

UNDER THE MICROSCOPE

NEWSLETTER OF THE TELETHON INSTITUTE FOR CHILD HEALTH RESEARCH



Telethon Institute for
Child Health
Research

2012 - ISSUE 2

www.childhealthresearch.org.au



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**WE FAREWELL
FIONA STANLEY**

Plus...

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New sun exposure guidelines
and more

CHECK OUT OUR NEW WEBSITE AT WWW.CHILDHEALTHRESEARCH.ORG.AU

SUBSCRIBE ONLINE TO RECEIVE OUR NEW MONTHLY E-NEWS



FAREWELL FIONA

We knew it would happen one day, but there was still surprise and sadness when our Founding Director, Professor Fiona Stanley AC, announced her intention to retire as Director at the end of 2011 after 21 years at the helm.

While Fiona has an ongoing program of research at the Institute and has agreed to take on the role of Patron, we wanted to honour and thank an inspirational leader whose intellect, passion and generosity has created such a special place to work and study.

A number of events were held to say thank you and goodbye to our Founding Director.

Staff Farewell Morning Tea

Director's morning teas have become a regular event at the Institute. It's an opportunity for staff to hear all the latest news, but for this special one, Chairman John Langoulant led the formal thank you and farewell from staff to Fiona.

The Fiona Stanley Festschrift – Symposium and Celebratory Dinner

Colleagues from around the world joined Australian and local researchers for a full day of

presentations at the UWA Club. It was followed by a dinner where Gus Nossal and Barry Jones paid tribute to Fiona's outstanding contribution throughout her research career.

The Fiona Stanley Tribute Fund – Keeping the Dream Alive

More than 500 business and political leaders attended a tribute lunch, hosted by The West Australian and Channel 7's Telethon, to raise funds to support the next generation of research leaders.

Mr Jack Bendat gave \$250,000 to establish The Bendat Family Foundation Children's Research

Scholarship. \$100,000 donations were received from Wesfarmers and Apache.

The F Party – Fiona's Final Festive Farewell

If there is one thing Fiona enjoys (and does very well) it's dressing up for the staff Christmas celebration. In 2011, the theme was an F party in tribute to our retiring director. There were many Fred Flintstones, flappers and "Fionas" in the crowd with Fiona herself pulling on the purple wig and glittery dress to make an appearance as Dame Edna.



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COVER IMAGE: Fiona Stanley at the tribute lunch.
Photo courtesy The West Australian



TRIBUTE LUNCH: THOMAS MAHER (APACHE), RICHARD GOYDER (WESFARMERS), JACK BENDAT, FIONA STANLEY AND KERRY STOKES (SEVEN WEST MEDIA)



DINNER: SIR GUSTAV NOSSAL



SYMPOSIUM: ABORIGINAL RESEARCHER SANDRA EADES



F-PARTY: DRESSING UP AS FIONA



DINNER: JONATHAN CARAPETIS, MARK CALLEJA, MOIRA CLAY & JOHN LANGOULANT



F-PARTY: FIONA GETS INTO THE SPIRIT WITH A DAME EDNA IMPERSONATION



DINNER: KEVIN CAMPBELL, DEBORAH LEHMANN, HARVEY COATES & LYN COATES



SYMPOSIUM: CEREBRAL PALSY RESEARCHER ALASTAIR MCLENNAN



TRIBUTE LUNCH: BASIL ZEMPILAS WITH JACK BENDAT



F-PARTY: INSTITUTE STAFF FAREWELL FIONA IN STYLE



DINNER: KIM HAMES, ALYSSA LOFFLER & BEN LOFFLER



DINNER: BARRY JONES



TRIBUTE LUNCH: FIONA STANLEY WITH PAUL KELLY



DINNER: CLIFTON BIENDURRY FROM NOMAD TWO WORLDS

NEW DIRECTOR
Professor Jonathan Carapetis will take the helm as Director of the Telethon Institute on Monday July 23.
We'll have a full profile in the next edition and you can find out more on our website.

Changes to sun exposure policy

For decades we've known that sunlight can cause skin cancer and we've been told to stay out of the sun or slip, slop, slap. However, the Cancer Council is now urging us to get some winter rays to boost Vitamin D levels, as we've learned only in the last few years that many Australians are Vitamin D deficient.

Guidelines for people living in Perth and southern parts of the State now recommend 30 minutes of sun exposure, close to midday, on most days during June and July. Sun should also be sought in May, August and September unless the UV index is greater than 3. No change was recommended for people living north of Perth who need to be sun safe all year.

Institute Vitamin D researcher Professor Prue Hart said the change in sun exposure policy by the Cancer Council demonstrates the ongoing need to examine where the balance lies between sun exposure, Vitamin D levels and optimal health.

"The public have been very confused about how much sun is required to prevent skin cancer initiation but to maintain sufficient Vitamin D levels," Professor Hart said.

"This change in policy will give some guidance but further research is needed in Perth to answer whether

these altered sun exposure patterns allow for sufficient vitamin D."

Sufficient Vitamin D levels are required for good health, healthy bones and optimal maintenance and vigilance of our immune systems. Humans get most of their vitamin D from sun exposure.

Professor Hart says there are many reasons why Australians may not be getting enough Vitamin D from the sun.

"This may be due to overprotection of skin and sun avoidance due to the Sun Smart campaigns," she said.

"But it could also be due to the technology/electronic revolution, where major lifestyle changes over the past few decades have seen more indoor and less outdoor hobbies and general entertainment."

A recent Institute study conducted in Perth found that in this sunny city (where our average daily sunshine is 8.8 hours a day), 41% (in summer)



Did you know?

Australians have the highest incidence of skin cancer in the world. On the flipside, a national population-based study of Australians aged 25 years and older also showed that nearly one third are vitamin D-deficient.

and 81% (in winter) of 14 year old children had Vitamin D3 levels that could be classified as insufficient.

We've also been looking at Vitamin D levels in the Raine Study, with these measures providing a snapshot of Vitamin D levels in people living in Perth. Analysis of the data has shown an association of low maternal Vitamin D levels at 18 weeks pregnancy with poor language skills of the children.

Safer drugs for pregnant mums

Congratulations to Institute researcher Lyn Colvin who recently won a National MedicineWise Award for the Best e-Health resource for the first population-based pharmacovigilance study of pregnant women in Australia.

Lyn and co-authors Linda Slack-Smith, Fiona Stanley and Carol Bower used the WA health datasets for all 123,000 pregnancies in WA from 2002-2005 and overlaid the dispenses of prescribed medicines to these women during the period of their pregnancy. They were able to see whether there was an

increased risk of birth defects in the children born to women dispensed a specific drug compared to all other children born and whether they were more likely to be born preterm or low birth weight.

The judges said the project was unique and innovative in that it focused on pregnancy, with the potential to be scaled to the whole population with many foreseeable benefits.

Lyn said the project showed that the linkage of medicine dispensing data to pregnancy events is feasible and would be a major public health

resource for the safe use of medicines in pregnancy.

"If we have the tools to prevent another thalidomide tragedy, we must use them," says Lyn.

"Our project has demonstrated that this approach to the surveillance of the safe use of medicines in pregnancy is feasible and innovative."

Well done to Lyn and the team.



National honour for infectious diseases researcher

Associate Professor Deborah Lehmann has been recognised for her research dedicated to reducing serious chest and ear infections in children, with the award of Officer in the Order of Australia (AO).

The Award was announced in the Queen's Birthday honours list on June 11.

Deborah heads the Institute's infectious diseases research, working on otitis media (middle ear infections), pneumococcal infections, the evaluation of swimming pools in remote Aboriginal communities and factors that contribute to lower respiratory tract infections.

She said the award was an acknowledgment of the team effort of colleagues in Papua New Guinea and Australia, in particular at the Institute.

"I enjoy working with a wonderful group of researchers who share the passion to make a difference in the health and wellbeing of children by doing excellent multi-disciplinary research in a friendly, supportive

environment," Deborah said.

Telethon Institute Acting Director, Professor Moira Clay, said Deborah had made an enormous contribution with her determination to understand the causes of disease and ways to prevent them, particularly for Aboriginal children.

"It is her research, evidence and advocacy that has supported the introduction of vaccines to protect against pneumococcal and Hib disease, and showed the health benefits of swimming pools in remote communities," Professor Clay said.

"These initiatives have resulted in a significant reduction in these life-threatening diseases in children, particularly for those in remote or disadvantaged areas.

"She is also a generous mentor that models the highest scientific rigour and

a great collaborator who brings together diverse groups of people for a concerted attack on a particular disease or issue."

Dr Lehmann has a medical degree and a Masters degree from the University of London. She spent 17 years in Papua New Guinea (PNG) where she headed the Pneumonia Research Program of the PNG Institute of Medical Research, undertaking studies of the epidemiology of respiratory infections and trials of pneumococcal and Hib vaccines.

In 1998, Deborah moved to the Telethon Institute where amongst many achievements, she led the Institute's Capacity Building Grant that consisted entirely of Indigenous team investigators.

Deborah is also the recipient of the Public Health Association of Australia Community Award, the Telethon Institute's Consumer and Community Participation Award and the Fiona Stanley Medal for Research.

DEBORAH LEHMANN
WITH RILEY



A good Conversation

Head of our Autism research team Associate Professor Andrew Whitehouse is now a regular columnist for online newsite [The Conversation](#). Here we share with you his recent column *“Be alert, but not alarmed.”*



Harland was born in Henryville, Indiana in 1890.

By all reports, his early life was rather miserable. His father died when he was six years old, and at that tender age, he took on the domestic jobs for his younger siblings while his mother worked. He dropped out of school by the seventh grade, and ran away from home after a series of stoushes with his new stepfather.

After short-lived careers as a farmer, and then a street car driver, he enlisted in the Army, serving 12 months in Cuba. He married soon after, but this too was shaded by heartache when his only son died at a young age. Harland moved from job to job – a steamboat driver to an insurance salesman to a railroad fireman – without finding any lasting satisfaction. The one career to which he did aspire – the law – ended abruptly after he physically fought with one of his own clients in the courtroom.

Somewhat deterred, Harland retreated to Kentucky and opened up a service station. He enjoyed the interaction with customers and would often serve them food in his own living quarters. Before long, he began creating meals that people could take with them; full Sunday lunches that could be packaged and eaten on the road.

This idea gained momentum, and before long travellers would go out of their way to taste deep fried chicken seasoned with Harland’s ‘secret recipe’. His fame grew and, in 1935, Governor Ruby Laffoon bestowed upon him the highest civilian honour that could be awarded a Kentuckian: the Colonel of Kentucky.

But, alas, misfortune was to strike again, when the diversion of the Interstate 75 led to a significant drop in customers, and eventually the failure of his business.

Ever one to get back on the horse, Harland took his first social security check of \$105 and approached local restaurateurs in the hope of convincing them to pay him for the use of his secret recipe. The ‘franchise’ approach worked, with an ever-growing number of

restaurants handing over a small fee for every piece of chicken coated in the 11 secret herbs and spices.

The year was 1955, and Colonel Harland Sanders had just created Kentucky Fried Chicken. He was 65 years old.

Late bloomers

Late bloomers have received a lot of press lately. Malcolm Gladwell, in particular, has written extensively on this subject, noting the fallacy of linking precocity with talent. My brother and I have also edited a book, which explored the very different ways people find their niche in life.

For every Picasso – a child prodigy who held his first solo exhibition in Paris at the age of 19 – there are equal numbers of Paul Cézannes (failed the entrance exam into the Ecole des Beux-Arts), Robert Frosts (spent seven years running a one-man chicken farm before having a poem published), and Bram Stokers (didn’t start scribbling about a certain blood sucking Count until his late 40s).

Late-blooming among adults has a certain romance to it. Who wouldn’t like to think that they have a hidden artistic genius that would gobsmack the Parisian bourgeois, if only they didn’t have to go to work, cook dinner, and take the bins out on Monday night?

But the late blooming among children evokes very different emotions – fear, being the main one.

Meeting milestones

It’s not uncommon for parents to have intimate knowledge of developmental milestones, and watch their beautiful new child like a hawk for any sign that they may be delayed. Even the most easy-going of parents can develop a finely-honed peripheral vision for these milestones.

And who can blame them? Parents are bombarded with ‘shoulds’. “Your child should be smiling at 8 – 10 weeks. Your child should be crawling by 8 – 10 months.” To an already anxious, sleep-deprived brain, this must be pure torture!

I’m certainly not advising that parents

ignore developmental milestones – far from it. These are extremely important. Parents are the biggest weapon in identifying delayed development, not least because they know their child’s coos, waddles and bowel movements better than they know their own.

But, here’s the rub: developmental guidelines are just that – guidelines. The child who hits each and every milestone on the knocker is the exception, not the rule.

Again, I write this not to downplay the importance of a parent playing an active role in monitoring their child’s development. If there are any concerns about a child, then it is very wise to consult a health professional. Speech Pathologists are experts in language and social development, Psychologists are experts in cognitive and behavioural development, and Occupational Therapists and Physiotherapists are experts in motor development.

But, I do believe that parents can take some of the pressure off themselves. Child development is variable. Not every healthy and happy child hits milestones at the same time.

By far the best thing that parents can do is create a rich learning environment for their child. This means getting down on the floor and playing with the child, talking with them, reading to them, interacting with them at their level. As a general rule, I find that the more you make a fool of yourself, the better!

Harland Sanders took a circuitous route to creating an empire (and a particularly delicious form of saturated fat!). While child development follows a less convoluted path, there are still considerable differences between children.

To borrow a phrase from the Australian Government (circa 2001), my advice is to be alert, but not alarmed.

From Placenta to Play Centre

Read more of Andrew’s columns at theconversation.edu.au

Climbing for cancer research

On July 8, our Acting Director Professor Moira Clay will swap her suit and heels for a full climbing kit complete with crampons as she begins a journey of a lifetime.

Moira is joining Rick Parish's Telethon Adventurers for the Chamonix Challenge, climbing Gran Paradiso, the highest mountain in Italy.

But the challenge doesn't end there. Not only will the group climb a mountain to raise money for children's cancer research, they will also be tandem paragliding from the Aiguilles du Midi, canyoning, mountain biking, rock climbing and rafting.

Moira says her goal in life is quite simple – to make a difference.

"As a medical researcher, I've been privileged to witness many advances in health from research, but there are still children dying because we still don't have the answers," says Moira.

"Participating in the Chamonix Challenge will test my mental strength and every bone and muscle in my body but I am ready and determined to do this for all children.

"Together, we will win the war on childhood cancer."

Moira is aiming to raise at least \$20,000 for the Chamonix Challenge. If you would like to support her, you can donate at:

www.theadventurers.com.au - choose Moira in the list of "Our Adventurers"



PROFESSOR MOIRA CLAY

Are you up for the challenge?

Support the Telethon Institute by joining the Telethon Adventurers on one of their amazing ventures or attend their functions this year.

The Telethon Adventurers are all volunteers who are aiming to raise \$2 million this year to fund their war on childhood cancer.

DAVID BROMLEY ART EXHIBITION - June and July

Murano and Gullotti Art Gallery is staging a major exhibition of renowned Australian artist David Bromley at Claremont Quarter June 14 - July 14. Visit this amazing exhibition, and you will have the opportunity to buy two exclusive pieces to be auctioned specifically for the Telethon Adventurers.

TOUR FOR A CURE RIDE USA - August

Harley Davidson and Mustang tour of the American Wild West. See the west coast of USA on a fully guided tour that starts and ends in LA.

JUMP FOR A CURE - October

Skydive in Western Australia. Feel the exhilarating rush of jumping out of a plane at 10,000 feet while raising money to help fund the war on Childhood Cancer

TOUR DE GRACETOWN - November

On 10 November riders face the challenge of cycling through some of the most spectacular scenery the south west has to offer.

Funds raised support the Telethon Institute's Brain Tumour Research Group as they strive to find the cause of childhood brain tumours and effective treatments.



Give Back - Get Involved

Go to www.theadventurers.com.au
Call Rick Parish on 0417 916 368
or email rick.p Parish@beyondfear.tv
Together we will find a cure

A clear message

No alcohol in pregnancy is the safest option. Three years after the launch of new guidelines to reduce the health risks from drinking alcohol, there are calls for urgent action to spread the message.

In March this year, the Telethon Institute was part of a Forum hosted by the Foundation for Alcohol Research and Education (FARE) on the role of the National Health and Medical Research Council Australian Guidelines to Reduce Health Risks from Drinking Alcohol.

The Forum was attended by a range of public health and government representatives and academics including the Institute's Professor Carol Bower.

The Forum attendees developed a Communique calling on immediate action by the government to raise awareness of the Guidelines through public education campaigns and mandatory alcohol warning labels on all alcohol products sold in Australia.

National guidelines needed for FASD diagnosis

New research from the Institute's Alcohol and Pregnancy Research Group has found that health professionals support the development of Australian guidelines to assist with diagnosing Fetal Alcohol Spectrum Disorders (FASD).

Lead author Dr Rochelle Watkins says while there are five different international guidelines, there was little evidence or confidence about the effectiveness of these being applied in the Australian context.

The existing guidelines were perceived to be limited by their lack of evidence base and appropriateness for the Australian population, their complexity, the need for training and support to use the guidelines and the lack of an

Did you know?

Every week, on average, 60 Australians die and a further 1,500 are hospitalised as a result of alcohol.

Source: NDRI, 2009

interdisciplinary and interagency model to support service delivery in Australia.

The research is published in the latest online edition of *BMC Pediatrics*.

Using these research findings, the Institute group is part of a National collaboration to develop a national approach to the diagnosis of FASD in Australia.

The Alcohol and Pregnancy Research Group at the Institute is committed to reducing the harm caused by alcohol consumption on families, particularly on unborn babies.

The group has funding from FARE for two key projects. One is looking at the professional knowledge, attitudes and practice in relation to FASD in the criminal justice system in Western Australia, while a second project is evaluating FASD resources for foster carers

It is also working with other agencies and stakeholders to research heavy maternal alcohol consumption and the increased risk of disabilities and still birth as well as recording a history of alcohol use in pregnancy

The Telethon Institute supports the Western Australian Drug and Alcohol Office 'No Alcohol in Pregnancy is the Safest Choice Campaign.'

Institute researchers are also contributing to the implementation of the WA Department of Health Model of Care for FASD.

You can find out more at

alcoholpregnancy.childhealthresearch.org.au



PROFESSOR CAROL BOWER HEADS OUR RESEARCH INTO ALCOHOL IN PREGNANCY

Our 2011 Annual Report is now available. Featuring infectious diseases researcher Dr Deborah Lehmann with Riley on the cover, it includes the Institute's highlights for 2011.

You can view it on our website as a flipbook and also download a pdf.

www.childhealthresearch.org.au

If you would like us to post you a printed copy, please contact us on 08 9489 7779 or email pr@ichr.uwa.edu.au



Vaccinating before birth?

If a pregnant mum has a 'flu vaccine does it give her baby more protection?

We need your help to find out.

There are now some studies from overseas that suggest 'flu vaccine in pregnancy may also help protect young babies from getting the 'flu in the first 6 months of life.

In Australia, influenza vaccination in pregnancy is recommended for women who will be in their second or third trimester during the influenza season.

FluMum is a national study to find out whether babies of mothers who had an influenza vaccine while they were pregnant are less likely to get influenza than the babies of mothers who didn't get the 'flu vaccine while they were pregnant.

If you have had a baby in the last eight weeks or are having one during the next four months, we'd love to hear from you.

There are no blood tests or procedures; you can answer our questions over the phone.

To find our more:

Visit the Vaccine Trials Group website - vaccine.childhealthresearch.org.au

Phone the Vaccine Trials Group on 9340 8542

Email flumum@ichr.uwa.edu.au



New vaccine shows promise

Researchers are an important step closer to finding a vaccine that protects against a wide range of strains of Meningococcal B, which accounts for more than 90 per cent of meningococcal cases in Western Australia.

New research published Online First in *The Lancet Infectious Diseases* showed the trials of the potential vaccine had found it to be safe and that it stimulated an effective immune response.

Report author, Associate Professor Peter Richmond who heads the Vaccine Trials Group, said the development of a vaccine to protect against multiple strains of meningococcal B is particularly important in Western Australia.

"For WA and many regions of Europe and North America, this particular type of meningococcal disease is

most prevalent," Dr Richmond said.

"While children in Australia are routinely vaccinated against meningococcal C, there has been no vaccine available to protect against meningococcal B which is the most common cause of the disease in WA and in countries where Australians widely travel."

The trial data showed that the potential vaccine produced protective antibodies against 90% of the invasive meningococcus serogroup B strains tested.

This phase 2 trial enrolled 539 healthy adolescents from 25 sites across Australia, Poland, and Spain to test the safety and immune response of the vaccine.

Meningococcal B can cause meningitis and blood poisoning and can progress very quickly with devastating effects.



DR PETER RICHMOND

Children between the ages of one month and one year are most at risk from meningococcal disease with a second peak in adolescents.

"This is the last major cause of meningococcal meningitis for which we don't have a vaccine so we are very excited about the progress towards developing a safe and effective vaccine," said Dr Richmond.

The next stage of development would involve bigger trials in a wider range of age groups.

Celebrating decades of cancer research support

Thirty-five years ago, a little Perth girl was diagnosed with leukaemia. Her name was Jennifer Harper and she was nine years old. When her father Peter discovered that there was no research into children's leukaemia in WA, he set out to raise funds for this purpose.

Together with other parents of children with cancer, and with the support of Princess Margaret Hospital for Children, the Children's Leukaemia and Cancer Research Foundation (CLCRF) was formed. Jennifer inspired the creation of the Foundation, but she did not win her fight against leukaemia. She died in 1978.



In 1983, the Children's Leukaemia & Cancer Research Laboratory was established on the children's hospital (PMH) campus and in 1984, Swiss-born scientist Dr Ursula Kees was recruited from the German Cancer Institute to head up the research laboratory.

When the Telethon Institute for Child Health Research was established in 1990, Dr Kees was appointed to head the Institute's cancer research team and the CLCRF's Laboratory was relocated to the Institute.

Today, the CLCRF continues to generously fund seven of the 20 childhood cancer researchers at the Telethon Institute.

Foundation Chairman Geoff Cattach has been involved since the beginning. It was his own son

being diagnosed with leukaemia just before his third birthday that sparked his commitment to the Foundation.

"This was the impetus to get involved and over time, and being a little old fashioned, I vowed to see it through to a position where it would not falter and the research work would continue into the future," says Geoff.

Geoff's dream for the Foundation is to find a foolproof cure for all children's cancers.

Establishing the lab has helped to build a world-class cancer team in Perth, not only in research but clinical care too.

"Our researchers provided the scientific backup that encouraged Dr Michael Willoughby to come to Perth (from the UK) to head up the

Oncology Department at PMH," explains Geoff.

"And the research team was instrumental in the establishment of the bone marrow transplant program and treatment protocols at PMH - equal to anything in the world."

Geoff says the Foundation's greatest achievement has been the establishment of the laboratory and being able to raise funds to provide security of tenure for the scientists over the last 30 years.

He says moving the laboratory from the hospital campus to the

Institute has been a highlight for the Foundation, which celebrated 30 years of support in 2010.

"The collaboration between our two organisations has been wonderful over many years and we hope that this will continue in the future," says Geoff.

"We are here for the benefit of our children, not only here in WA but around the world."

Professor Ursula Kees, head of the CLCRF cancer research team at the Telethon Institute, said the Foundation has made a vital contribution to finding the answers to the major questions which still challenge childhood cancer doctors and researchers.

She congratulated the Foundation for raising more than \$19.8M during the past 30 years for childhood cancer research.

Professor Kees said that as a result of the extraordinary fundraising efforts of the Foundation, her team had always been able to use the latest technology.

"In 1983, I made a list of equipment for the laboratory," Professor Kees explains.

"One of the most expensive items on my list was a liquid nitrogen tank. Back then, no-one at the hospital or in research labs in WA used such tanks. That very tank was in operation for more than 20 years, a very good investment. Now the Institute has four such tanks."



FOUNDER OF THE CHILDREN'S LEUKAEMIA AND CANCER RESEARCH FOUNDATION PETER HARPER (RIGHT) WITH CHAIRMAN GEOFF CATTACH.

Contained within that liquid nitrogen is Western Australia's first Cancer Tissue Bank, which was developed at least ten years before any other was started for research in adult cancers. It contains several thousand tumour and leukaemia specimens from patients diagnosed at PMH. This outstanding collection of specimens is still used constantly today and forms an important part of our research.

In 1984, Professor Kees' team started using another new technology - growing cancer cells in the lab.

"Because most patient specimens are very small, they do not provide enough material for our research," says Professor Kees.

"So we developed a method to keep the tumour cells alive in the laboratory so we could expand the cell numbers.

"We have established what is probably the largest collection of such cell lines, from over 50 childhood cancer patients. These cell lines are a great asset for our studies, particularly to investigate resistance to the best cancer drugs."

Today, the team is known internationally for their ability to grow cancer cells in the lab and the cell lines are in great demand by researchers around the globe.

Professor Kees says that the Foundation's funding has also enabled researchers to work more closely with the doctors, nurses and pharmacists in PMH's Ward 3B.

Working together, researchers and clinicians can select the best possible therapy for each patient, based on their knowledge of the individual patient's disease.

Following the sequencing of the Human Genome in 2000, new technologies became available which allow us to test 20,000 genes at the same time. These 'array technologies' are expensive, more than \$2,000 per test, but we've been able to test our cell lines stored in liquid nitrogen as well as many patient samples.

Today, we are using what is called Next Generation Sequencing which generates information of unprecedented quality and provides detail on all 3 billion base pairs of genes. This research allows us to identify the changes that lead to cancer or leukaemia, and to therapy resistance.

While the cure rate for children with leukaemia or cancer has increased



CHAIRMAN OF CLCRF, GEOFF CATTACH AM, PRESENTS THE 2011 CLCRF FELLOWSHIP TO THE INSTITUTE'S LEUKAEMIA RESEARCHER, DR ALEX BEESLEY.

steadily over the past 50 years, and today is approximately 70%, drug resistance is still an important problem.

However, with the support of the Children's Leukaemia & Cancer Research Foundation, we can continue our current research of testing new approaches to overcome drug resistance and find better therapies for children with cancer.

THANK YOU to the Foundation for your continued support of our cancer research. You really are helping to make a difference to the lives of those children, and their families, living with cancer.

According to the WA Cancer Registry, in 2008 there were 60 children under the age of 15 years diagnosed with cancer and other cancer-related conditions. Cancer at this age is a rare disease and annual variation in numbers and types is considerable. Leukaemias and lymphomas were most common.



PROFESSOR URSULA KEES WITH KURTIS AND HIS DAD ANDREW. KURTIS PASSED IN FEBRUARY 2001.

OUR SUPPORTERS

Ride for autism

It's just over 400 kilometres down the Great Southern Highway from York to Albany. The challenge for Team Kinetika - Edwin Botha, Will Graham and Myk Lozyk - was to tackle the road on their bikes, and they started in complete darkness.

Leaving York at midnight on May 31, the cyclists headed south to raise money for autism research at the Telethon Institute. They cycled through the night and for most of the day, arriving in Albany after 17 hours on their bikes.

Their mammoth effort has so far raised \$2,690 to help Associate Professor Andrew Whitehouse establish an Autism Clinical Trial (ACT) unit at the Institute.

Associate Professor Whitehouse said he was humbled at the achievement of Edwin, Will and Myk.

"Not only have they pushed their bodies to the limits, but they have done this in the hope of bettering the lives of families struggling with autism," he said.

"Their contributions make a huge difference to our exciting research program. I can't wait for next year's event!"

If you would like to support Team Kinetika's fundraising efforts, go to

www.everydayhero.com.au/team_kinetika



WILL GRAHAM, ANDREW WHITEHOUSE AND EDWIN BOTHA
PHOTO COURTESY OF THE COMMUNITY NEWSPAPER GROUP

CHILD DEVELOPMENT AND WELLBEING

Learning more about Australia's children

In May, Minister for Early Childhood and School Education Peter Garrett launched the second data collection for the Australian Early Development Index (AEDI).

More than 7500 government and non-government schools across Australia will start taking part in the world's most comprehensive collection of information about the development of Australia's children.

"Australia is the first country in the world to have collected comprehensive and population based data on young children across the entire nation," Mr Garrett said.

"The second national AEDI data collection is ground breaking because, for the first time, governments and communities will be able to track progress in their work to improve the health, education, social competence and emotional development of children across Australia."

The AEDI measures five key areas of young children's development: physical health and wellbeing, social competence, emotional maturity, language and cognitive skills, and communication skills and general knowledge.

For more information on the AEDI go to www.aedi.org.au

The Telethon Institute is a partner in the AEDI project.

