

## Project Funding 2017 to 2023

The Children's Cancer Foundation together with its funding partners has committed **\$8,774,896** across **27 projects** from 2017 through to 2023. Of these, **16 projects (\$6,934,571)** were approved for funding in 2017/18 alone. Funding includes salaries for 31 hospital and research staff (25 EFT), laboratory consumables and family resources. From 2017 funding has extended to national projects, giving children across Australia access to new treatments through clinical trials.



Project 219

**Research:** Hudson Monash Paediatric Precision Medicine Program (4.0 EFT)  
**Institute:** Hudson Institute of Medical Research and Monash Children's Hospital  
**Recipient:** A/Prof. Ron Firestein

**Funding:** \$1,263,092 over 2 years (2017-19)

Australia's first paediatric living organoid and functional genomic program utilising individual patient's tumour cells to identify new therapeutic targets and repurpose existing targets. Research into brain cancer, central nervous system tumours and Wilm's tumour will lay the foundation for establishing a systematic pipeline to test and identify personalised cancer therapeutics for paediatric cancer patients with the greatest unmet clinical need. The key outcome will be proof of concept functional diagnostic screens based on each cancer's unique genetic profile using paediatric organoid models. Successful completion of this pilot phase will lead to integration of comprehensive molecular analysis into clinical management by guiding molecular-targeted therapeutics for cancer patients.



Project 133

**Family:** Family Counselling Service

**Institute:** The Royal Children's Hospital and Monash Children's Hospital

**Funding:** \$413,200 over 5 years (2017-22)

Funding for face-to-face counselling with a psychologist for children with cancer, their parents or siblings. Recent research has confirmed both the unmet demand for and benefit of psychological support to help families through cancer diagnosis and treatment.



Project 134

**Research:** Children's Cancer Foundation Clinical Research Fellowship

**Institute:** Murdoch Children's Research Institute and The Royal Children's Hospital

**Recipient:** Dr Seong Lin Khaw

**Funding Partner:** Victorian Cancer Agency (\$400,000)

**Funding:** \$1,029,000 over 4 years (2017-21), plus \$341,100 from Murdoch Children's to fund a Research Assistant

Research project to improve the effectiveness of treatment in children with acute lymphoblastic leukaemia who respond poorly to or relapse following standard-of-care therapy. The key outcome from this research project is to translate biological data to improve treatment precision and effectiveness, particularly with the use of newly developed, targeted drugs.



Project 216

**Clinical Trials:** Clinical Trials Manager (1.0 EFT)

**Institute:** Monash Children's Hospital

**Funding:** \$380,507 over 5 years (2016-21)

Salary funding for a Clinical Trials Manager to lead the clinical trials unit. The key outcome is to increase the portfolio of trials open, and the number of children enrolled in clinical trials accessing new treatments and innovative drugs.



Project 135

**Research:** My Room Clinical Research Training Fellowship (1.0 EFT)

**Institute:** The Royal Children's Hospital and Murdoch Children's Research Institute

**Recipient:** My Room Clinical Research Fellow

**Funding Partner:** My Room (100%)

**Funding:** \$494,136 over 5 years (2018-21)

Salary funding for a 2-year clinical research fellowship training program under supervision of A/Prof Paul Ekert at Murdoch Children's Research Institute, with a 0.8: 0.2 EFT split of research and clinical time. This program is an investment in training the next generation of oncologists in translational research skills. Two fellowships will be funded under this program.



Project 136

**Family:** Family Connect

**Institute:** The Royal Children's Hospital

**Funding:** \$50,000 over 5 years (2017-22)

A weekly morning tea in the Family Room at The Royal Children's Hospital to meet and connect with other families in a relaxed atmosphere. Each week, Family Connect hosts an interactive and creative activity for children and their families, featuring a special presenter.



Project 302

**Research:** National Clinical Trials Investigating Stem Cell Transplantation and Personalised Medicine (1.0 EFT)

**Institute:** Sydney Children's Hospital

**Recipient:** A/Prof. David Ziegler

**Funding:** \$316,218 over 4 years (2017-19)

Salary funding for a Clinical Trial Associate coordinating two national clinical trials: (1) The PRISM (PREclSion Medicine for Paediatric Oncology Patients) study targeting 300 paediatric and adolescent patients with high-risk malignancies (expected survival < 30%). The key outcome is feasibility of precision medicine in a clinical setting, outcomes of patients treated and review of psychological impact and economic viability; (2) Pαβlo study recruiting >24 patients to test a novel technology that may allow safe and effective stem cell transplant from a patient's parent (when stem cell transplant is the only available cure and a matched sibling or unrelated donor is unavailable).



Project 115

**Clinical Care:** Art Therapists (1.4 EFT)

**Institute:** The Royal Children's Hospital

**Funding Partner:** The Pratt Foundation (\$40,000 in 2017)

**Funding:** \$721,745 over 5 years (2017-22). Renewal – funded since 2010

Salary funding to provide art therapy services enabling children under treatment for cancer to process their emotions such as anxiety, depression, hopes and fears through art. Through non-verbal and safe individual and group sessions, children can use creative avenues while socialising with other children sharing similar cancer experiences.



Project 132

**Research:** Modelling leukaemia using human pluripotent stem cells (1.0 EFT)

**Institute:** Murdoch Children's Research Institute

**Recipient:** Prof. Andrew Elefanty and Prof. Ed Stanley

**Funding:** \$461,576 over 3 years (2016-20)

Research project to model the development of blood cells and to understand how fusion oncogenes cause childhood leukaemia. The significant innovation is the ability to study how the cancer genes function directly in a human cell model, improving our understanding of how the mutant genes cause cancer, and to identify new targets against which therapy can be directed and tested.



Project 301

**Clinical Trials:** National Acute Myeloid Leukaemia MyeChild01 Clinical Trial

**Institute:** Led by Dr Andrew Moore, Lady Cilento Hospital, Brisbane; with nine participating hospitals in Australia and New Zealand

**Funding Partner:** My Room (100%)

**Funding:** \$1,055,245 over 6 years (2017-23)

National clinical trial recruiting children with acute myeloid leukaemia across nine participating hospitals. This trial provides access to a new drug currently unavailable to Australian children, even on compassionate grounds. The key outcome is to determine which of the current treatments combined with the new drug will provide the best chance of survival.



Project 129

**Family:** Family Gym Memberships

**Institute:** The Royal Children's Hospital

**Funding Partner:** Inside Out Performance

**Funding:** \$2,562 over 1 year (2017-18). Renewal – funded since 2016

The Foundation secured two in-kind 12-month gym memberships at the independent gym based at The Royal Children's Hospital for parents of children in the Children's Cancer Centre. The key outcome is to support parents in improving their wellbeing while based at the hospital for prolonged periods caring for their children.



Project 215

**Research:** Clinical Research Fellow (1.0 EFT)

**Institute:** Hudson Institute of Medical Research, with Monash Children's Hospital and Monash University

**Recipient:** Dr Sara Khan

**Funding Partner:** Australian Lions Childhood Cancer Research Foundation (100%)

**Funding:** \$450,000 over 3 years (2016-19)

Clinical research training and laboratory consumables for a paediatric oncologist to investigate new therapeutic options for two of the most prevalent and aggressive paediatric brain tumours – medulloblastoma and Diffuse Intrinsic Pontine Glioma (DIPG). Key outcomes will be the development of a rapid and cost-effective clinical tool to determine the medulloblastoma molecular subtype; new DIPG gene targets for potential therapeutic intervention; and preclinical validation of potential pharmacological epigenetic modifiers of DIPG.



Project 209

**Clinical Care:** Dietitian (0.4 EFT)

**Institute:** Monash Children's Hospital

**Funding Partner:** My Room (100%)

**Funding:** \$137,526 over 3 years (2017-20). Supplement – 0.3 EFT funded 2010-17 and embedded in hospital budget.

Salary funding for a part-time Dietitian to provide intensive nutritional support to children with cancer, which is associated with improved survival rates and treatment tolerance. This EFT increase ensures all children have access to a full-time nutritional service to optimise their health during cancer treatment.



Project 217

**Clinical Trials:** Bright light therapy clinical trial for children with acute lymphoblastic leukaemia

**Institute:** Hudson Institute of Medical Research, Monash Children's Hospital and Monash University

**Recipient:** Dr Lisa Walter

**Funding:** \$18,428 over 1 year (2016-17)

Research clinical trial to investigate the effects of light therapy on the quality of sleep, fatigue and overall quality of life of children with acute lymphoblastic leukaemia. Light therapy is a low cost, portable and effective treatment currently used to treat depression in adult cancer patients by resetting the circadian rhythms. The key outcome from this pilot evaluation is to determine whether bright light therapy can improve sleep-associated symptoms experienced by children with cancer.



Project 220

**Research:** My Room Clinical Research Training Fellowship (1.0 EFT)

**Institute:** Monash Children's Hospital and Hudson Institute of Medical Research

**Funding Partner:** My Room (100%)

**Recipient:** My Room Foundation Clinical Research Fellow

**Funding:** \$757,801 over 5 years (2018-22)

Salary funding for a 2-year clinical research fellowship training program, with a 0.8:0.2 EFT split of research and clinical time. This program is an investment in training the next generation of oncologists in translational research skills. Three fellowships will be funded under this program.



Project 117

**Clinical Care:** Music Therapist (0.6 EFT)

**Institute:** The Royal Children's Hospital

**Funding:** \$172,600 over 3 years (2016-19). Renewal – funded since 2007

Salary funding for a Music Therapist to provide clinical music therapy services (song-writing, active music making, therapeutic music lessons, improvisation, relaxation) to children under treatment within the Children's Cancer Centre. Music therapy improves children's psychological adjustment to cancer treatment and promotes positive coping skills.



Project 113

**Family:** Family Resource Coordinator (0.87 EFT)

**Institute:** The Royal Children's Hospital

**Funding Partner:** Portland House Foundation (\$40,000 in 2017)

**Funding:** \$208,929 over 3 years (2015-18). Renewal – funded since 2006

Salary funding for a non-medical staff member providing practical and emotional support services for children and their families across inpatients, outpatients and day oncology. The Family Resource Coordinator facilitates discussion between staff and families, and provides day-to-day support services through play, social activities and respite.



Project 125

**Research:** Personalised childhood cancer care partnership between The Royal Children's Hospital and Sydney Children's Hospital (0.5 EFT)

**Institute:** Murdoch Children's Research Institute, with Children's Cancer Institute

**Recipient:** A/Prof. Paul Ekert

**Funding Partner:** Steven Walter Children's Cancer Foundation (100%)

**Funding:** \$225,000 over 3 years (2015-18)

Research project to advance personalised medicine as standard of care based on an understanding of the gene mutations that cause cancer. Through this collaborative project, expertise and analysis developed at The Royal Children's Hospital will be shared with Sydney Children's Hospital. The key outcome is the development of tools and processes to make individual analysis of paediatric cancers available to Australian families.



Project 203

**Clinical Care:** Music Therapists (1.0 EFT)

**Institute:** Monash Children’s Hospital

**Funding:** \$90,856 over 3 years (2016-18). Renewal – funded since 2009

Salary funding for two Music Therapists who help children adjust to their cancer diagnosis and treatment through song-writing, active music making, therapeutic music lessons, improvisation and relaxation. Sessions also assist with pain and anxiety management during procedures.



Project 131

**Research:** Clinical implementation of transcriptome sequencing for precision cancer medicine (1.5 EFT)

**Institute:** Murdoch Children’s Research Institute

**Recipient:** A/Prof. Paul Ekert and Dr Alicia Oshlack

**Funding:** \$284,249 over 2 years (2016-18)

Research discovery project using advanced techniques to read genetic code in cancer cells and identify the changes in those cells that cause cancer. This information can then be used in clinical trials that test new treatments that directly target the specific genes causing that cancer. The key outcome is to develop the sequencing and analytic platforms for clinical reporting, and to develop a tool that can aid in the identification of standard, high and very high risk patients.



Project 202

**Family:** Family and Community Resource Liaison Officer (0.2 EFT)

**Institute:** Monash Children’s Hospital

**Funding:** \$41,483 over 3 years (2017-20). Supplement – 0.4 EFT funded 2007-17 and embedded in hospital budget.

Salary funding for a non-medical staff member providing practical and emotional support services for children and their families. The Family and Community Resource Officer facilitates discussion between staff and families, and provides day-to-day support services through play, recreation, social activities and respite.



Project 126

**Clinical Trials:** Early Phase Clinical Trial Study Coordinator

**Institute:** The Royal Children’s Hospital and Murdoch Children’s Research Institute

**Funding:** \$183,124 over 2 years (2017-19). Renewal – funded since 2014

Research clinical trials to offer children new treatment options, supporting target of 75% of all patients to be enrolled in a clinical trial. The position has facilitated access to drugs unavailable to patients through standard clinical care and access to treatment for patients who would otherwise have had no further treatment options.



Project 122

**Research:** Head of Molecular Diagnostics (0.4 EFT)

**Institute:** The Royal Children’s Hospital, with Murdoch Children’s Research Institute

**Recipient:** A/Prof. Paul Ekert

**Funding:** \$600,000 over 5 years (2014-19)

Salary funding for a leadership position with protected clinical research time to develop new molecular diagnostic tools and build expertise and research capacity. The key outcome will be evidence of the changes that occur in the genes of cancer cells, and how those changes can be used in cancer diagnosis and the selection of appropriate treatments.



Project 116 & 204

**Family:** The Beaded Journey

**Institute:** The Royal Children’s Hospital, Monash Children’s Hospital and Peter MacCallum Cancer Centre

**Funding:** \$55,900 over 5 years (2017-20). Renewal – funded since 2008

The Beaded Journey, a therapeutic program that gives children the opportunity to tell their personal cancer story by marking key medical and non-medical events throughout their treatment with a special bead.



Project 130

**Research:** Genomics of brain and solid tumours of childhood (1.0 EFT)

**Institute:** Murdoch Children's Research Institute

**Recipient:** Dr Dong-Ahn Khuong-Quang

**Funding:** \$271,833 over 2 years (2016-18)

Two key outcomes of this project to increase the understanding of childhood cancers: to develop and improve the classification of solid tumours, including brain tumours on the basis of epigenetic signatures using RNA sequencing (focus on medulloblastoma and high grade gliomas); and to develop a methodology and testing platform to identify the genomic profiles of paediatric solid tumours in blood using advanced sequencing techniques (with a focus on neuroblastoma and lymphoma). This has the capacity to provide a "frontline" test to identify the presence of a tumour and track the response to treatment.



Project 303

**Research:** Project Grant – Category D of the Priority-driven Collaboration Cancer Research Scheme

**Institute:** Cancer Australia

**Funding:** \$100,000 over 1 year (2019-20)

Research project grant investigating childhood cancer using a bioinformatics approach. Bioinformatics is increasingly important for analysing and interpreting genomic data. This project grant is directed towards researchers with 1-7 years' post-doctoral experience.



Project 222

**Research:** Children's Cancer Foundation PhD Scholars Program (3.0 EFT)

**Institute:** Hudson Institute of Medical Research

**Funding:** \$304,500 over 5 years (2018-2022)

Funding for three PhD students in paediatric precision medicine. The key aims are to develop a doctoral training program focused on key research themes of precision medicine, enable hypothesis-driven research that directly arises from the Hudson Monash Paediatric Precision Medicine Program (Project 219), and to strengthen cross-institutional collaborations (local, national, and international) by building and developing student exchange programs.



Project 221

**Research:** International collaborations – Hudson Monash Precision Medicine Program

**Institute:** Hudson Institute of Medical Research

**Funding:** \$11,600 over 1 year (2018)

Funding of on-site visits during the Childhood Cancer Research Symposium 2018 for researchers from Hospital for Sick Children (Toronto, Canada), Children's Hospital of Philadelphia (USA), Children's Brain Tumour Tissue Consortium (USA) and the KK Women's and Children's Hospital (Singapore). The aim is to advance the Hudson Monash Paediatric Precision Medicine Program (Project 219) by developing and strengthening collaboration with international experts in paediatric precision medicine.