

Perth Children's Hospital **Foundation**

From little things, big things grow.

Annual Review 2021/2022



Acknowledgement of Country

Perth Children's Hospital Foundation acknowledges the traditional custodians of the land, the Whadjuk Noongar people and the Aboriginal people of the many traditional lands and language groups of Western Australia. We acknowledge the wisdom of Aboriginal Elders both past and present, and pay respect to them and Aboriginal communities of today.

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A message from the Foundation.



Making a difference to the lives of sick children is the driving force behind Perth Children's Hospital Foundation. We are truly passionate about helping sick children get well and stay well.

The Hon. Ian Campbell

Chairman





Carrick Robinson

Chief Executive Officer As we reflect on the year, we're celebrating some iconic projects which are continuing to raise the bar on children's healthcare. Projects like the much-needed Children's Hospice, providing a home away from home for children with a life-limiting illness; the world's first rare diseases centre focusing on the whole life journey; the ground-breaking research paving the way for Australia's first clinical exercise service for children living with chronic diseases; and the exciting upcoming Greenspace project, bringing sick children and their families closer to the healing power of nature.

All these projects, and many more, are only ossible thanks to our generous donors, large of small. From the humble beginnings of this amazing support, we are immensely proud to watch big things grow.

With your help we are funding world-class expertise, the most advanced technology and equipment, ground-breaking research, innovative education and training programs and positive patient and family experiences.

In the following pages we celebrate **From Little Things, Big Things Grow.**

We invite you to come on a journey with us as we detail the incredible power and impact of donor contributions, from the Australian and world-first projects to the caring clinicians and children who have received lifechanging care. Despite Covid-19 and inflationary economic pressures over the past year, the Foundation has provided grants to the value of \$6.95 million. Thanks to the generosity of our donors, we are now ranked WA's fourth largest philanthropic Foundation in terms of funds distributed.

We are deeply grateful for this unwavering support and look forward to continuing the journey on the frontline to help children get well and stay well.

A heartfelt thank you to all our donor supporters.



About us.

Perth Children's Hospital Foundation proudly fuels the fight on the frontline of children's health care, helping sick children get well and stay well.

By working closely with those on the frontline, the Foundation has an in-depth understanding of what clinicians, researchers and families need to ensure we make a tangible impact where it counts most.

We are the official and largest funder of Perth Children's Hospital (PCH) and the wider Child and Adolescent Health Service (CAHS) after Government and are now the 4th largest philanthropic foundation in WA.

Thanks to the wonderful generosity of our donors our total support over the past 26 years has been more than \$98.9 million, with a further \$20.9 million committed over the next five years. In FY 2021-22 we had another successful year, funding \$6.95 million in grants, the 3rd highest in our history.

With the help of our generous partners, our efforts enable PCH and CAHS to provide WA's sick children and young people with access to world-class care that comes from:

[4-/	\$1,041,927	The most advanced equipment and technology
	\$972,722	Ground-breaking research
	\$777,028	Innovative education and training programs
	\$3,667,863	The expertise of highly trained clinicians from Australia and around the world
	\$487,165	Positive patient and family experiences

Financial summary.

The Foundation recorded another strong financial result in FY 21/22, providing \$6.95 million in grants to Perth Children's Hospital and the wider Child and Adolescent Health Service.

All costs are closely monitored to ensure they are controlled as much as possible without compromising the Foundations ability to deliver maximum support.

We pride ourselves on ensuring that all funds generously donated are spent wisely to make a real and positive impact on child healthcare. To achieve this we employ a rigorous peer review process to vet all requests for funding.

The first level of application review is by the Executive Committee of the relevant health service – Perth Children's Hospital, the Child and Adolescent Community Health Service, or the Child and Adolescent Mental Health Service. If they believe the project is compliant and meets the Foundation's funding guidelines and CAHS priorities, the application is then reviewed and assessed by the PCHF Executive team. If considered eligible, the submission is then prepared for review by the Foundation Grants Sub-Committee. Finally, a request for funding over \$20,000 requires the approval of the full Perth Children's Hospital Foundation Board.

In addition to establishing that each application provides a strong case outlining how it will improve health outcomes for children, the Foundation ensures that we are not being asked to fund something that the community would reasonably expect is the responsibility of Government, such as the routine replacement of equipment. The Foundation's focus is on funding world-class expertise and training, ground-breaking research, cutting-edge equipment and technology, and positive patient experiences that the Child and Adolescent Health Service would otherwise not be able to access.

We trust that our stewardship of the funding you provide meets your highest expectations, and gives you the confidence to continue your support.

\$6.95m GRANT FUNDING, OUR 3RD HIGHEST EVER

\$38.5m Total assets

11.7% Fundraising revenue growth



Our impact on the frontline.

Changing lives through the most advanced equipment and technology.

Funding the future through ground breaking research.

300



54

children have been more efficiently monitored by new respiratory equipment while recovering from surgery, improving safety and ensuring complications are quickly identified



30

newborns requiring critical treatment have been safely transferred to the Neonatal Intensive Care Unit (NICU) thanks to four giraffe warmers with inbuilt resuscitation equipment



50

children have been safely discharged home without delay due to the purchase of 10 home ventilators

100

children with type 1 diabetes including four under 18 months of age are sleeping through the night because of insulin pumps we have funded





(approx.) children per week use Virtual Reality goggles as a distraction and calming tool during painful procedures in the Emergency Department.

(in the second s

6

children needing neurovascular surgery have avoided travelling to the eastern states and have had their treatment at home following the funding of equipment that significantly enhances visualisation of brain vessels requiring bypass or excision



237

and quality of life.

refugee children have received dental care as part of a trial, resulting in a reduction of oralhealth related hospitalisations and emergency tooth extractions in refugee children

(approx.) children with cerebral

palsy are benefiting from research

evidence that targeted movement

reduces pain and improves sleep

135

young patients are participating in an international study comparing the effect of two forms of anaesthesia on brain development in children younger than 2 years of age



114

children recruited at PCH for a cardiac study, the largest international study ever undertaken in paediatric critical care

Funding clinicians through innovative education and training programs.

Funding worldclass expertise closer to home.

100s

of kids diagnosed

with acute leukemia in

the coming years will

benefit from ground-

breaking research on

leukaemia patterns in

Aboriginal children, the

vancomycin for a deadly

early insertion of central

of blood clots in the veins

lines and increased risk

Aboriginal and non-

use of the antibiotic

bacterial infection and examination of a possible link between



Funding positive patient and family experiences.



refugee children and their families from Afghanistan, Eritrea and Syria received culturally appropriate nutrition education, empowering them to make healthy food choices to reduce the risk of chronic disease in adolescence and adulthood



A smart phone app we funded now supports social connection and wellbeing in young people with cystic fibrosis

month wait times for children with urgent cases of eczema

3 years now 1

healthcare workers

received simulation training to improve their clinical

and communications skills

urgent cases of eczema due to training and support for GPs, nurses and pharmacists and parent education

And looking to the future...



additional children will be monitored by more effective respiratory monitors after surgery by the end of 2022



of parents will benefit from research on the issues faced by parents caring for a child with chronic illness, including stress and support needs



(approx.) children who come to the hospital each year will be able to get closer to nature and its healing benefits with the upgrade of the Greenspace area at the base of the Kids' Bridge

Helping heal with Greenspace nature.

Perth Children's Hospital Foundation is proud to partner with Rio Tinto, to deliver a \$4m upgrade to the QEII Medical Centre Greenspace.

Located at the base of the new Kids' Bridge and next door to Perth Children's Hospital, the upgraded Greenspace will allow patients, families and staff to escape the pressures of hospital and enjoy respite through the benefits of being closer to nature.

Sitting on Noongar land, the redevelopment will incorporate traditional and contemporary cultural themes and dreamtime stories, creating a rich, immersive natural environment. The new design has been guided by Aboriginal cultural advisors to incorporate traditional and contemporary cultural themes and pay respects to the history and stories of the traditional owners.

Noongar Cultural Partners Barry McGuire and Carol Inness said the Greenspace will be a place for young people and their loved ones to spend time together and make cherished memories whilst enduring the challenges of a diagnosis.

"It is hoped the design will inspire connections to Country and to each other, and facilitate opportunities for play, respite, learning and discovery."

In its present state, the Greenspace is a grassed area with no seating, shade entertainment or educational benefits. The new Greenspace will be split into four zones appreciative of Aboriginal culture and the local habitat.

The Aboriginal themes and storylines woven through the design include a discovery path called Koodjal Noorn (two snakes), shelter pods honoring the six Noongar seasons, playground cubbies referencing Noongar mia-mias, an interactive playwall incorporating tactile animal and plant totems and a climbing net depicting the web of the trapdoor spider, a unique Aboriginal story connected to King's Park.



Perth Children's Hospital Foundation Chairman Hon. Ian Campbell said Perth Children's Hospital Foundation was proud to be funding the creation of this unique space.

"We know that the power of nature in healing is enormous for children and adults alike. A range of therapies in natural settings have been shown to contribute strongly to the wellbeing of the sick and assist in recovery rates," he said.

Chief Executive Simon Trott of mining giant Rio Tinto said they were delighted to be partnering with Perth Children's Hospital Foundation to build a world-class nature space.

"We are very proud to contribute to fantastic projects like this to support healthy, thriving and resilient communities across Western Australia. This inclusive and accessible playspace embraces local Noongar culture and aims to improve wellbeing by connecting patients, families and staff to nature."

It is expected the Greenspace will be finished by mid 2023.

"Bringing patients and staff closer to nature will positively impact the wellbeing of sick children, their families and staff at the QEII Medical Campus and we are immensely grateful for generous funding from Rio Tinto and support from BGIS and Hassell Studio which has made this landmark project possible."

Hon. Ian Campbell PCHF Chairman



World-first rare diseases care.

Rare diseases are not as rare as you think. In WA, 63,000 children live with a rare disease which places an immeasurable burden on families.

The journey can be long, lonely and stressful. Some children wait years for a diagnosis – the average is five – and 50% are misdiagnosed often more than once.

Offering new hope for these children and families is the Rare Care Centre, set to open at Perth Children's Hospital.

The world-first centre will be funded through Perth Children's Hospital Foundation, via a significant contribution by its principal partner Mineral Resources Limited via the Channel 7 Telethon Trust, in partnership with a WA based philanthropy consortium comprising the Angela Wright Bennett Foundation, the McCusker Charitable Foundation via the Channel 7 Telethon Trust and the Stan Perron Charitable Foundation.

For children like 12-year-old Andie, the Centre will be life-changing. For most of her life Andie's family didn't know why the left side of her body was larger than her right and why she had facial and dental abnormalities, along with vision and hearing impairment.

Test after test failed to shed any light and at one point, her compassionate and goodhumoured doctors declared the condition 'Andie Syndrome'! But the doctors never gave up, and finally the breakthrough diagnosis of RHOA related mosaic ectodermal dysplasia came shortly before Andie turned 11 years old.

Her mum, Maja, said it was a relief to finally have a diagnosis, "it was kind of unbelievable because we tried so many times." The Centre aims to improve the lives of children and young people with a rare disease and their families by providing a holistic and globally connected model of care. It will link national and international specialists and help transform the life journey through early identification and diagnosis, better support and improved care coordination. It will provide better access to community resources, clinical trials and research.

"Research is so important and it's moving quickly, to have the money and financial support going into research means they might not have to wait 10 years for a diagnosis like Andie did."

Aboriginal health and mental health will be an important focus of the Centre, connecting children and their families with a wider range of services such as education and disability services. The Centre will work with worldleading rare diseases experts, including the World Health Organisation Global Network for Rare Diseases.



"Although they are called 'rare', collectively the impact of rare diseases is massive. This is an area of such severe and large unmet need, rare and undiagnosed diseases are like a hidden, global epidemic."

Dr Gareth Baynam Clinical Geneticist and Centre Medical Director Perth Children's Hospital

Stan Perron Centre of Excellence for Childhood Burns.

In an instant, burns can change the course of a child's life. Survivors face long hours in hospital, often for years to come, and potentially lifelong physical and mental health challenges.

Burns are a leading cause of injury and a common reason for visits to the PCH Emergency Department, especially in children aged 0-4 years. Treatment is complex, time-consuming and very painful. Sore, itchy scars can lead to secondary problems with growth and development.

"In burn care we have a real understanding that every intervention from the point of injury will influence the scar worn for life, inside and out, so it is essential research is supported every step of the way," explained world renowned burns specialist Professor Fiona Wood, AM. Incredible donor support for Perth Children's Hospital Foundation led to the establishment of the Stan Perron Centre of Excellence for Childhood Burns in 2019. Headed by Professor Wood, the Centre is a world-leader in clinical excellence, research, education and community engagement.

With generous donor support, the Centre brings together the best researchers and clinicians dedicated to reducing the terrible toll of burn injuries.

Ground-breaking research is helping clinicians understand how burns impact long-term health, both physical and mental, so that they can improve the life trajectory of these children and their families. Researchers are examining the impact of burns on the immune system, motor skills, the link between burns and cancer and the impact on the brain.

Burns also cause psychological distress and early intervention research is paving the way for education programs empowering patients to adapt to their injuries and new appearance. The goal is to prevent social



withdrawal and problems with school, work and the patient's outlook on life. This holistic approach to burn care has been shown to improve recovery from burn trauma.

The Centre is also working on revolutionary technology to help improve and speed up recovery. This includes a cutting-edge 3D printer to be used in surgery to deliver cells and promote the healing of burns.

Through ongoing generous support of Perth Children's Hospital Foundation, WA continues to be a world leader in burns care with ground-breaking treatments and interventions making a challenging journey a little bit easier and reducing the lifelong impact of burn scarring and trauma.

(over past year)



553 burns admissions



Burns Research



221 patients recruited for the long-term



110

261

PCH burn patient samples analysed for immune system changes



patients' samples are in the burns Biobank for research

The Family Elena and Shannan

World-leading treatment improving young lives.

Happy-go-lucky Elena was just 15 months of age when she climbed into a bathroom sink and turned on the hot water, scalding herself.

The third-degree burns she received to more than 20% of her little body were the worst doctors in the Perth Children's Hospital burns centre had seen in 30 years.

Teams of clinicians specialising in burns, plastic surgery, pain, diet, physio and occupational therapy have been instrumental in Elena's recovery. She initially spent two months in hospital and was readmitted three times for skin grafting and laser procedures and a viral infection.

One of the biggest risks burns patients face is infection due to the extra load on their immune system. Now almost 2, Elena has to wear a special compression garment every day and, for the next few years, can no longer go to playgrounds, to the shops or daycare due to the infection risk. She is on multiple medications and has to stay out of the sun, meaning no trips to the beach or swimming pools like other kids her age. As she grows, her scars will tighten and contract, and she will require frequent procedures to essentially stretch her skin.

While Elena faces a lifetime of burns care, the worldleading treatment she received at Perth Children's Hospital means family life is starting to settle into a new normal. Mum Shannan, who was 24 weeks pregnant with her fourth child when their life as they knew it was upended, said it is hard to believe what her courageous little girl has gone through.



"We couldn't have gotten through any of this without them, the treatment has been amazing, and they cared for Elena like a VIP.

You have no idea how much goes into treating a burn and donations are crucial so there is more research, there is more treatment, there are more trials to see what else we can do to help these poor children."

Shannan, Elena's mum

Keeping our mob healthy.

A genuine interest and willingness by PCH staff to improve care for Aboriginal children has seen a range of health care teams come together to create an alternative series of culturally appropriate Health Fact sheets.

To support this effort, Perth Children's Hospital Foundation contributed to funding the Keeping Our Mob Healthy project, designed to improve communication with, and the health outcomes of, Aboriginal children and their families.

The project was led through collaboration of the PCH Social Work team and CAHS Communications. Over a 12-month period the project team worked with health care teams – including Burns, Orthopaedics, Ear Nose and Throat (ENT), Ophthalmology, Emergency Department, General Medicine, Respiratory, Pharmacy, Surgical, Physiotherapy, Occupational Therapy, Plastic Surgery, Palliative Care, Oncology, Cardiology, Endocrinology, Immunology, Dermatology, Dental and Orthotics – to rewrite 130 Health Fact sheets along with creative inspiration from graphic artist Tyrown Waigana who created the illustrations.

The illustrations now form a library which can be drawn upon for future PCH health information resources. The Keeping Our Mob Healthy sheets are available on the Perth Children's Hospital intranet and internet alongside the original health fact sheets.



Consumer feedback and consultation was key to the project and was sought by speaking with a selection of inpatients and their families, Aboriginal Medical Service, the Aboriginal Health Council WA and Aboriginal health workers in the Northam region.

The new culturally appropriate resources will provide an alternative option for family members to understand their child's medical condition, the treatment involved and to improve health outcomes for Aboriginal children across Western Australia.

Simulating real life to improve patient care.

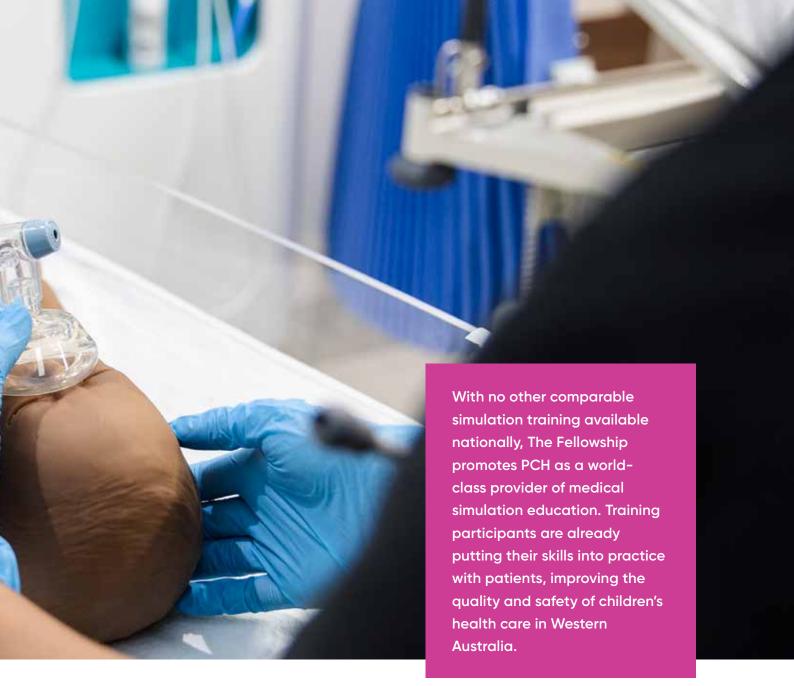
Patient safety is a top priority for clinicians at PCH.

Simulation education helps to improve patient care by training clinicians in high-risk medical events in a low risk, safe environment. Doctors and nurses practice skills and gain hands-on experience in emergency scenarios that don't occur often. Then, when faced with the situation in real life, they have the skills and experience to achieve the best outcome for their patients.

Until recently, very few clinicians in WA Health's Child and Adolescent Health Service (CAHS) were trained in this niche area. The Paediatric Simulation and Clinical Research Education Fellowship at Perth Children's Hospital, funded by the generous support of MACA, is the first simulation fellowship in Perth with a paediatric focus. The program provides advanced-level training in designing, leading and debriefing paediatric simulation education and leadership expertise, with the benefits flowing to the children and families of Western Australia. The appointed Simulation Fellowship at PCH's state-of-the-art simulation suite works with the team to create realistic emergency situations and procedural processes allowing practitioners to improve their skills in high-risk clinical scenarios.

The Fellow helps create and facilitate simulation scenarios for junior medical and nursing staff in General Paediatrics, Paediatric & Neonatal Intensive Care and Post Anaesthetic Care.

The Fellow has taken part in weekly simulation training activities both in the Simulation Suites and in the various wards



and departments. Over the course of the year, the sessions have increased along with staff engagement. Although much training and education was cancelled due to the pandemic, such is the impact and importance of Simulation Based Education that a total of 2320 healthcare workers participated in 311 sessions which has helped improve their clinical and communication skills. The anecdotal feedback and evaluations of sessions tells us that participants of immersive simulation-based education are putting the skills, knowledge and practices they learnt in the simulation training to use in clinical settings.

The Fellow has developed an infographic for the weekly out-of-hours STARs sessions. These reinforce the causes, management and care of a child or adolescent with the sessions' condition and have been extremely well received. For healthcare professionals working at PCH, the 2022 Fellow is designing and developing a course aimed at de-escalation skills with a focus on children and adolescents. The pilot for this course is scheduled for late 2022. As clinicians face a growing number of children and adolescents exhibiting challenging behaviour, this course is already oversubscribed.

The Fellow has been one of the leads in the scenario design workshop and the embedded simulation personal workshop. The Fellow has also undertaken further simulation education and gained extensive experience in debriefing skills.



Leading the charge against childhood cancer.

Great inroads have been made in children's cancer treatment in recent decades. Around 80 to 85% of children now survive this devastating disease, however, they may be left with toxic side effects.

Sadly, not all children will make it. Brain cancer is the biggest killer of children and although survival rates have improved, they lag other common childhood cancers.

Generous support from the Stan Perron Charitable Foundation is making a significant difference through exceptional cancer care and pioneering research.

Renowned cancer specialist, Professor Nick Gottardo, was appointed to the Stan Perron Chair of Paediatric Haematology and Oncology in 2018 and is at the forefront of developing more effective treatments for braincancer.

Highly regarded by clinicians across Australia and worldwide, Professor Gottardo and his team are on a mission to reduce the suffering of children and their families. They are focused on developing new cancer therapies with fewer debilitating side effects.

Since his appointment, Professor Gottardo and his team have developed a state-ofthe-art pre-clinical research pipeline with a dedicated brain tumour laboratory to assess novel anti-cancer drugs in combination with traditional chemotherapies, as well as radiation therapy.

WA children now have access to cuttingedge cancer therapies, some of which are having remarkable results, helping to shrink and control aggressive tumours. Recent research highlights include a landmark meta-analysis – where the results of multiple studies are combined and analysed – of the molecular features of a lethal radiation-induced malignant brain tumour, and a study of Australian and North American therapeutic data for paediatric pineoblastoma, a rare aggressive brain tumour. Both studies will help inform better treatments for children locally and internationally.

As living with COVID-19 becomes a part of everyday life in our region, Professor Gottardo has provided expert advice on the impact for those living with cancer. He has led the Australian and New Zealand Children's Haematology/Oncology Group's (ANZCHOG) Trans-Tasman guidelines for COVID-19 vaccination in children with cancer and authored a paper on the impact of COVID on families of children with cancer.

Generous donor support for Professor Gottardo's work is having a powerful impact, not only on children in Perth, but across Australia and the world as important discoveries are translated into more effective cancer therapies with fewer toxic side effects.

WA Child Cancer



>100 children's cancer cases each year



PCH Oncology Research



33

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cutting-edge clinical trials

20 for brain cancer

"Unwavering donor support means I have dedicated research time, I am able to forge strong collaborations with international children's brain cancer clinical trials groups and lead the development of clinical trials. This has a direct impact on children in Western Australia as these cutting-edge clinical trials become available right here in WA for children diagnosed with this dreadful disease."

100

19

Professor Nick Gottardo



Nurturing the next generation.

Dr Sandra Ruhayel moved to Perth from Melbourne for post-graduate training on the strength of PCH's reputation for excellence in research and clinical programs.

As part of the Stan Perron Traineeship in Oncology, Dr Ruhayel worked under the supportive guidance of Professor Nick Gottardo.

During her tenure, Dr Ruhayel acquired a keen interest in Leukemia and developed multiple research projects which will benefit hundreds of WA children in the years to come.

Leukaemia patterns study

Leukemia is the most common cancer diagnosed in Australian children. A national project which Dr Ruhayel was a part of could shape the future of care for children with this type of cancer.

The study retrospectively analysed children with acute leukemia over a 20-year period and looked at outcomes for Aboriginal and non-Aboriginal children. It also assessed the impact of living in remote areas and those with socioeconomic disadvantage in WA, South Australia and the Northern Territory.

Aboriginal children were found to have lower rates of enrolment in clinical trials and were more likely to fail to attend follow-up appointments after their treatment finished.

Children living in remote areas, sadly, had significantly lower rates of survival than children living in cities.

Antibiotic treatment for deadly bacteria

Viridans Group Streptococci (VSG) bloodstream infections can be lifethreatening for children with cancer; the mortality rate is up to 23%. In this national, multicentre study of adults and children, Dr Ruhayel reviewed the use of the antibiotic Vancomycin for VSG infections in PCH cancer patients with the highest risk, those with Leukemia or undergoing bone marrow transplants.

Although it is the most effective antibiotic for VSG infections, Vancomycin can be toxic to the kidneys. Dr Ruhayel reviewed the effectiveness of adding Vancomycin to the treatment therapy for febrile neutropaenia, where patients with very low levels of white blood cells known as neutrophils develop a fever. The data over a 3-year period demonstrated that the risk-stratified approach of adding vancomycin is safe and effective for these high-risk patients. However, limiting its use to children most at risk is imperative to prevent potentially significant toxic complications.

Venous thrombosis link to central lines

This project reviewed whether the insertion of a central venous catheter – also known as a central line – early after a leukemia diagnosis increased the risk of venous thromboembolism (VTE), a potentially fatal blood clot in the brain.

Dr Ruhayel audited the incidence of VTE in WA patients with and without central lines inserted in the induction phase of chemotherapy over a 20-year period. In that timeframe, 364 patients with a median age of 58 months (4.8years) were treated for leukaemia. A total of 10% of patients developed VTE and 67% of cases occurred in males.



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While the review found no significant link between early insertion of a central line and the risk of developing a blood clot in the brain, the identification of males having a higher risk of developing VTE was an unexpected finding. Further research is required to explore the risk factors which may be modifiable and/or allow clinicians to identify those at greater risk early on. "Thanks to donor funding, the Oncology traineeship at PCH gave me a solid and allencompassing experience working amongst an experienced and dedicated team. I felt privileged to be working with many senior clinicians at the forefront of research in their respective speciality fields."

Dr Sandra Ruhayel



Prescribing exercise as medicine.

One in five Australian children lives with a chronic disease that often leads to mental and physical illness in adulthood.

While regular physical activity is vital to a child's physical and functional development, many children with chronic disease face barriers to the healing aspects of physical activity. These may include low confidence and self-esteem, lack of access to appropriate physical activity providers and fear of how to manage their condition in front of peers.

A less active lifestyle increases the risk of developing other chronic conditions such as obesity, heart disease, stroke or depression. Children living with chronic disease have a two to three times greater risk of developing a mental health disorder than their physically healthy peers.

Ground-breaking new research is paving the way for Australia's first clinical exercise service at Perth Children's Hospital to help these children.

The unique service will harness the concept of 'exercise as medicine', prescribing personalised physical exercise and health promotion as part of routine clinical care for children with chronic disease.

The project has been made possible through funding from the Stan Perron Charitable Foundation and Perth Children's Hospital Foundation with principal support from Mineral Resources Limited via the Channel 7 Telethon Trust, Amazon, Globe BD and the WA community. The project is another first for Perth Children's Hospital Foundation and Australia. Thanks to our generous donors and supporters, WA children living with chronic disease will have access to a service that will significantly improve their physical and mental wellbeing and quality of life.

An initial pilot study, exploring the effectiveness of surfing as a form of therapy in a multi-pronged approach to care, has led to a larger surfing intervention program as part of the Move to Improve project. For nine-year old Mary, who has cystic fibrosis and endures physio twice a day to clear mucus from her system, the program has been life-changing.

"When I'm out in the water and surfing, I feel like I'm more free. My body feels stronger, more in control. When I have freedom, I feel like I can be myself and when I can be myself I can be most happy," Mary said.

The purpose-built PCH exercise clinic will be run by an expert team of clinicians and researchers across multiple health disciplines.





UB TRAINER

"We've become really good at prescribing medicines and surgical treatments but one thing we just haven't done is incorporate exercise as medicine. Exercise has enormous benefits for not only mental and physical health but helps re-engage confidence and connection."

Professor Liz Davis Head of Diabetes and Endocrinology and Co-Lead, Move to Improve

"Without the support of donors, the service would not have been able to grow, as it has over the past nine years and having ongoing funding for Music Therapy means the team have been able to truly integrate and cement the service at the hospital."

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Karen Twyford Music Therapist

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Supporting children and families with music therapy.

Music Therapy is a valuable rehabilitation service at PCH and is designed to improve the physiological, cognitive and emotional rehabilitation of children who are often at risk of increased medical stress, due to the likelihood of long-term hospital stays.

Over the past year, thanks to the support of Foundation donors, the Music Therapy program provided a total of 445 sessions which included support for 74 infants, childrenand adolescents.

According to Music Therapist Karen Twyford, Music Therapy can have many benefits including promoting coping skills, reducing pain or distress, promoting developmentally appropriate skills, increased awareness, orientation and memory, supporting the rehabilitation of speech and language disorders and supporting the re-acquisition of physical skills while assisting in the promotion of independence.

"Music Therapy provides a way to help physical rehabilitation as well as a range of mental health benefits like decreasing overall stress and uncertainty children may feel, by providing a welcome distraction at a time when they have so many things being 'done' to them," said Karen.

The program supports the whole family. Getting parents and sometimes siblings involved supports their hospital experience and coping mechanisms, which in turn assists their child.

"There is a lot of planning that goes into each session that we do, researching what the child's condition is and what they need support in, what their family situation is, what sort of music they like and what they may respond to. I am never just walking into a room and playing some nice music." "We have been able to build the evidence to support the work we do within the hospital and gain the support of other health professionals who now refer us, to support them as a team and therefore the service has become more respected and utilised."

"It is not something that the hospital would be able to offer without the support of Foundation donors and it brings so much to the table for children of all ages and their families."

PCH eczema service.

For the 1 in 4 WA children with eczema, life can be miserable. Eczema causes itching, redness, weeping and scaly patches and is one of the most common chronic childhood diseases.

Left uncontrolled, it can profoundly impact a child's quality of life, causing sleepless nights, exhaustion, teasing and bullying and changes in attention, behaviour, growth and development. Sometimes children scratch the skin until the point of bleeding, putting them at risk of infection.

Timely access to treatment was challenging until Perth Children's Hospital Foundation stepped in with funding for the PCH Eczema Service. Through donor generosity, this muchneeded service has dramatically reduced long hospital wait times for specialist management and enhanced community management, leading to better health outcomes.

In the past, many GPs were unaware of correct management of eczema and there was a reluctance to prescribe an adequate amount of topical steroids to treat eczema.

Treating eczema early may also reduce the risk of food allergy later on. Research suggests the breakdown in the skin barrier and inflammation in the skin may trigger food allergy, with it developing via immune cells in the skin rather than the gut. Early intervention and management will reduce the risk of complications such as secondary infections, impaired growth and development and mental health issues.

New patients wait times for dermatology



Urgent cases within 1 month

"We have been able to provide more timely support to children and their families to help them manage their eczema well, and improved access to care. A world-class collaborative paediatric eczema shared-care model has been developed in Western Australia and is being shared with colleagues nationally as well as internationally."

A/Professor Richard Loh

With generous support of the Perth Children's Hospital Foundation, the PCH eczema service has significantly improved the quality of life of many WA children. Its leading approach to eczema care and management has been shared nationally and internationally benefitting children and families globally.

Significant improvements in eczema management are also due to better eczema care in the community, resulting from programs and resources developed by PCH eczema service.

The Eczema Nurse Practitioner-led service has provided training and support for GPs, nurses and pharmacists, and parent education on how to treat eczema and when to seek help. Confidence in treating and managing the condition has increased, reducing referrals to PCH for uncomplicated eczema.

In the coming year, the service will examine the link between eczema and children from culturally and linguistically diverse families. These children have a greater risk of developing more severe and difficult to manage eczema.

Wal-yan Warlang-up: Place of healthy lungs.

In Australia, around 1 million children live with serious respiratory diseases, with asthma alone costing the country \$28 billion each year. More than 110,000 of these children live in WA.

In 2020, a powerhouse partnership between Perth Children's Hospital Foundation, Telethon Kids Institute and Perth Children's Hospital paved the way for the creation of Wal-yan Respiratory Research Centre, with a vision to ensure that all children have healthy lungs for life.

Despite many advances in treatments and understanding over the past few decades, non-communicable diseases still result in 40 million deaths worldwide each year. About 25 percent of these deaths are caused by diseases of the respiratory system that begin in childhood such as asthma, chronic lung disease of prematurity, chronic obstructive pulmonary disease and cystic fibrosis.

Acute respiratory infections including bronchiolitis, pneumonia and influenza are a major cause of hospital admissions and mortality in children worldwide. Respiratory disease is a global issue and international networks are critical to informing bestpractice approaches to the clinical care and management of childhood respiratory health.

The Wal-yan Centre has become a global epicentre for paediatric respiratory research and is informing clinical practice and driving a new research agenda for childhood lung health. The Centre brings together clinicians, scientists and community members from across the globe with a united goal – to prevent childhood respiratory illness and ensure all children have healthy lungs for life. Professor Stephen Stick, Director of Wal-yan Respiratory Research Centre said that the establishment of the Centre means that we have world leading research into the prevention and cure of respiratory disease in children, right on our doorstep.

"Thanks to this powerhouse partnership we have now had 140 members join our centre, who are working on more than 100 research projects. We have had 80 papers published in the past year and 500 respiratory research references," said Professor Stick.



Healthy lungs for every child, for life

A Powerhouse Partnership



Perth Children's Hospital



"We are leading paediatric research in Australia to contribute significantly to global efforts to improve the lives of children with respiratory conditions and their families."

Professor Stephen Stick Director of Wal-yan Respiratory Research Centre

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Wal-yan Warlang-up highlights over the past year include:



Pivotal research around the safety of e-cigarettes. Preliminary data indicates that the inhaled emissions from some nicotine containing vaping devices may be more harmful than traditional cigarettes

Outcomes of two trials that will change the clinical care of cystic fibrosis (CF) patients. One trial involved the prophylactic administration of the broad-spectrum antibiotic azithromycin, the other focused on twice-daily inhalations of hypertonic saline to produce positive effects in young CF patients



Further advances in understanding how we can prevent the development of asthma by training the immune system



Leading a unique trial in Chile a collaboration between Professor Tobias Kollmann's group and researchers in Chile. The trial has found treatment with the drug interferon can reduce the risk of household transmission of SARS-CoV-2 (the virus that causes COVID-19)



Recruitment of the final participant into our Western Australian Lung Health in Prematurity cohort. Since 2018 researchers have been following 200 young adults born <32 weeks to understand how early life affects lung health throughout the life course



The development of a clinical program to implement bacteriophage (phage) therapy for bacterial infections resistant to antibiotics. Bacteriophages are viruses that kill bacteria, offering a potential treatment solution for infections where antibiotics no longer work



The delivery of strategies for the timely detection of chronic wet cough in Aboriginal children in WA's Kimberly region





The Family Ruby and Kerry Bringing dreams alive.

Ruby, who has cystic fibrosis, loves sports and dreams of competing at the Olympics one day.

Her mum Kerry said Ruby's dream is possible thanks to the hard work of respiratory researchers, including those at the Wal-yan Respiratory Research Centre.

"It's pretty amazing how far research has come. Ruby's had access to certain medications that have allowed for her lung function to increase," said Kerry.

"Ruby lives for sport, she loves her sport, the fact that she can get out and be able to do the sports that she does is amazing. She wouldn't be able to do half of what she does if it wasn't for the research.

"We just hope she gets to fulfil her dreams of being able to compete at the Olympics one day. That's what the medication and the research and all that does, it gives her a future."

Perth medical discoveries saving lives globally.

For all the advances in modern medicine, mothers and their babies still face the greatest risk of suffering and death.

Every year there are nearly 3 million stillbirths, 15 million babies born dangerously pre-term – 1 million of these die as a consequence of preterm birth – and another 800,000 newborns die from infections often due to their premature birth.

Perth Children's Hospital is now home to one of the world's top experts in vaccines, Professor Tobias Kollmann, an infectious diseases specialist who is passionate about tackling the significant suffering and loss of life by mothers and babies.

Over the past year Professor Kollmann and his partners at Telethon Kids Institute and the Human Vaccines Project (HVP) – the world's leading immunology network dedicated to decoding the human immune system – have teamed up to establish an ambitious clinical research project, the Born Strong Initiative (BSI).

The outcome of this project will significantly reduce preventable stillbirth, pre-term birth, infant death and suboptimal neurodevelopment. To reach this goal, they will harness the power of maternal and infant immunity through simple, scalable and safe interventions such as vaccines and nutritional supplements.

This cutting-edge project will have local as well as global impact, ensuring every baby, everywhere, has the best start to life. Outstanding donor support for Perth Children's Hospital Foundation means Professor Kollmann's renowned expertise in immunology and vaccines continues to put Perth at the forefront of paediatric and maternal immune health. His research is attracting the next generation of scientists, and his cutting-edge interventions are having a direct impact on WA's sick kids.



"The impact of funding on research, and critically, the interventions we will implement as a result, should cut the rate of preventable stillbirth, preterm birth and dangerous newborn infections by 50% by 2032; a truly game-changing advance in paediatric and maternal medicine."

Professor Tobias Kollmann

Perth Children's Hospital Foundation TELETHON

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Creating positive patient experiences.

We know that hospital can be a daunting and stressful experience for children and parents alike.

That's why, with your help, we have invested in positive experiences for patients and their families, including the Artist in Residence Program.

The program aims to boost the health and wellbeing of young patients and their families by providing support and a positive, enjoyable experience during their visit to hospital.

Local artists provide a range of creative activities in various artforms to improve the hospital experience, making it less daunting for patients and families. Workshops include collage, sculpture, crochet, textile printing, storytelling and illustration. Animation workshops have been among the most popular. Creative activities are known to help people feel better and enhance healing. Studies show the Arts provide comfort, reduce stress or anxiety and shorten lengths of stay in hospital.

Children who have participated in the Artist in Residence program have Reviewed feeling better, happier and more stimulated. Parents and carers say creative activities are a welcome distraction during an oftenworrying time and help them relax.



The Family Zoe and Simon

A brighter picture for young patients and families

Eleven-year-old Zoe has been in and out of hospital for digestive issues since she was a baby. As she's grown older, Zoe has begun to feel anxious about procedures.

The PCH Artist in Residence program has lifted Zoe's spirits during visits to hospital as both an inpatient and outpatient.

Taking part in creative activities helped take her mind off any worries and enabled Zoe to have fun with her younger sister and mum and dad.

Zoe's Dad, Simon, said art activities were a positive distraction for the whole family. "The program allows patients to experience something fun and interesting in an environment that normally wouldn't allow for that, and it helps reduce the mental stress of medical issues," Simon said.





Children's Hospice moves ahead with \$6M legacy.

A local Perth man has created an incredible legacy for children and families in Western Australia by leaving \$6million in his will which will support the new WA Children's Hospice.

John Street (pictured), from Wembley, lived a simple and humble life and built up a considerable fortune through his hard work as a toolmaker.

He wanted to make sure when he passed away, his estate went to a cause that would benefit society for many years to come and would also honour his sister who died of throat cancer.

Following his death in 2010, Mr Street's estate was bequeathed to the Cancer Council WA which gifted \$6m to the Perth Children's Hospital Foundation to support the hospice.

Mr Street's friend of 60 years, Graham Ockleshaw, said Mr Street would be tickled pink the money is being directed to the Children's Hospice.

"It's exactly where he hoped the money would go," Mr Ockleshaw said. "Bequeathing money is a very desirable thing, if it can be given to someone in the community like a charity it will help the whole community for years to come and many generations will benefit."

Thanks to Mr Street's generosity, the WA Children's Hospice now has secured funding of more than \$25million including other donor contributions and State and Federal government funding. The Perth Children's Hospital Foundation aims to raise a total of \$35million for construction and ongoing non-clinical operational costs.



The facility is on track to offer a nurturing, home-like environment for children aged from birth to 18 years requiring end of life care. In WA, 2,000 children are living with a life-limiting illness. The hospice will focus on celebrating life and will provide specialist care and treatment in one place for children and their families.

We've been fortunate to welcome other generous donations for the Children's Hospice throughout the years including those from: Big W, Cancer Council WA, CBH Group, Central Fruit Sales, Country Wide Insurance Brokers, Fresh Produce Group, Gilbert's Fresh Markets, Julia and Mason Vojkovic (in memory of Flynn Vojkovic), Key Produce, Lotterywest, Michelle Kaggi, Nick and Maureen Lustini, Norton Gold Fields, Peter and Rae Breidahl, Rio's Legacy, Robert Branchi, Robert Tyrell, S.J. Fresh Produce, Stan Perron Charitable Foundation, Sweet Charity, The Barton Family Foundation, The Channel 7 Telethon Trust, The Tony Fini Foundation, Tony Alessandrini, Western Australian Chinese Chamber of Commerce, Woodside Energy, Xiaoxuan Sun and Yvonne Flanagan.



"We are thrilled to have this additional support for this important and impactful project. The difference that the Hospice will make to thousands of families each year in Western Australia is almost impossible to measure. We have waited for a long time to have a facility like this in WA."

Carrick Robinson CEO Perth Children's Hospital Foundation



Giving our littlest patients the best possible care.

Philanthropist Rhonda Wyllie and her daughter Melissa Karlson's foundation, *be giving*, have once again ensured that PCHF has been able to provide our tiniest patients with the best possible care.

Thanks to their incredible generosity, the Newborn Emergency Transport Service (NETS) WA clinical service has been able to purchase a vital new vehicle fitted with a WA-first neo-natal twin cot to transfer our smallest and most vulnerable babies between Perth and regional hospitals.

All up it cost more than \$300,000, and would not have been possible without donor support.

Ms Wyllie said as soon as she heard about the NETS WA patient transfer vehicle need, she put her hands up to help.

"We've got four generations and I thought I've got six beautiful grandchildren and we've been lucky," said Ms Wyllie.

NETS WA clinical nurse consultant Kylie McDonald said the new vehicle and its equipment inside would safely transfer newborns and infants to Perth Children's Hospital as well as back to their birthing hospitals or hospitals closer to home, when they were well enough.

Ms McDonald said the new vehicle had replaced a previous but now outdated transporter used by PCH and KEMH that could transport only one baby at a time. "If we had to move twins for example, we would transfer one of the twins into a cot, load into an ambulance, drive to a receiving hospital which could be up to an hour away then drive back and then transfer the second twin," she said.

"It was taking a team away for more time than necessary.

"With this new model, we can transfer twins or two unrelated babies at once , load them in the vehicle and get babies back to other hospitals closer to home so the family unit can be back together again."

be giving is a group of like-minded women passionate about supporting the health and well-being of children throughout WA. Founded by Melissa Karlson and Dr Lucy Caratti, *be giving* was launched in December 2016 at a morning tea hosted by Melissa with the aim of creating a new generation of philanthropists to support projects at Perth Children's Hospital. That first morning tea raised \$46,000. Since then, *be giving* has gone on to raise over \$3 million for Perth Children's Hospital Foundation. We are deeply grateful for this amazing support.



impacts so many children and so many families every year. At a time when they are so overwhelmed, it can help put their minds at ease for a short time, that their tiny babies are getting the best possible care. Without donors, the upgrades and additional need, would not be able to be met in such a timely way."

Kylie McDonald

Newborn Emergency Transport Service WA Clinical Nurse Consultant

Donors on the frontline.

As a Perth Children's Hospital Foundation donor, you are fuelling the fight on the frontline, so sick kids have access to world-class care helping them get well and stay well.

We're enormously grateful to all of our donors, large and small. Every dollar counts.



Eight-year-old Kade selflessly donated \$10 after spending a few days in hospital when his appendix burst at the end of 2021.

"He said to me, mum, we need to donate to the kids, they need our help, so he donated his pocket money. Kade said when he was in PCH they were so nice to him and fixed him."

- Jolean, Kade's mum



Juergen created his own community fundraiser to help support WA's sick kids and raised an amazing \$2,290. The dad of one completed an incredible 1,477 burpee pull-ups in 12 hours!

"I decided to fundraise for the Foundation because for a child to be sick is unequivocally the most unfair thing in the world, we only get one childhood to live and that should be the best time of our lives. I decided I could do a small part to help these children."

- Juergen



Thank you Luke.

We are enormously grateful to popular reality TV star Luke Toki, who has generously shared his time and winnings with us to help WA's sick children.

The former Australian Survivor star and Big Brother VIP winner endeared himself to Australians with his wit and humour. But behind the very public persona is a caring dad who wants the best possible care for his sick daughter.

Maddie was born with cystic fibrosis (CF) and needed immediate surgery as a newborn to unblock her intestines, a common complication of CF.

Now a happy three-year-old, Maddie endures a treatment regime of over a dozen vitamins and medicines, daily physiotherapy and regular doctor's appointments.

Once a year she is admitted to hospital for a procedure under general anaesthetic to check the extent of lung damage as a result of her condition. Luke and his family generously agreed to become the 'face' of our 2022 Autumn Appeal, raising funds for ground-breaking research and innovative equipment and technology benefitting children with cystic fibrosis.

Every four days, a baby in Australia is born with CF and only half those with the condition live past 40.

"I hope and dream that Maddie can outlive me!" Luke said. "I just want to see my daughter live life to the fullest. I hope the Foundation continues to bring more supportto families who are fighting the disease. If they have help with the funding, it could help people worldwide."

Thanks to our staff and volunteers.

We're grateful to our wonderful staff and volunteers who work tirelessly to help WA's sick children.



81-year-old Steve Saunders is celebrating 20 years at the Foundation, but he doesn't consider his role procuring specialised equipment and technology work. The incredible difference being made to children's health inspires Steve to continue fronting up week after week.

"The value of the Foundation's impact at both PMH & PCH, is immeasurable and not only related to patient care. Having worked closely with Clinical, Nursing & Allied Health staff over my career, I have witnessed the positive difference the Foundation has made to medical staff and their day-to-day patient care functions. And, with clinical technology developing at such a rapid rate, it is critical to children's health that the Foundation continues to fund the latest technology."



The amazing Dolores was the hospital's first volunteer, beginning 42 years ago at PMH and still going strong today in PCH's gift shop and in the Pre-Op area taking patients to theatre and escorting them afterwards. At 82, Dolores plans to continue for as long as she can.

"I started volunteering after I found myself with time on my hands when my children started school. Over the years, I've met many wonderful people, including those who I met as babies and who have returned with their children years later, it's always a lovely surprise to see them again."



As a mum, Shirley spent many years accompanying her sick son to hospital throughout his childhood. This motivated her to become a hospital volunteer, firstly pushing the kiosk trolley through the wards of PMH, and now, in the gift shop at PCH.

"I wanted to help parents out as you know how terrible and stressful it can be for parents, you know what they are going through, and this helps to make a difference."



Thank you

Miracle

Miracle supporters have made donations of \$100,000 or more in the past financial year.



Hero

Hero supporters have made a donation of \$50,000 or more in the past financial year.

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Champion

Champion supporters have made a donation of \$20,000 or more in the past financial year.

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Over the past year, an amazing \$6.95 million has been donated to Perth Children's Hospital to help WA's sick kids get well and stay well. Thank you to all of our donors.

Star

Star supporters have made a donation of \$10,000 or more in the past financial year.

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Gifts-in-kind

An extensive list of good and services have kindly been donated by individuals an organisations. We thank everyone who has made a gift-in-kind donation. The following list acknowledges those whose donation was valued at \$3,000 or more.

ATCO Gas Clayton Utz Dimattina Coffee Hassel Studio Hesperia Minter Ellison Motum Nous Group PWC Wood Recruitment Thank you for your generous support. It really is making a difference to the lives of sick kids in WA and across the world.



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Perth Children's Hospital **Foundation**

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