers, RK Prinjha, D Anderson, KW Carter, AM Gout, T Lassmann, J O'Reilly, CH Cole, RS Kotecha, UR Kees "Systematic chemical and molecular profiling of MLL-rearranged infant acute lymphoblastic leukemia reveals efficacy of Romidepsin". Leukemia (2017) 31, 40–50; doi:10.1038/leu.2016.165

Taylor RL, Cruickshank MN, Karimi M, Ng HL, Quail E, Kaufman D, Harley J, Abraham LJ, Tsao B, Boackle S, Ulgiati D. "Focused transcription from the human CR2/CD21 core promoter is regulated by synergistic activity of TATA and Initiator elements in mature B cells". Cellular & Molecular Immunology (2016); 13, 119–131; doi: 10.1038/cmi.2014.138.

Cruickshank MN, Dods J, Taylor RL, Karimi M, Fenwick E, Quail E, Holers VM, Abraham LJ, Ulgiati D. Analysis of tandem E-box motifs within human Complement receptor 2 (CR2/CD21) promoter reveals cell specific roles for RP58/ZNF238/ZBTB18. Int J Cell Biol Biochem (2015); 64, 107-119, doi: 10.1016/j.biocel.2015.03.016


CHILDREN'S
Leukaemia & Cancer Research
Foundation (Inc.)
DANCE FOR A CURE
childcancerresearch.com.au

DONATIONS $500 & ABOVE 2016/2017

Many generous people and organisations gave to the Foundation during July 2016 - June 2017. We have tried to make the following list as accurate as possible but please forgive us if we have omitted details of your gift. Space does not permit us to list the numerous other donations given.

A
Accord Logistics P/L
ADG Welding Supplies
Agribusiness Research & Management P/L
Atherton Jan
Austvending P/L (SA)

B
Bailey Peter
Balga Community Assoc (Inc)
Banksia Grove Primary School
Barnett John Mr & Mrs
Barry Michael
Bayswater Senior Citizens Assoc
Beaumaris Primary School
Bechar Pravan
Beechboro Newsagency & Lotteries
Bentel Dr Gary & Erica
Boar Swam Campdraft Club
Booth Stacey
Boulton Brian
Bruce Justin
Buttsworth Industrial Supplies
Byrne Kim & Maureen

C
Cabaret Gaming P/L
Camelia Court Craft Group
Christ Church Grammar - Romsey House
Cicerello Jan
Clark Family Trust
Cole Ian
Colley Steve
Cresswell Richard

D
Davies Drew
Dempers & Seymour P/L
De Vos Bryant & Denise
Dewar Zahli

E
Einfalt Jurna

G
Galleria Toyota
Gibson Luke
Griffith Stuart

H
Haederle Mike & Judi
Heal Pty Ltd
Henley R
Hesketh John & Barbara
Higgs Family
Hislop Brett
Houghton Louise
Hughan John
Hughes Ian
Hunter Zavier

J
Jennings Brian
Jordan Marion

K
Kane Community Foundation
King Anthony
Kojonup Croquet Golf Club
Kotevski George

L
Landsdale Forum News
Lane John, JP
Langer Family
Langsford Kim
Lauder Cherise
Lawrence Industrial & Auto Supplies
Leaker Partners
Leech
Leppard Todd
Lewis Roderick
Lim Sow Moi
Lions Club of Coonamble Inc
Lions Club of Cowaramup
Lions Club of Leewin (Inc)
Lions Club of Margaret River Inc
Lions Club of Serpentine-Jarrahdale Inc
Lissiman Terry & Cindy
Loefgren Andre
Lucken Michele
Lynwood United Football Club

M
Macri Daniel
Mak Ellis
Mallee Bearings
Mandurah Over 55's Canoe Club Inc
McCorkill Dr Ron & Michelle
McGlynn Joshua
McPherson Nola
Minear Robert
Mining People International P/L

N
Nachi (Australia) P/L
National Insurance Brokers Assoc of WA

O
Oenpelli Nominees
O'Neil Ronald
Ong Irene

P
Pearce Natasha
Perth Financial Planning Services
Phelan Mark
Pizzuto Mark
Popsicle & Co
Power Tools Plus P/L
Prindiville Terrence

R
Reliable Process Maintenance
Rickman Alyssa-Skye
Rural Quip Ayr

S
Saint-Gobain Abrasives P/L
Sedl Agencies
Sell Steve
Sharmans
Shreeve & Carslake P/L
Simmons Laura
Small Barry & Jeanette
South West Tools & Industrial
Stan Perron Charitable Foundation Ltd
Stevens Steven

T
Tate Family Foundation
The Patrick Foundation
Think Pink Realty
Thornlie Bowling Club
Toolmart Australia Ltd
Tulk Scott

U
Ugle Barry
United Fundraisers

V
Vogel Reto

W
WA Primary School Football Championships
Wallis
Wellard Limited
West Brothers Sport Leisure
Wheeler Geoff & Margaret
Wood & Grieve Engineers

Z
Zacore P/L

Other Support:

Absolute Edge Media
Allion Legal
Australian Industrial Supplies (AIS)
Autobahn
Awesome Balloon Creations
Big Picture Factory
Boar Swamp Campdraft
Bruce Justin
Candy Goldsmith Photography
Carole Graf Hair Salon
Carlsson Kristy, Jonelle & Chris
Cat Café Purrth
Cathy Fulwood Tupperware Rep
Channel 9
City of Perth
Claire McGill for Hair
Claremont Art Framers & Gallery
Community Pod
Einfalt Jurna
Entertainment Publications
Everyday Hero
Felmingham Sarah
Fernandez Lisa – Ambassador
McGill Bernadette - Artist
Go Fundraise
Hair Tizz
Hello Call Centres
Inkredible Parlour
Keep The Flame Alive Volunteer Team
Kearns Gary
Langer Justin – Patron
Lowry Georgia - Ambassador
Mailing Solutions
McGill Bernadette
McLarty Family
Momber Louise
My Cause
National Australia Bank
Nexus Risk Services
NSK
Officeworks
Perth Demons Football Club
Perth Scorchers
Perth Zoo
Pinked
Quality Printer Cartridges
Quik Impressions
Response Services Australia
Seymour Pat & Michele
Sony Music
Sumitomo Australia
Royal Life Saving Society of WA
Telethon Kids Institute
Timken
Tsubaki
Typhoon Tools
Ultra Clean
Ultra Printing
Warner Music Australia
Wellard Limited
West Brothers Sport Leisure
Worthington Ros, OAM

FINANCIAL MEMBERS AS AT 30/06/2017

A
Agostino Melina
Ahern Muriel
Alexander Andrea & Gordon
Anderson Kimon & Sondra
Anthony Ted
Anzellino Dom & Rosa
Archibald Lesley
Arnold Geoffrey
Astone Joe & Ivy
Atkins Deborah

B
Bailey Philip
Barnett John
Barrett Margaret
Barrett-Lennard B R
Bartoli Giorgio & Gloria
Beake Jim
Beer Campbell
Bennett Iris
Blampey Matthew
Bombardieri Patricia
Boogaard Annette & Austin Ken
Boulton Brian
Bowater Valma
Bradshaw John & Elizabeth
Brassington John
Bridson Suad
Brodie-Hall R & C
Brown Gerry & Thea
Brown Colin & Glenice
Bruce Kristy
Bruce Justin
Bruce Family
Budd Joy
Bunn Tania & Loren
Burgess Donald
Burns Faith
Buttfield Jan

C
Calleja John
Cattach David & Jenny
Cattach Brent
Cattach AM Geoff, Life Member
Cattach Stewart
Cattach Family
Causier David & Susan
Chapman George & Lucy
Christian Bret
Clark Sue
Clifford Alistair
Cocking Barbara
Couzens Kathleen
Covich John

D
Daniels Jan
Davidson Sandra
Davies Lesley
Davis Tony & Lesley
De Nooyer Lein
De Petra Dawn & Genelle
Delroy MD Neil
Detiuk Michael & Georgina
Di Candilo G
Di Masi L & E
Dickson Stuart & Jennifer
Dobrowolski Maria
Dodd E F
Draper Stephen & Karen
Duane Bec
Ducey Gerry & Beryl
Dunning Vaughan

E
Elliott Mary
Ellis Barry & Sue
English Skye May
Escott Brenda
Fahrner Helke

F
Falconer Peter, Life Member
Falconer Moira
Falconer David & Leanne
Fawcett Bob & Jan
Fawcett K E
Fels Brian
Fergusson Brendan & Helena
Fisher Kellie
Fitzgerald John
Flavel Don
Flint Monica
Francis Rosslyn
Frawley M & S
Frost Petra
Froude Winifred

G
Galati Cono & Trudy
Geddes David & Charlotte
Genovese/ Fox Family
Germain Terrence
Germs Leanne
Giglia Lou & Maria
Ginbey Robert & Maria
Glass Thelma
Gobby Geoffrey
Godfrey Allen
Goetz Marilyn
Graham Valerie
Grant Rosemary
Gray Jill
Greenham Tim & Sue
Grosser Kerry

H
Hall Michelle
Hambley Bill & Rita
Han Edward & Francis
Hargrave Steve
Harris Eileen
Harris Murray, Helen & Justin
Hart Roy & Linda
Hayes Sharyee
Heal Valda
Heal Eric & Judy
Heil Adrian
Hicks David & Pam
Hicks Sue
Hill Charles & Joan
Hill Stan & Beryl
Hogben Terry
Horrocks Megan
Howe Suzanne
Hutchings Les & Alice
Hutchings / English Brad & Cassandra

I
Italiano Robert & Minnie

J
James Errol
Jennings Brian

Jennings Ian & Val
Jupp Allan & Cheryl

K

Keane Brian
Kearns Gary & Wendy
Kelly Linda
Kelly J
Kenda Renato & Annette
Kirkwood Kerrin
Kitchen John & Mary
Konigsberg Hilary
Kounis Kaye
Krikke Peter

L

Lamb Phil
Lane (JP) John
Larke Graham & Althea
Lazzarich Family
Le Page Michael
Lee John
Leeflang Carine
Love Murray
Lush Katelyn
Lychlander Sheila
Lydon Larry & Isabell
Lynch Andrew

M

Macleod Jessie
Maddock Eric & Annette
Mancuso Maruzza
Marchant Family
Marsell William & Marian
Martin Evelyn
Matthews Daniel
Matthews Neville
McClymont Frank
McCorkill Ron & Michelle
McCormick Dorothy
McCormick Steve & June
McDonald Ian & Penny
Mignacca Family
Miller Rusty & Barbara
Mills Alistair
Mills Jenny
Mills Nancy
Milner Warren
Mincherton Glyn
Mischin Michael MLC
Muir Darryl
Murray Wendy
Myers John

N

Norton Daniel
Nottle Pat
Nyenhuis Harry & Brigitte

O

Oldham Neil & Shirley
Oldham Tracey
Oliveri Antonio & Santina

P

Parker Michael & Catherine
Parker Judith AM DCSJ
Parkin Peggy
Paulin Antony
Peaker Shirley
Pech Judith
Pintabona Charles & Sharon
Preece Christine

Q

Quinn Judy
Quinones Susanne

R

Reed Brad
Riley Geoff & Mary
Rodoreda Greg & Michelle
Russell Bill

S

Salamone Rebecca
Schulze Dean
Scott Graham & Linda
Segal Lea
Senior Sue
Sequeira Andre & Neicha
Silbert Lindsay & Suzanne
Silsbury Robin
Sim Paula
Simons Eileen
Sinclair Family
Skinner James & Patricia
Slatter Brian
Smith Jim
Smith Masie
Smith Philip
Spagnolo Family
Sparks Amanda
Stanley Fiona Prof, AC
Starkey Stephen & Lorraine
Steel Peter & Christine
Stokman Gerda
Stratton Veronica
Stuchbury Mark & Laura
Sutton Peter & Glenda

T

Tassone Joseph
Tate Noelene
Tate Franklin
Taylor J R & M M
Terms Alexandra
Terry Phillippa
Turner Jim
Turner Glen
Turner Keven & Fay

U

Udinga Alex & Jan

V

Van Der Lecq PSM & A
Van Dijk H & C
Villa Gillian
Vittino Ric & Jackie
Vogel Reto

W

Walker Richard
Wallace M-J
Wards Joseph
Warn Rosalie
Warwicker Shirley
Webb Brian & Maxena
Wilborn Bernie
Williams Robbi & Courtney
Williamson Kim & Jenny
Wilson Lorna
Wilson Stephen
Wolfe Jeanette

Children's Leukaemia & Cancer Research Foundation (Inc)

The Trustee for Children's Leukaemia & Cancer Research Fund - ABN: 85 900 470 711

FINANCIAL STATEMENTS

Year Ended 30th June 2017

CHILDREN'S
Leukaemia & Cancer Research
Foundation (Inc.)

Suite 3/100 Hay Street
Subiaco WA 6008

PO Box 1118
West Perth WA 6872

Phone:
+61 8 9363 7400

Fax:
+61 8 9382 8798

admin@
childcancerresearch.com.au

childcancerresearch.com.au

Children's Leukaemia & Cancer Research Foundation (Inc.)

The Trustee for Children's Leukaemia & Cancer Research Fund

ABN: 85 900 470 711

Patron: Justin Langer AM

STATEMENT BY THE COMMITTEE OF MANAGEMENT

The Committee Members have determined that the Foundation is not a reporting entity, and that this special purpose financial report should be prepared in accordance with the accounting policies outlined in Note 1 to the financial report.

In the opinion of the Committee of Management, the accompanying financial reports:

1. (a) The financial statements and notes are in accordance with Part 5 of the Associations Incorporation Act 2015; and

   (b) The accompanying Operating Statement gives a true and fair view of the deficit of the Foundation for the financial year; and

   (c) The accompanying Balance Sheet gives a true and fair view of the state of affairs of the Foundation as at the end of the financial year.

2. At the date of the statement there are reasonable grounds to believe that the Foundation will be able to pay its debts as and when they fall due.

This statement is made in accordance with a resolution of the Committee of Management and is signed by and on behalf of the Committee of Management by:

.....

Executive Officer – Andrea Alexander

.....

Treasurer – Kim Williamson

Date: 08/11/2017

The accompanying notes form part of the financial statements.

INDEPENDENT AUDIT REPORT

TO THE MEMBERS OF THE CHILDREN'S LEUKAEMIA & CANCER RESEARCH FOUNDATION (INC)

NICK DEL POPOLO
CHARTERED ACCOUNTANT
9 CARRINGTON STREET
NORTH PERTH, WA, 6006
Ph: 0419 922 776

9 November 2017

TO THE MEMBERS
THE CHILDREN'S LEUKAEMIA & CANCER RESEARCH FOUNDATION (INC)
We have audited the financial statements of Children's Leukaemia & Cancer Research Foundation (INC)(The Foundation) for the year ended 30 June 2017.

The Foundation's Management Committee are responsible for the preparation of the financial statements. We have conducted an independent audit of these financial statements in order to express an opinion on them to the members of the Foundation. The Management Committee's responsibility also includes such internal control as the Management Committee's determine necessary to enable the preparation of a financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

The audit has been conducted in accordance with Australian Auditing Standards to provide reasonable assurance as to whether the financial statements are free of material misstatement. Our procedures included examination, on a test basis, of evidence supporting the amounts and other disclosures in the financial statements, and the evaluation of accounting policies and significant accounting estimates. These procedures have been undertaken to form an opinion as to whether in all materials respects the financial statements are presented fairly in accordance with Australian Accounting Standards so as to present a view of the Foundation which is consistent with our understanding of its financial position and the results of its operations.

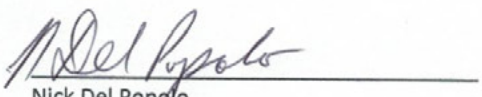
The financial statements include fundraising receipts. It has not been practicable to determine whether pledged monies from external fundraising activities have been received and banked through the Foundation's accounts.

The Audit opinion expressed in this report has been formed on the above basis.

INDEPENDENCE
In conducting our audit, we have complied with the independence requirements of the Australian professional ethical pronouncements.

AUDIT OPINION
In our opinion, the financial statements present fairly the financial position of Children's Leukaemia & Cancer Research Foundation (INC) as at 30 June 2017 and the results of its operations for the year ended 30 June 2017 in accordance with applicable Accounting Standards to the extent described in Note 1.
In addition;
a.The financial statements satisfy the requirements of Part 5 of the Associations Incorporation Act 2015;
b. We have been given all information, explanations and assistance necessary for the conduct of the Audit;
c. The Foundation has kept financial records sufficient to enable financial statements to be prepared and audited;
d. The Foundation has kept other records as required by Part 5 of the Associations Incorporation Act 2015

EMPHASIS OF MATTER- BASIS OF ACCOUNTING
We draw attention to Note 1 to the financial report, which describes the basis of accounting. As a result, the financial report may not be suitable for another purpose. Out audit opinion is not modified in respect of this matter.



Nick Del Popolo
Chartered Accountant
Registered Company Auditor

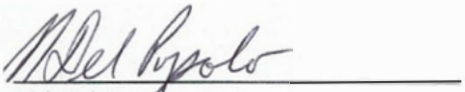
AUDITORS INDEPENDENCE DECLARATION

TO THE COMMITTEE OF MANAGEMENT OF THE CHILDREN'S LEUKAEMIA & CANCER RESEARCH FOUNDATION (INC)

I declare that, to be best of my knowledge and belief, during the year ended 30 June 2017 there have been no contraventions of:

i.Any applicable code of professional conduct in relation to the audit

Name of firm:	N DEL POPOLO
Name of partner:	N DEL POPOLO
Date:	1st July 2017
Address:	9 CARRINGTON STREET NORTH PERTH WA 6006



Nick Del Popolo
Chartered Accountant
Registered Company Auditor

OPERATING STATEMENT 01/07/16 - 30/06/17

REVENUE	2016/2017	2015/2016
Subscriptions	$5,357	$ 1,406
Donations & Promotions	$ 170,366	$ 211,251
Community Activities	$ 205,352	$ 157,620
Raffles & Direct Mail Campaigns	$ 343,284	$ 432,122
Schools & Associations	$ 11,683	$ 10,123
Commercial Support:		
Triple Vend/Austway	$ 1,321	$ 1,220
United Fundraisers	$ 1,172	$ 1,908
VLT	$ 2,204	$ 1,923
Grants & Bequests:		
Bequests	$ 529,917	$ 356,794
3BL (Brain Tumour Research Project)	$ 50	$ 400
Interest Received	$ 108,256	$ 123,432
TOTAL REVENUE	**$ 1,378,962**	**$ 1,298,199**
EXPENDITURE		
Admin/Salaries & Other Costs	$ 361,768	$ 443,791
Raffles & Direct Mail Campaigns	$ 180,316	$ 197,393
Promotions & Events	$ 145,076	$ 100,827
Property Outgoings / Refurbishment	$ 46,321	$ 30,100
SUB-TOTAL	**$ 733,481**	**$ 772,111**
APPROPRIATIONS		
Research / Funding Grants:		
Block Grant Allocation	$ 376,251	$ 390,328
1Mio Grant of Excellence	$ 207,889	$ 121,839
CLCRF Fellowship - Assoc Prof A Beesley	$ 50,551	$ 201,621
Woolworths Fellowship - Dr M Cruickshank	$ 39,958	$ 108,757
Midline Carcinoma Grant	$ 901	$ 91,406
Morpholino Therapy for Cancer Grant	$ 8	$ 16,706
CLCRF CRT Professor	$ -	$ 26,364
Novel Therapies NUT Midline	$ 63,752	$ 42,889
Therapeutic Targets for High-Risk Leukaemia	$ 2,900	$ -
CLCRF Fellowship - Dr M Cruickshank	$ 51,511	$ -
Assoc Prof A Beesley - manuscrip costs	$ 5,712	$ -
SUB-TOTAL APPROPRIATIONS	**$ 799,433**	**$ 999,910**
EXCESS/(DEFICIT) TRANSFER TO ACCUMULATED FUNDS	**$ (153,952)**	**$ (473,822)**

The accompanying notes form part of the financial statements.

BALANCE SHEET - 30/06/2017

ACCUMULATED FUNDS	NOTE	2016/2017	2015/2016
Balance as at 01/07/2016		$ 6,965,169	$ 7,438,991
Excess/(Deficit) from Operating Statement		$ (153,952)	$ (473,822)
TOTAL ACCUMULATED FUNDS		**$ 6,811,217**	**$ 6,965,169**
These Funds are represented by:			
CURRENT ASSETS:		2016/2017	2015/2016
Cash on Hand		$ 100	$ 100
Cash At Bank		$ 162,882	$ 388,542
Gaming Commission		$ 48,278	$ 47,336
Term Deposits		$ 4,748,534	$ 4,771,354
TOTAL CASH AVAILABLE		$ 4,959,794	$ 5,207,332
Trade Debtors		$ -	$ -
Shares - At Cost		$ 17,166	$17,166
Share Options - At Cost		$ 1	$ 1
Provision for Diminution in Value		$ (9,166)	$ (15,566)
TOTAL CURRENT ASSETS		$ 4,967,795	$ 5,208,933
NON-CURRENT ASSETS:		2016/2017	2015/2016
Property Land & Buildings			
100 Hay St Subiaco	2	$ 886,630	$ 886,630
Capital Improvements - Subiaco		$ 121,625	$ 121,626
Provision for Diminution in Value		$ (198,256)	$ (198,256)
Provision for Depreciation		$ (16,200)	$ (16,200)
Computer Equiment At Cost		$ 7,183	$ 7,182
Property - Vacant Land			
26 Parnell Pde Bassendean	2	$ 572,928	$ 572,928
28 Parnell Pde Bassendean	2	$ 553,588	$ 553,588
TOTAL NON-CURRENT ASSETS		$ 1,927,498	$ 1,927,498
TOTAL ASSETS		**$ 6,895,293**	**$ 7,136,431**
CURRENT LIABILITIES		2016/2017	2015/2016
Trade Creditors		$ (31,775)	$ (119,031)
Accrued/Sundry Creditors		$ -	$ (5,252)
Leave Liabilities		$ (83,874)	$ (77,559)
Provision for AL/LSL on-costs		$ (6,800)	$ (6,800)
Total Years Tax Liabilities		$ 38,373	$ 37,379
TOTAL LIABILITIES		**$ (84,076)**	**$ (171,263)**
TOTAL ASSETS/LIABILITIES		**$ 6,811,217**	**$ 6,965,169**

The accompanying notes form part of the financial statements.

STATEMENT OF CASH FLOWS - AS AT 30/06/17

CASH FLOWS FROM OPERATING ACTIVITIES	NOTE	2016/2017
Receipts from:		
Subscriptions		5,357
Donations and promotions		$ 170,366
Community activities		$ 205,352
Raffles and Direct mail campaigns		$ 342,343
School and Associations		$ 11,683
Commercial Support		$ 4,697
Grants and Bequests		$ 529,967
Interest		$ 108,256
Payments to clients, suppliers, employees and for research grants		$ (1,626,501)
Net cash used in operating activities	**3**	**$ (248,480)**

CASH FLOWS FROM INVESTING ACTIVITIES	2016/2017
Investment in Term Deposits	$ (2,511,180)
Withdrawl of Term Deposits	$ 2,534,000
Net Cash provided by investing activities	**$ 22,820**

Net change in cash and cash equivalents	**$ (225,660)**
Cash and cash equivalents, beginning of year	$ 388,642
Cash and cash equivalents, end of year	**$ 162,982**

The accompanying notes form part of the financial statements.

CHILDREN'S LEUKAEMIA & CANCER RESEARCH FOUNDATION (Inc)

NOTE 1 - Statement of Significant Accounting Policies

The significant accounting policies which have been adopted in the preparation of this financial report are:

BASIS OF PREPARATION

The Financial Report is a special purpose financial report, which has been prepared to meet the requirements of the Management Committee to provide information to the Children's Leukaemia & Cancer Research Foundation (Inc). The Foundation is not a reporting entity and is not obliged to adhere to the mandatory reporting requirements of the Australian Accounting Standards. Notwithstanding the special reporting status of the foundation, the Management Committee have, unless otherwise stated followed generally accepted accounting principles in accordance with Australian Accounting Standards. The accounts have been prepared on the basis of historical costs and do not take into account the changing value or fair value of non-current assets. The Accounting policies are consistent with those prepared in 2016.

TAXATION AND GST

Children's Leukaemia & Cancer Research Foundation (Inc) is an income tax exempt body.

The Net amount of Goods and Services Tax and GST recoverable from or payable to the Australian Taxation Office is included as a current asset or liability in the Balance Sheet.

Revenue, Expenses and Assets are recognised net of GST.

EMPLOYEE ENTITLEMENTS

The amounts expected to be paid to employees for their pro-rata entitlement to long service leave and annual leave are accrued annually at current pay rates.

NOTE 2 - Valuation of Non-Current Assets - Property

Hay Street, Subiaco was purchased on 02/09/2010 and is valued at market valuation. The Market Valuation is at 19/06/15 and is prepared by an independent licensed property valuer. 26 and 28 Parnell Parade, Bassendean, were transferred to the Foundation on 17/09/2013 by a deceased estate. They are valued at Committee of Management valuation based upon a real estate agents Appraisal and Report dated 18/09/2012 and a second real estate agents drive-by valuation dated 08/11/2013.

NOTE 3 - Operating Cash Flow

Reconciliation of cash flows from operating activities with current year deficit.

CASH FLOWS FROM OPERATING ACTIVITIES	
Net deficit for the year	$ (153,952)
Non-cash flows in operating deficit:	
Diminution in share investments	$ (6,401)
Net changes in working capital:	
Change in trade and other receivables	$ (1,933)
Change in trade and other payables	$ (92,509)
Change in provisions	$ 6,315
Net cash from operating activities	**$ (248,480)**

CONTACT US

Children's Leukaemia & Cancer Research Foundation (Inc.)

The Trustee for Children's Leukaemia & Cancer Research Fund

Phone: +61 8 9363 7400
Fax: +61 8 9382 9798
Email: admin@childcancerresearch.com.au

www.childcancerresearch.com.au

ABN: 85 900 470 711