THE UNIVERSITY OF QUEENSLAND
AUSTRALIA

2024 Research Report Card

QUEENSLAND CEREBRAL PALSY AND REHABILITATION RESEARCH CENTRE
CHILD HEALTH RESEARCH CENTRE









ACKNOWLEDGMENT OF COUNTRY

We acknowledge the Traditional Custodians of Country as Traditional Owners and custodians of the lands on which we meet and work.

We pay our respects to their Ancestors and Descendants who continue cultural and spiritual connections to Country.

We recognise their valuable contributions to Australian and global society.

[1] **Image: Digital Reproduction of A guidance through time created by Quandamooka artists Casey Coolwell and Kyra Mancktelow for The University of Queensland Reconciliation Action Plan (RAP)**

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Executive Summary

The Queensland Cerebral Palsy and Rehabilitation Research Centre (QCPRRC) has achieved 18 years of continuous research impact and output (since 2007) due to ongoing philanthropic support from the Merchant Charitable Foundation (MCF). The continued philanthropic support from MCF via the Children's Hospital Foundation and matching funds from The University of Queensland have enabled and contributed to the QCPRRC's successes in obtaining nationally and internationally competitive funding. Major funding sources in 2024 include the NHMRC Cerebral Palsy Synergy Program (A$5M), two joint Australian NHMRC and European Union Horizon programs – Born-To-Get-There (€3.7M) and Artificial Intelligence in Cerebral Palsy (AInCP;€6M), both with A$0.5M to support the Australian-arm of the programs.

In addition, the QCPRRC team has demonstrated a strong track record in achieving numerous MRFF project funds such as the "CP-KASP" consumer led project and the MRFF Clinician Researchers - Nurses Midwives and Allied Health project "PACT-ONLINE". The MRFF consumer-led program the Cerebral Palsy Knowledge, Advocacy and Support Program (CP-KASP) co-led by A/Prof Leanne Sakzewski and Dr Shaneen Leishman (our QCPRRC manager who has lived experience of Cerebral Palsy).

2024 was a very productive year for the QCPRRC team; where we have collaboratively published 38 journal articles and presented 41 research papers at national and international meetings showcasing the outstanding results/outcomes of this UQ centre research programs. The QCPRRC team has accomplished a Return on Investment (RoI) of 9.8 in 2024 based on the income received, leveraging from the $0.5M Merchant philanthropic support and $0.5M UQ strategic funds.

In 2024, the team has continued to extend its clinical trials across Australia, Europe and Southeast Asia working in the LEAP-CP trial with indigenous communities in regional and remote Queensland and now in the Northern Territory as well as supporting the EU Horizon Teams in Sri Lanka and Georgia in Eastern Europe. Leading the successful LEAP-CP program and as the Australian-arm of the international Born-To-Get-There consortium, the project team has successfully screened over 480 infants and recruited 73 infants to the Early Intervention LEAP-CP clinical trial to date. We have commenced surveillance and recruitment with our Aboriginal Medical Services in the NT to develop further capacity with our local community workers to upskill and translate our LEAP surveillance and early support program in urban, regional and remote Aboriginal and Torres Strait Islander communities.

QCPRRC and our collaborators have jointly marked numerous milestones in 2024 – I hope you enjoy reading about some of the key achievements and highlights from our work, and - whether you are a consumer, parent, researcher, clinician, or one of our many supporters – and that you will join our network as we would be delighted to work with you.

Roslyn N Boyd, Professor of Cerebral Palsy Research, UQ Child Health Research Centre, Faculty of Health, Medicine and Behavioural Sciences, The University of Queensland.
Scientific Director, Queensland Cerebral Palsy & Rehabilitation Research Centre
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QCPRRC Awards and Achievements

- In 2024, under Prof. Roslyn Boyd's leadership, along with senior researchers A/Professor Leanne Sakzewski and A/Prof Koa Whittingham, QCPRRC staff and students published 38 peer-reviewed journal articles and had significant involvement in 41 premier international conferences (both keynote presentations & free papers) and project stakeholder engagement activities.
- QCPRRC team and collaborators have collectively achieved an actual income of $5.2M in 2024.
- The QCPRRC team has accomplished RoI of 9.8 in 2024 based on the income received, leveraging from the $0.5M philanthropic support from the Merchant Charitable Foundation.
- PhD Student Karen Mistry won the prestigious Gayle G. Arnold Award for Excellence – Best Paper at the American Academy of Cerebral Palsy and Developmental Medicine AACPDM conference in Quebec City in December 2024.
- A/Prof Koa Whittingham led a team of researchers in a successful MRFF Allied Health Researchers project grant "PACT-Online", an E-health program that will be offered to n=300 families of children with disability 0-12 years. The program received over ~200 EOI within 5 months from opening to recruitment.
- A/Prof. Sakzewski was awarded $1M from MRFF to develop a consumer led research initiative "CP-KASP", to support families to navigate the different health systems including the National Disability Insurance Scheme, NDIS and empower them to advocate for their children.
- Prof Boyd spent 3 weeks as a visiting academic at Federal University of São Carlos in Brazil, delivering training for the post graduate program of Physical Therapy (PPGFt) and a practical course on the Hammersmith Infant Neurological Examination (HINE), in collaboration with Dr Carly Luke.
- Dr Carly Luke was awarded the Deans Commendation for her thesis in December 2024.

2024 QCPRRC Research Highlights

Born-To-Get-There EU Horizon project final meeting[2].

The "Born-To-Get-There" project, which began in February 2020 and concluded in December 2025, was funded by the European Union's Horizon 2020 research and innovation program (grant agreement No 848201). The initiative involved a consortium of partners, including Universita' Di Pisa (Italy), Fondazione Stella Maris (Italy), Kobenhavns Universitet (Denmark), Academisch Ziekenhuis Groningen (the Netherlands), Cerebral Palsy Lanka Foundation (Sri Lanka), David Tvildiani Medical University Llc (Georgia), The University of Queensland (Australia), Hubstract Srl (Italy), and Fondazione Toscana Life Sciences (Italy). For more details on the project: https://www.borntogetthere.eu/.

The "Born-To-Get-There" project made a profound impact by addressing the early detection, surveillance, and intervention of young children with Cerebral Palsy (CP) and supporting their families in Italy, Denmark, the Netherlands, Sri-Lanka, Australia, and Georgia. For the first time, in both high- and low-resource locations, the project trained more than 1,000 healthcare professionals on the best tools available for very early detection and management of infants with CP and their families. This effort went beyond training by emphasizing practical implementation: more than 5,000 babies were screened, and over 500 were identified as being at high risk of CP. These children were subsequently enrolled in evidence-based early interventions, including in low-resource settings, thereby enhancing early outcomes.

By integrating evidence-based international guidelines into healthcare practices, the project strengthened early care pathways and directly improved outcomes for children at risk of CP. Ukraine also contributed to the dissemination and availability of materials and e-learning resources, further expanding the project's reach. This dual focus on education and real-world application empowered healthcare professionals and stakeholders to provide tangible benefits for children and families.

The project's outcomes were celebrated during a final meeting in Tbilisi, Georgia, in November 2024, attended by politicians, parents of children with CP, and other stakeholders who were directly impacted by the initiative. Looking ahead, the project aims to further promote this approach by expanding training for healthcare professionals in additional European countries and extending the methodology to address other paediatric conditions, such as autism and other neurodevelopmental disabilities. By continuing to strengthen early detection and intervention strategies, the "Born-To-Get-There" project aspires to make a lasting, global impact on paediatric care.

QCPRRC and AusCP-CTN [3] partners enrolment >2770 children with CP and neurodevelopmental disabilities

The QCPRRC and the AusCP-CTN CRE team continues to excel in conducting randomised controlled trials (RCTs) for infants and children with CP and other neurodevelopmental disabilities. Our team has led more RCTs in cerebral palsy than any other group globally, uniquely positioning us to aggregate trial findings and conduct prospective follow-up. This enables us to determine long-term school and employment outcomes for children

[2] BornToGetThere: http://borntogetthere.eu/
[3] AusCP-CTN Education Program EoI: https://cre-auscpctn.centre.uq.edu.au/education-program

with CP who have received early neuroprotection and neurorehabilitation. Internationally, our group is renowned for generating groundbreaking knowledge that fundamentally transforms practice and policy.

Our contributions include early diagnosis, early intervention, functional therapy guidelines, MRI standards, and genetic causal pathways. Our strong ties to the Australian CP Register allow us to evaluate neurodevelopmental and school readiness outcomes for children identified early and treated with neuroprotectants and early neurorehabilitation. Since 2017, the AusCP-CTN team has collaborated with medical researchers, clinicians, and allied health professionals, successfully recruiting over 2,300 families with children with CP and neurodevelopmental disabilities across 17 multi-site RCTs, cohort studies, and surveillance programs. Over the last year, children identified as high chance of CP or neurodevelopmental disability have been offered nine intervention trials. The latest project updates are reported from page 10.

Recruited >2770 children with CP across 17 multisite clinical trials

QCPRRC & AusCP-CTN Education Programs update

The Australasian Cerebral Palsy Clinical Trials Network AusCP-CTN unites key opinion leaders and clinicians working in the field of child neurology across all states of Australia, along with international partners in New Zealand, Europe, SE Asia and USA. The AusCP-CTN aims to foster and develop current and future leaders in cerebral palsy research and clinical practice. Our vision for the future workforce for children with CP is to build national capacity comprising individuals with expertise in more than one key area of research and/or training (basic science/ neuroscience, epidemiology, clinical/health services initiatives, and translation/ implementation). Through our extensive Education Program, we aim to provide and facilitate a range of interactive clinical trainings and workshops for researchers and clinical professionals. To date our Education Program[4] has benefited over 2,650+ clinicians, health professionals, researchers, and higher degree research students in upskilling their knowledge and skills in novel paediatric neurological research, diagnosis and interventions, Systematic Reviews, Grant Writing, and dissemination.

In 2024, teams across the Queensland Cerebral Palsy & Rehabilitation Research Centre (QCPRRC) and AusCP-CTN have hosted

- 3 Hammersmith Infant Neurological examination (HINE) workshops with 24 attendees in Brisbane, 34 attendees in Brazil and 35 attendees in Sri Lanka.
- 2 General Movements Basic Workshops led by Prof Giovanni Cioni and Prof Andrea Guzzetta with 37 attendees in Cairns and 35 attendees in Brisbane,
- 2 General Movements Advanced Workshops led by Prof Andrea Guzzetta with 23 attendees in Cairns and 18 attendees in Brisbane
- Systematic Review & GRADE Analysis Workshop (online), with 84 attendees.

Trained >+2650 researchers and health professionals

2024 Online Systematic Review Workshop and GRADE Analysis Course

A virtual eight-week Systematic Review Workshop was held online, 9 Feb – 23 March 2024. The interactive workshop was designed to enable the attendees to gain a comprehensive knowledge and practical experience in conducting a systematic review and meta-analysis of efficacy of treatment, a clinometric review of measures,

and/or a review of diagnostic criteria for a clinical area. Despite challenging time differences, the intensive eight-week workshop attracted 66 attendees (researchers, higher degree research students, medical clinicians and health professionals) from across the time zones of Australia, Italy, Georgia, Sri Lanka and USA. From QCPRRC, Prof Ros Boyd, A/Prof Leanne Sakzewski led the course with input from our Research Occupational Therapist Dr Andrea Burgess and Prof. Robert Ware (Professor of Biostatistics and clinical epidemiology, Griffith University), who presented lectures on Biostatistics for Clinical Trials, Meta-Analysis and Clinimetrics.
As part of the Systematic Review Workshop, Dr Sue Brennan from the Melbourne GRADE Centre provided a one-day interactive session on GRADE analysis. GRADE (Grading of Recommendations, Assessment, Development and Evaluations) a transparent framework for developing and presenting summaries of evidence and provides a systematic approach for making clinical practice recommendations. Workshop topics included: Overview (GRADE in systematic review, guideline process), Interpreting effect estimates, How to GRADE the evidence, Using GRADE criteria and Making recommendations. For more information about our Systematic Review workshop and EOI for the in 2026: https://cre-auscpctn.centre.uq.edu.au/education-program

Becoming a trainer for HABIT-ILE – Dr Andrea Burgess learning in Belgium and Vietnam

HABIT-ILE is an acronym which stands for Hand-Arm Bimanual Intensive Therapy including Lower Extremity. HABIT-ILE is an intensive, goal-directed therapy approach which simultaneously engages the upper and lower extremities and postural control. HABIT-ILE is based on known principles of motor learning and neuroplasticity. For example, it uses highly structured intensive practice, with practice-induced brain changes arise from repetition. Tasks and activities are graded to the just-right challenge to bring about success, and activities are shaped so that the task becomes progressively more complex with the aim of a achieving a functional goal in mind. Positive reinforcement is used to motivate the child.
HABIT-ILE was first put forward as a model of intervention for children with cerebral palsy by Professor Yannick Bleyenheuft and Professor Andrew Gordon in 2014. Since then, research has been published mainly from Europe and USA. The first Australian study of HABIT-ILE was completed in 2020 in a multi-site trial led by QCPRRC's Associate Professor Leanne Sakzewski and involved children aged 8 to 16 years.
In 2021, QCPRRC commenced a research trial called Preschool HABIT-ILE for children aged 2-5years who had bilateral cerebral palsy. Preschool HABIT-ILE was adapted to be more feasible for families with young children, with children attending therapy for 3 hours per day at the Queensland Children's Hospital, Queensland Paediatric Rehabilitation Department. The Preschool HABIT-ILE study was led by A/Prof Leanne Sakzewski, together with Dr Andrea Burgess and PhD student Kate McLeod, Coordinator Sarah Goodman, and QCPRRC therapists Chris Finn and Sarah Gibson.

Professor Yannick Bleyenheuft provided regular guidance from Belgium via zoom. Student volunteers were an essential part of the research project. The data collection for Preschool HABIT-ILE is now complete and analysis of results is underway.
Dr Andrea Burgess attended 3 days of HABIT-ILE supervisor training with Professor Yannick Bleyenheuft and Dr Julie Paradis in Belgium in May 2024. This was followed up with observation and participation in one week of therapy camp held at the Intensive Rehabilitation Foundation, Belgium in June 2024. Following on from this, Dr Burgess attended a 2-week intensive therapy camp in Ho Chi Minh, Vietnam in January 2025. The camp was held in the An Binh hospital rehabilitation department, with nine children attending camp with their parents and grandparents. The camp was coordinated by PhD student Doan Nguyen and supervised by Prof Yannick

Bleyenheuft and Dr Geoffroy Sauzzes. It was an amazing learning and cultural experience. All the children did 5 hours of therapy each day, with lunch and a nap in the middle of the day. Fun fact: parents and therapists too had a nap after lunch before starting the afternoon session!

Current Project and Studies

Early Intervention

Early detection and intervention for babies with cerebral palsy

NHMRC Cerebral Palsy Synergy Program Early Prediction of Infant Neurodevelopmental Outcomes: EPINO Study[5]

The Early Prediction of Infant Neurodevelopmental Outcomes (E-PINO) study, funded by the NHMRC Synergy Grant ($5M; 2022-2026), is making significant strides in its mission to understand and predict neurodevelopmental outcomes for children at risk of cerebral palsy. Since its launch, recruitment is progressing well with participation at the Royal Brisbane and Women's Hospital (RBWH), Monash Medical Centre and soon at the Townsville University Hospital. The study has currently recruited 46 participants.

The collaborative effort between top research institutions such as RBWH, Monash Medical Centre, Townsville University Hospital, CSIRO, QIMR Berghofer Medical Research Institute, and the University of Adelaide, facilitates the analysis of diverse data types, offering a more detailed and multifaceted approach to uncovering early predictors of conditions such as cerebral palsy. The ePINO study is pioneering in its integrated approach, combining neuroimaging, HD EEG, genomics, proteomics, gut microbiome analysis, feeding data, and clinical biomarkers, all aimed at developing automated predictive analysis tools. This innovative combination of technologies is set to significantly improve early diagnostic and intervention strategies and ultimately pave the way for better outcomes for children at high-risk of cerebral palsy and other neurodevelopmental disorders.

Testimonial:
"We were keen to participate in the ePINO study, as it has provided us with access to additional clinical assessments and MRIs. We have found it reassuring knowing our baby is getting this extra monitoring and we are grateful for the opportunity to contribute to research that may benefit other families in the future" Steph mum of Y.

Contact Details: EPINO Coordinator epino@uq.edu.au

Investigators: Prof Roslyn Boyd, Prof Iona Novak, Prof Stephen Rose, Prof Michael Fahey, Prof Paul Colditz, Prof Rod Hunt, Prof Nadia Badawi, Dr Jurgen Fripp, A/Prof Leanne Sakzewski, Dr Mark Corbett, Dr Warwick Locke, A/Professor James Roberts, A/Prof Severine Navarro, Dr Dana Bradford, A/Prof Atul Malhotra, Dr Liza van Eijk.

Funding: This project is funded by NHMRC Synergy grant 2010736 Aus$5M.

LEAP-CP[6]*: Learning through Everyday Activities with Parents, for infants at high risk of CP in Indigenous Australia*

Testimonial:
"Most of my family don't know how to play or communicate with M, but once I pull out his little box of treasures when people are over. They are like 'Oh, this is what your guys do to play' and they are very interested in playing with him now. It has helped family members get closer and more confident with M." Anna mum of M

Over the past year, the LEAP study has continued to make significant strides in engaging Aboriginal and Torres Strait Islander families in early childhood development research. The team across Queensland and newly initiated site in the Northern Territory have screened 215 infants for likelihood of a neurodevelopmental disability, with 36 infants identified as eligible for the trial of the LEAP Family Support Program. This family support program now actively employs four Indigenous Family Support Workers across three partner agencies, including Queensland Health, Aboriginal Health and UQ. This dynamic team of First Nations women have engaged in an in depth 'Embedding for Mob' process facilitated by Aboriginal Researcher Maleah Carele, to review the LEAP curriculum and service delivery model to ensure it is meaningful and culturally safe for our families. Leeann Mick-Ramsamy,

[5] **ePINO: https://qcprrc.centre.uq.edu.au/project/epino-early-prediction-infant-neurodevelopmental-outcomes-0**

[6] **LEAP-CP Indigenous: https://qcprrc.centre.uq.edu.au/project/Leapcpindigenous**

an Aboriginal PhD scholar continues to yarn with families to develop and evaluate a culturally safe 'Baby Movement Check', which implements the gold standard tools for infant neurodevelopmental screening tested in the PhD thesis by Dr Carly Luke. Dr Luke was awarded her doctorate this year with an exceptional thesis awarded the Dean's Award for Outstanding Higher Degree Research in the Faculty of Medicine titled "Early Detection of Aboriginal and Torres Strait Islander infants at high chance of adverse neurodevelopmental outcomes at 12 months corrected age: LEAP-CP Learning through Everyday Activities with Parent early detection study".

The LEAP program efforts have also been recognised by publication in high-ranking journals, including the world-first efficacy results from LEAP India (Benfer 2024, Pediatrics). This study found that the LEAP program was effective at improving the motor skills of ambulatory children with CP. The team has presented our novel work widely, including international presentations at the European Academy of Childhood Disability in Bruges, Australasian Academy of Cerebral Palsy and Developmental Medicine in Cairns, and American Academy of Cerebral Palsy and Developmental Medicine in Quebec; and an invited presentations in conjunction with the Global Cerebral Palsy Low Middle Income Country Register series (June 2024) and the Mater Growth and Development Conference (Brisbane). The LEAP program was a finalist in the "Spirit of Reconciliation" Faculty of Medicine Awards.

LEAP-CP RCT in India: The results from the initial LEAP-CP efficacy trial, led by Dr Katherine Benfer and Prof. Roslyn Boyd, in West Bengal India (screened >800 babies on GMA/HINE assessments, and 152 children were randomised to LEAP/ health advice) has been published in the prestigious journal Paediatrics (2024), and showed LEAP was effective for improving motor skills in infants with mild-moderate CP.

LEAP-CP with Born-To-Get-There: The program has been upscaled and culturally adapted for two new sites: Georgia (screened n=42, intervention n=28) and Sri Lanka (screened n=229, recruited n=38) funded under BornT0GetThere[1]. The team in Sri Lanka hosted Prof Ros Boyd and Dr Carly Luke for training in early detection in January 2024, and Dr Kath Benfer and Ms Ellena Oakes for training in the LEAP family support program in April 2024, training over 70 clinicians across the country.

Contact Details: LEAP Coordinator Ms Laura Purcell leapqld@uq.edu.au

Chief Investigators: Prof. Roslyn Boyd, Dr Katherine Benfer.

Research team: Dr Carly Luke (Early Screening) and Ellena Oakes (Early Support), Leeann Mick Ramsamy (Indigenous PhD Scholar), Hannah Johnston (site lead NT Health), Gemma Nevin (co-ordinator, NT Health), Dr Mantho Kefentse Kgosiemang (paediatrician, NT Health), Dr Simon Martin (PhD Scholar), and Kelly Paterson (Physiotherapist, NT Health)

Funding: This project is funded by EU-NHMRC Partnership Grant APP1194128, Children's Hospital Foundation, Cerebral Palsy Alliance, and Perpetual Trustees.

Publications: Benfer, K. A., et al (2024). Efficacy of Early Intervention for Infants With Cerebral Palsy in an LMIC: An RCT. *Pediatrics*, *153*(4). https://doi.org/10.1542/peds.2023-063854

The QEDIN[7] network extends across Australia and with partners in Europe

In 2017, QCPRRC (funded by Advance QLD Program) partnered with keen researchers and clinicians across Queensland to successfully establish the state-wide QLD Early Detection and Intervention Network (QEDIN). Led by Professor Ros Boyd and Dr Carly Luke, coordinated by Ms Laura Purcell and supported by our Advanced General Movements Assessors and Hammersmith Infant Neurological Examination (HINE) Trainers Anya Gordon, Sarah Gibson, Chris Finn, and Bernadette Shannon at QCPRRC. The QEDIN network currently has >320 clinical members representing all 18 HHSs across Queensland. Now in its 8th year, the network has supported the real-world implementation of the Cerebral Palsy Early Detection clinical practice guidelines across the state, providing a clear path linking medical research, clinical workforce, enabling data transfer for screening, second opinions, clinical calibration, reliability testing and fast-tracking families to available clinical trials of early intervention.

In 2024 the network was rebranded to QEDIN (Originally QEDIN-CP), representing a shift in focus to improving early identification of other neurodevelopmental disabilities and neurodiverse outcomes including autism and Foetal Alcohol Spectrum Disorder, not just cerebral palsy. To date, QEDIN has trained >600 clinicians in key early screening tools, Prechtl's General Movements Assessment and the Hammersmith Infant Neurological Examination (HINE) to assess 1147 referred infants across the state, with 169 infants fast-tracked to QEDIN early diagnosis and interventional clinical trial projects. QEDIN represents the largest 'at risk' infant cohort in Australia, with preliminary findings presented at international conferences in 2024, generating keen interest globally.

In 2025 the QEDIN network will expand to the Northern Territory commencing in Darwin and Alice Springs with NT Health, to support early screening and neonatal follow-up pathways and offer Aboriginal and/or Torres Strait Islander families' participation in the culturally adapted LEAP (Learning through Everyday Activities with Parents) screening and early supports program.

Leveraging from its success and framework establishment, QEDIN has further contributed to an implementation of surveillance program at the national scale (KiTE-CP, NHMRC Partnership Program), linking clinical and research workforce between Queensland, New South Wales, and Victoria, allowing more large scale multisite clinical trials to be easily established and connected to interested families. In 2023 Kite-CP has recruited 597 families across Australia (194 from Qld), with follow-up concluded in early 2024.

The QCPRRC also serves as the Australian-arm of the BORN-TO-GET-THERE international program (supported by the European Horizon 2020 Grant), which aims to increase awareness of evidence-based guidelines for early detection, screening and intervention for infants with Cerebral Palsy. The BORN-TO-GET-THERE program implements current evidence on early detection, surveillance and intervention for infants at high risk of Cerebral Palsy (CP) by implementing the first International Clinical Practice Guidelines (Novak et al. 2017) in multiple sites in Europe (Italy, Denmark, Netherlands), in low- and middle-income countries (Georgia, Sri Lanka) and hard to reach populations in remote areas of Australia (Queensland and the Northern Territory).

Contact Details: QEDIN Coordinator, qedincp@uq.edu.au.

Investigators: Prof Roslyn Boyd, Dr Morgan Carlton, Dr Carly Luke, Ms Anya Gordon, Dr Lynda McNamara, Dr Priya Edwards, Dr Nicola Previteria, Dr Margot Bosanquet.

Publications: Luke, C. et al, (2023). Developmental Medicine and Child Neurology, Ljubljana, Slovenia. doi: 10.1111/dmcn.15595
http://espace.library.uq.edu.au/view/UQ:c441182

EU Horizon 2020 & Australian NHMRC Partnerships: Born-To-Get-There

Further extending our research partnerships, the QCPRRC and the AusCP-CTN also serves as the Australian-arm of the Born-To-Get-There international program (supported by the European Horizon 2020 Program Grant and Australian NHMRC EU Partnerships Grant), which aims to increase awareness of evidence-based guidelines for early detection, surveillance and early intervention for infants with Cerebral Palsy.

[7] **QEDIN-CP network: https://qcprrc.centre.uq.edu.au/qedin-cp**

The Born-To-Get-There program has implemented current evidence on early detection, surveillance and intervention for infants at high risk of Cerebral Palsy (CP) by implementing the first International Clinical Practice Guidelines (Novak et al. 2017) in multiple sites in Europe (Italy, Denmark, Netherlands), in low- and middle-income countries (Georgia, Sri-Lanka) and hard to reach populations (Queensland and remote Australia). International program teams from Italy, Holland, Denmark, Georgia, and Sri Lanka, were awarded Euro 3.5M to deliver this program. In conjunction, Prof. Ros Boyd and Dr Kath Benfer were awarded A$0.5M from the NHMRC, serving as the Australian-arm of the program to conduct and implement the research in QLD and remote Australia. Specifically, the team will improve maternal and infant health through the following three specific aims.

- Improve health programs for the early detection (ED) of CP, thereby reducing the age at diagnosis and age at referral to CP-specific early intervention programs.
- Improve health programs for the early surveillance (ES) of associated impairments and functional limitations in infants with CP and mental health of their parents, thereby fostering individualised early intervention delivery and prevention of secondary complications for infants, and provision of support for their parents.
- Improve health programs of early intervention (EI) in infants with CP, thereby improving the outcomes of the infants (motor, cognitive and social-emotional development) and of their caregivers (mental health).
- A final 2-day meeting in Tibilsi in November 2024 was attended by >500 clinicians, parents and stakeholders including the Georgian Minister of Health and a Georgian Member of Parliament who herself is the mother of a child who had a neonatal Stroke. The 2-day program highlighted the tremendous impact the program has had on families at all study sites including Georgia, Sri Lanka and Australia, offering evidence-based surveillance and implementation of evidence based early intervention.

DRIVE CP CRE - Directing Research In Very Early Cerebral Palsy

Our NHMRC funded Centre of Research Excellence (CRE) DRIVE CP (Directing Research In Very Early Cerebral Palsy) (AUD2.5Million, 2022-2027) is leveraging the foundational work of our previous CRE AusCP-CTN, to further reduce severity of CP with the ultimate aim of full participation in society for people with CP.
DRIVE CP CRE unites leading researchers in CP, including the top 3 CP experts worldwide with seven CIs in the top 40 globally (Expertscape: CIs Boyd #1, Novak #2, Badawi #3, Morgan #15; Spittle #23; Sakzewski #29, Fahey #38). DRIVE CP activities were showcased at a pre-conference workshop at the AusACPDM conference, July 2024, in Cairns, Queensland. As well as highlighting perspectives of those with lived experience, presentations featured DRIVE CP's progress towards earlier treatments, more accurate prediction and universal screening using AI. Other DRIVE CP sponsored activities at AusACPDM 2024 included a Research Partner Lunch for people with lived experience, and a sponsored Early and Mid-Career Researcher networking event. DRIVE CP allocated AUD$100,000 to training and professional development, including some small grants, to support EMCRs working in early diagnosis and early intervention in CP, to be distributed over the next 2-3 years. DRIVE CP Investigators played a leading role in an international Universal Screening Summit in Pisa, Italy in September 2024. A Post-Doctoral Fellowship, based at Deakin University, to advance AI in Universal Screening was also awarded. DRIVE CP funded studies underway include the VIP (Very early Intervention in Preterm babies) Trial, Early Communications in CP Trial, and Wearable Infant Sensor Enabled (WISE) at Home study.

Investigators: Prof Iona Novak, Prof Roslyn Boyd, A/Prof Leanne Sakzewski, Dr Dana Bradford, Prof Michael Fahey CIF, Prof Nadia Badawi, A/Prof Tracy Comans, Dr Catherine Morgan, Prof Alicia Spittle, Prof Svetha Venkatesh.

Funding: This project is funded by NHMRC Centre of Excellence (APP2015843) A$ 3M. Managed by the University of Sydney.

VISIBLE[8]: Vision intervention for Seeing Impaired Babies through Learning and Enrichment

Visual impairment is prevalent in 40-50% of children with cerebral palsy (CP), often due to neurological impairments rather than ocular lesions. in about 10% of cases, the condition is severe. Despite its prevalence, vision difficulties are frequently overlooked, highlighting the urgent need for evidence-based interventions for infants with cerebral visual impairment (CVI).

The VISIBLE is a world-first multisite randomised controlled trial (RCT) that focuses on an early vision-aware and parent-directed environmental enrichment program. The study aims to assess the feasibility, acceptability, and efficacy of the VISIBLE program in improving visual function, developmental outcomes, and parent-infant emotional and relational development compared to standard care. Developmental therapists provide parent training, information, and demonstration of appropriate activities for the child either in the family home or via telehealth. Children are then assessed at 12 months corrected age on a range of measures including vision, cognitive and motor outcomes. A series of nine parent booklets were designed and given to parents in the VISIBLE group to provide information based on the needs of the infant and the family. Recruitment concluded in 2024, successfully enrolling 45 children: 14 in QLD ,6 in WA, 11 in PISA, 7 in Georgia EU, and 7 in Cincinnati, USA.

We are continuing to communicate with all active sites and hold regular meetings. An abstract on our preliminary study findings has been accepted to the International IAACD meeting in Heidelberg in June, 2025 and the American Academy for Cerebral Palsy and Developmental Medicine (AACPDM) for their 79th Annual Meeting in October 2025.

Contact Details: Prof Roslyn Boyd, VISIBLE CIA, E: r.boyd@uq.edu.au, gedincp@uq.edu.au

Chief Investigators: Prof. Roslyn Boyd, Prof. Andrea Guzzetta, Dr Alison Salt, Prof. Catherine Elliott, Prof. Glen Gole, Dr Swetha Philip, Prof. Nadia Badawi, Prof. Stephen Rose, Dr Jurgen Fripp, Dr Kerstin Pannek, Dr Nana Tashivilli, Dr Ana Bedosivilli, Dr Terry Swartz, Dr Karen Harpster.

Funding: Cerebral Palsy Alliance grant PG15717 (2018-2022) $172,730, Child Health QLD Foundation

ENACT[9]: ENvironmental enrichment for infants; parenting with ACT- an innovative intervention for infants with higher likelihood of being Autistic.

Autism is a complex neurodevelopmental condition characterized by difficulties in social communication and the presence of repetitive and restricted interests and activities. Research indicates that infants with a first-degree autistic relative have a higher likelihood of being autistic themselves.

Our team is evaluating the efficacy of ENACT, an innovative early parenting program designed for parents of infants at elevated risk of autism. The program aims to support parents' mental health during pregnancy and postnatally, and to foster early back-and-forth social interactions with their baby from the first weeks of life. This approach helps parents build confidence in reading and responding to their baby's cues, laying a crucial foundation for the child's development.

Recruitment and Methodology: We have recruited mothers and families early, from pregnancy up to 7 weeks of age. In this randomized controlled trial, families were randomly assigned to either receive the ENACT intervention or usual care. The ENACT program combines mental health support for parents with a social reciprocity intervention for babies, focusing on parents adapting to their baby's pace and style. Families in the intervention group received access to an e-course, ENACT101, on the edX platform, and clinical telehealth consultations via Zoom with Dr.Jacqui Barfoot. All participating families received developmental reports from our developmental pediatrician, Dr.Andrea McGlade, following the 12-month assessment.

Participation Criteria: To participate, infants needed to have a first-degree autistic relative (parent or sibling). We have successfully recruited 52 families from Queensland, Newcastle, Melbourne, and Darwin. Recruitment closed in October 2024, and data collection will conclude in October 2025.This study represents a significant

[8] **VISIBLE: https://qcprrc.centre.uq.edu.au/project/visible-vision-intervention-seeing-impaired-babies-learning-through-enrichment-0**

[9] **ENACT: https://qcprrc.centre.uq.edu.au/project/enact**

step towards understanding and supporting the early development of infants at risk of autism, with a focus on enhancing parental mental health and fostering early social interactions.

Contact Details: Study Coordinator uqenact@uq.edu.au

Chief Investigators: Dr Koa Whittingham, Dr Andrea McGlade, Dr Kavi Kulasinghe, Dr Amy Mitchell, Prof. Roslyn Boyd, A/Prof. Honey Heussler.

Research Team: Dr Jacqui Barfoot

Funding: UQ Graduate School Scholarships for Dr Andrea McGlade and Dr Kavindri Kulasinghe.

Publications: Whittingham, K. et al (2020). *BMJ Open*, *10*(8), e034315. https://doi.org/10.1136/bmjopen-2019-034315

Neurorehabilitation

Promoting Physical activity, therapy and gross motor skills for children

ACTIVE STRIDES-CP[10]: Randomized trial of intensive rehabilitation (combined intensive gait and cycling training) for children with moderate to severe bilateral cerebral palsy.

Active Strides-CP is an innovative physiotherapy program designed to improve body functions, activity, and participation outcomes for children with moderate to severe bilateral cerebral palsy (CP). This study aims to compare the effectiveness of Active Strides-CP to usual care in a large, multi-site, randomized waitlist-controlled trial.

For children with moderate to severe bilateral CP who are marginally ambulant, gross motor capacity typically peaks between 6-7 years of age, followed by a clinical decline that affects their ability to engage in health-enhancing physical activity.

Study Design and Recruitment: We aim to recruit 150 children with bilateral CP, aged 5-15 years, classified in GMFCS levels III and IV. Participants will be stratified by GMFCS level, age bands (5-10 years; 11-15 years), and trial site, then randomized to receive either:

- Active Strides-CP: 8 weeks of therapy, twice weekly for 1.5 hours in clinic, plus 2-4 fortnightly home visits or remote telehealth sessions (total of 8 sessions, 32 hours).
- Usual Care

Active Strides-CP Components: The program includes Functional Electrical Stimulation Cycling, Partial Body Weight Support Treadmill Training, overground walking, adapted community cycling, and goal-directed training.

Outcome Measures: Outcomes are assessed at baseline, immediately post-intervention (9 weeks), and at 26 weeks post-baseline to evaluate the retention of treatment effects. The primary outcome is the Gross Motor Function Measure-66. Secondary outcomes include habitual physical activity, cardiorespiratory fitness, walking speed and distance, community participation, mobility, goal attainment, healthcare use, and quality of life.

Ethics and Study Sites: The study has received approval from the Human Research Ethics Committees of Children's Health Queensland Hospital and Health Service, The University of Queensland, The University of Melbourne, and Curtin University.

The study is being conducted at five sites in Australia: Queensland Children's Hospital, Cerebral Palsy Alliance in Sydney, Health Strides Foundation in Perth, Royal Children's Hospital, and Monash Health in Victoria. To date, we have recruited 34 children, with 15 allocated to the Active Strides group and 19 to the waitlist group. Of these, 13 children from the waitlist group have completed Active Strides. Overall, 28 children have completed the study, and 6 are still participating.

This study represents a significant effort to enhance the physical health and quality of life for children with bilateral CP through targeted physiotherapy interventions.

Contact details: Study Co-ordinator Dr Pam Gabrovska activestrides@uq.edu.au

Investigators: A/Prof. Leanne Sakzewski, Dr Dayna Pool, Dr Ellen Armstrong, Dr Sarah E Reedman, Prof. Roslyn N Boyd, Prof Catherine Elliott, Iona Novak, Prof. Stewart G. Trost, Robert S Ware, Prof. Tracy Comans, Dr Rachel Toovey, Mark Peterson, Megan Kentish, Dr Sean A Horan, Prof Jane Valentine, Dr Sian Williams.

Funding: this study is supported by a National Health and Medical Research Council Clinical Trials and Cohort Study grant (NHMRC 2006867)

Publications: Sakzewski, L. et al (2023). *BMJ Open*, *13*(3), 1-15. https://doi.org/10.1136/bmjopen-2022-068774

[10] **Active Strides: https://qcprrc.centre.uq.edu.au/ActiveStrides**

Active Start Active Future [11] : an early intervention targeting physical activity participation and sedentary behaviour in young children with cerebral palsy.

Active Start Active Future aims to increase physical activity participation in young children with cerebral palsy by empowering parents who are key to making family lifestyle changes. After one year, Active Start Active Future has recruited 17/40 children with CP (3-7 years), classified in GMFCS levels II-V randomised to receive either (i) Active Start Active Future, an 8-week intervention for 1 hour per week in any setting or (ii) usual care followed by delayed intervention. Active Start Active Future has been delivered across the Sunshine Coast to Gold Coast in families' homes and communities. Families have chosen diverse goals including swimming, cycling, playground play, cricket, table tennis, footy, dance and touch rugby. Intervention acceptability and experiences of PA participation will be explored using a qualitative descriptive approach, with very positive initial feedback.

Testimonial:

"Active Start Active Future Intervention came along at a time when I really needed some help with working out how to engage my son in extracurricular physical activity. I found the intervention really helpful for understanding his physical activity requirements as well as working out how best to engage him. The school team were easily convinced to get on board and this intervention really helped drive more movement for Archie at school for which I am very grateful. We continue to use the knowledge gained from this intervention and bought him an activity tracking watch to try to get a better idea of his general movements and how this interacts with his sleep." Yvette mum of A.

Project Contact: Dr Gaela Kilgour, g.kilgour@uq.edu.au
Chief Investigators: Dr Gaela Kilgour, Dr Sarah Reedman, A/Prof. Leanne Sakzewski, Dr Emma Beckman, Prof. Roslyn Boyd.
Publications: Kilgour, G. et al, (2025). *BMJ Open*, *15*(5), e087697. https://doi.org/10.1136/bmjopen-2024-087697

Run 4 Health: Frame Running[12]

Frame Running (formerly Race Running) is a sport designed specifically for people who are not able to run due to severe motor and coordination impairments. A specialized running frame with low rolling resistance allows athletes with high support needs to run easily over ground. Frame Running is inclusive and fun! It can be used as a mode of transport, for recreational and competitive physical activity. Frame Running is highly beneficial for young people with cerebral palsy (CP) and a range of neurological conditions. We know that weight bearing exercise is important for improving muscle strength and bone mineral density, the supported position on a Frame Runner allows athletes to engage in moderate to high intensity physical activity. Athletes with motor impairments may have limited opportunities to engage in more intense physical activity, and the intensity of activity is important for maintaining health and fitness.

Testimonial:

"His respiratory changed, his sleep pattern changed. He did it for up to an hour, twice a week. He never stopped. He never had a break... He just enjoyed it. If we could do that twice a week for the rest of his life. I would do it in a heartbeat. It was, my word, would be life changing, absolutely. Life changing."
Parent of Participant

Run4Health is a multi-site trial that was conceived and developed by Dr Sarah Reedman (Post doctoral fellow at the QCPRRC, The University of Queensland). Dr Reedman recognised Frame Running as a potential means to improve poor cardiovascular health in young people with CP, which is linked to high rates of morbidity and mortality in adults with CP. In 2021, Dr Reedman was awarded an Early Career Research Project Award by the Children's Hospital Foundation to test the feasibility of the 12-week Run4Health program. Following the successful recruitment of 12 participants across three sites (Brisbane, Sunshine Coast and Cairns), the Run4Health team then secured a highly competitive Early to Mid-Career Researchers grant from Medical Research Futures Fund (MRFF) to expand the study. Additional funding allowed for the inclusion of four new training sites (Sydney: Randwick and Westmead, Perth and Gold Coast) and additional outcome measures, based on feedback from the Run4Health consumer group. The expanded study is investigating the effects of

[11] **Active Start:** https://qcprrc.centre.uq.edu.au/project/active-start-active-future-early-intervention-targeting-physical-activity-participation-and-sedentary-behaviour-young-children-cerebral-palsy
[12] **Run4Health:** https://qcprrc.centre.uq.edu.au/project/run4health-cp

frame running on aerobic capacity, bone mineral density, sleep, pain and gross motor function in young people with CP and similar neurological conditions.

The Run4Health team are collaborating with partner organisations, such as Dejay Medical, World Ability sport and Little Athletics Australia. These organisations provide the invaluable experience required to translate study findings and improve the accessibility, quality and sustainability of frame running opportunities for young people. Our team have built on these community relationships by hosting frame running come-and-try days in 2024 across South-East Queensland sites and in Cairns. At our Perth site, the research team at The Healthy Strides Foundation led by Dr Dayna Pool partnered with the West Coast Eagles, resulting in access to a state-of-the-art training venue, bone density scanning equipment and volunteer support from the players to encourage our Frame Running athletes.

The research team has also worked to raise the profile of Frame Running as a potential therapy within professional networks. In 2024, Dr Sarah Reedman discussed frame running with clinicians at the Australasian Academy of Cerebral Palsy and Developmental Medicine (AusACPM) conference in Cairns. Dr Sarah Reedman has presented to cohorts of international researchers including to a team of Frame Running researchers at the Karolinska institute in Stockholm and as an invited keynote speaker at the 2023 World Abilitysport Conference for People with Cerebral Palsy at the University of Edinburgh.

Run4Health Post-doc, Dr Ellen Armstrong (The University of Queensland), is leading the qualitative study arm with the help of the research consumer group. The qualitative interviews completed to date have presented insight into the logistical challenges as well as the immense benefits obtained through families participating in Frame Running. The outputs from this qualitative data will contribute to improving the sustainability of frame running opportunities for young people in Australia.

Our lived experience reference group was active in 2024 with contributions from young people living with CP, Max Bailey-Jensen and Finley Coll, as well as parents Samantha Bailey, Amanda Coll and Yvette Pollock. The group met several times, most recently to begin co-designing translation materials. These will include videos and social media content to help make the results of the research accessible to the community and create long lasting impact.

The MRFF-funded Run4Health trial is now recruiting at sites in Brisbane, Sunshine Coast, Cairns, Perth, and Gold Coast with Sydney on track to start recruiting in early 2025. Data collection will continue until April of 2026.

Project Contact: Study Coordinator Mr Edward Hayes-Woods, run4healthcp@uq.edu.au

Chief Investigators: Dr Sarah Reedman, A/Prof. Leanne Sakzewski, Dr Stina Oftedal, Dr Matthew Ahmadi, Dr Ellen Armstrong, Dr Andrea Burgess, Dr Tamara Blake, Dr Syed Afroz Keramat, Dr Iain Dutia, Dr Dayna Pool, Prof. Cathie Sherrington, Ms Lynda McNamara, Ms Kerry West, Dr Emma Beckman, Prof. Roslyn Boyd.

Funding: This project is funded by the NHMRC Medical Research Future Fund (2022624).

Publications: Reedman, S. E. et al, (2022). *BMJ Open*, *12*(4), e057668-e057668. https://doi.org/10.1136/bmjopen-2021-057668

PARTICIPATE-CP: Optimising participation in physically active leisure for children with cerebral palsy: A randomised controlled trial.

Most Australian children do not get enough physical activity each day for growth and healthy development. In the recent 2018 Active Healthy Kids Australia Physical Activity Report Card, Australia scored a D- for overall physical activity level, placing us in a tie for 32nd place out of 49 participating countries. Children with cerebral palsy (CP) are particularly at risk for low levels of physical activity and low rates of participation in community sports and physical recreation. Effective ways to promote physical activity in children with CP are desperately needed. We have developed Participate-CP, a model of participation-focused therapy to promote participation in physical activities has been developed to respond to this emerging problem. Participate-CP recognizes the role of environmental factors in restricting participation for youth with disabilities. We have tested Participate-CP in a large phase III multi-site randomised controlled trial across metropolitan (Brisbane, Sydney and Perth) and regional (Cairns, Newcastle) sites in Australia and Auckland in New Zealand. This is the only randomised controlled trial of a participation focused intervention that has been conducted worldwide. We recruited 110 children with CP, average age 10 .4 years, who were randomised to receive Participate-CP (n=56) or to usual care (n=54). The usual care group were able to receive Participate-CP after a 6-month waitlist period. We found that Participate-CP led to greater changes in perceived performance of participation goals, fewer barriers to participation, expected goal attainment and greater frequency of community participation. We are currently finalising writeup of the primary outcomes paper. We have presented the results of Participate-CP at National

and International conferences and conducted a number of instructional workshops including at the Australasian Academy of Cerebral Palsy and Developmental Medicine (1 presentation and 1 instructional workshop), European Academy of Childhood Disability (1 oral presentation and 1 more in depth mini symposium) and American Academy of Cerebral Palsy and Developmental Medicine (AACPDM – 1 morning seminar and 1 oral presentation). The abstract at the AACPDM was nominated as one of the top 10 for the prestigious Gayle Arnold Award for best paper. Abstracts from these three conferences have been published in Developmental Medicine & Child Neurology.

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Chief Investigators: A/Prof. Leanne Sakzewski, Prof. Catherine Elliott, Prof. Roslyn Boyd, Prof. Jenny Ziviani, Prof. Iona Novak, Prof. Stewart Trost, Prof. Annette Majnemer.

Funding: National Health and Medical Research Council project grant (1140756).

Publications: Sakzewski, L. et al, (2023). *BMJ Open*, *13*(10), e075570-e075570. https://doi.org/10.1136/bmjopen-2023-075570

HABIT-ILE & Pre-school HABIT-ILE: A randomised trial of Hand Arm Bimanual Intensive Training Including Lower Extremity training for children with bilateral cerebral palsy.

HABIT-ILE & Pre-school HABIT-ILE: A randomised trial of Hand Arm Bimanual Intensive Training Including Lower Extremity training for children with bilateral cerebral palsy.

There has been a paucity of evidence for effective interventions to improve motor outcomes for children with bilateral CP. We have a new motor learning approach that integrates an intensive model of bilateral upper limb and lower extremity training (Hand Arm Bimanual Training + Intensive Lower Extremity: HABIT-ILE) which has been pilot tested with strong effects to improve manual ability and gross motor function. HABIT-ILE is delivered using a “day camp” model with groups of up to 12 children with bilateral CP. We have conducted a pragmatic, single-blind randomised controlled trial (RCT) for children with bilateral CP to evaluate the effects of HABIT-ILE versus usual care on manual ability and gross motor function immediately post intervention. Secondary outcomes were neuroplasticity changes in brain structural integrity plus functional and structural connectivity. Other secondary outcomes included walking endurance, self-care, mobility, performance of and satisfaction with individualized goals, and quality of life immediately post intervention and retention at 26 weeks after the intervention. Participants were recruited across the three sites (Brisbane, Sydney, and Perth). Recruitment for the study has been completed, with 90 children participating from across the three sites. Thirteen camps were held across Brisbane (5), Sydney (5), and Perth (3). We found HABIT-ILE compared to the control group led to greater changes in manual ability, goal performance, and self-care, but there were no differences for gross motor function or walking efficiency. The HABIT-ILE outcomes paper has been submitted for publication. Results were presented as an oral presentation at the American Academy of Cerebral Palsy and Developmental Medicine in September 2023 in Cincinnati, at the European Academy of Childhood Disability (May 2024, Bruges, Belgium) and Australian Academy of Cerebral Palsy and Developmental Medicine (August 2024, Cairns Australia).

A second study of HABIT-ILE for preschool aged children with cerebral palsy was completed in December 2024. In total, 28 children were recruited and randomised to receive Preschool HABIT-ILE (n=16) or usual care (12). After a 6-month waitlist period, the usual care group went on to complete the Preschool HABIT-ILE intervention (n=12). We are currently analysing and writing up the study. PhD candidate, Kate McLeod presented preliminary results looking at characteristics of best responders at the Australasian Academy of Cerebral Palsy and Developmental Medicine Conference in Cairns 2024. We have abstracts accepted to present at the American Academy of Cerebral Palsy and Developmental Medicine in New Orleans in October 2025.

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Chief Investigators: A/Prof. Leanne Sakzewski, Prof. Roslyn Boyd, Prof. Yannick Bleyenheuft, Prof. Iona Novak, Prof. Catherine Elliott, Dr Nicholas Dowson, Dr Cath Morgan, Dr Kerstin Pannek.

Research team: Dr Andrea Burgess, PhD OT. E: a.burgess@uq.edu.au

Funding: National Health and Medical Research Council project grant (1144846); Ramaciotti Health Investment Grants, (2020-2022).

Publications: Sakzewski, L et al., (2021*BMJ Open*, *11*(3), 1-11. https://doi.org/10.1136/bmjopen-2020-041542

Parenting, wellbeing and social skills interventions

Improving wellbeing & social skills for children and their families

PEERS® Plus[13]: A mixed methods randomised trial of the Program for the Education and Enrichment of Relational Skills (PEERS®) for Primary and Early High School children with acquired brain injury and cerebral palsy.

PEERS Plus is a study for primary school-aged children with acquired brain injury and cerebral palsy. It aims to determine if PEERS Plus, a novel creative and performing arts-based social skills program based on PEERS® (Program for the Education in Enrichment of Relational Skills), improves the social competency of primary school-aged children with brain injury. Primary school-aged children participate in a 90 min weekly session for 12 weeks, while their caregiver attends a separate parent group designed to enhance social coaching. At three time points (i.e., before commencing group sessions, midway, and on program conclusion), each primary school-aged child and their caregiver take part in a 60 min occupational therapy session where they are provided with the opportunity to collaboratively set and review meaningful and individualised 'social goals' they wish to achieve through their involvement. Primary school-aged children and their caregiver work together to complete homework missions each week to aid goal attainment and encourage the skills they have learnt in the group to be carried over to their home, school, and community environments. 7 children were recruited in the first cohort. To date, 8 children have been recruited. The first intervention group concluded in November 2024 and the waitlist group is underway at the time of reporting. One additional group is planned for early 2025, with data collection planned until late 2025.

This program will contribute to research evidence for how to improve social functioning in primary school-aged children with brain injuries. Bianca Thompson has joined QCPRC taking on the Peers for Primary school aged children in her PhD project. Professionally trained as an Occupational Therapist, Bianca is passionate about working with children and young people to ensure their fundamental right to participation and inclusion ensues. Bianca's PhD will focus on developing a novel creative and performing arts-based social skills intervention that aims to improve the social competency of primary school-aged children with cerebral palsy and acquired brain injury. Bianca is supervised by a team of highly experienced researchers, including A/Prof. Leanne Sakzewski and Dr Jacqui Barfoot.

Testimonial:
"Our daughter got a lot of confidence from doing this and she went from hiding on her iPad when we went camping to engaging every adult, finding what they've been doing, what they do for work, asking them questions, same with every child, inviting them over to the van, talking to people in class which she never used to do, she used to be a quiet shy mouse. She has stepped out of her comfort zone. It's actually amazing to see her want to talk to people and be keen and eager"
Parent of Participant

Contact details: Study coordinator Sarah Goodman, E: s.goodman@uq.edu.au
Investigators: A/Prof. Leanne Sakzewski, Dr Rosemary Gilmore, Nicola Hilton, Megan Kentish, Prof. Roslyn Boyd.
Funding: This study is supported by a project grant from the National Injury Insurance Scheme Queensland (NIISQ).
Publications: Gilmore, R. et al, (2024). *Disabil Rehabil*, *46*(3), 515-523. https://doi.org/10.1080/09638288.2023.2167008
Thompson, B. et al (2025). *BMJ Open*, *15*(1), e095354. https://doi.org/10.1136/bmjopen-2024-095354

PEERS Telehealth[14]: Mixed methods RCT of telehealth program for the education and enrichment of relational skills (PEERS®) for teens with brain injuries

This mixed methods RCT of telehealth PEERS® for teens aims to test the effectiveness, acceptability and feasibility of a telehealth group delivered Program for the Education and Enrichment of Relational Skills (PEERS®) for high-school aged teenagers aged 11–17 years with acquired brain injury (ABI) or cerebral palsy

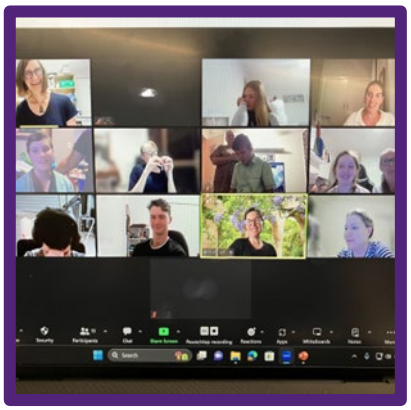
[13] **PEERS Plus:** https://qcprrc.centre.uq.edu.au/PEERSPlus
[14] **PEERS Telehealth:** https://qcprrc.centre.uq.edu.au/project/peers-telehealth-helping-teens-acquired-brain-injury-and-cerebral-palsy-improve-social-skills

Testimonial:
"I knew they were going to get something out of it, but I didn't know that I was going to get so much out of it, too." [M5]

"I really hope more kids and families get this opportunity because it is incredibly special." [M4]

(CP). In this pilot randomised controlled trial, we recruited 24 teenagers with brain injuries and their caregivers across Queensland and randomise them to receive telehealth PEERS® or be waitlisted for 6 months. Telehealth PEERS® for teens will be run for groups of 8 youths and their caregivers. Outcomes will be measured before the intervention, after the telehealth PEERS® for teens program, and then 3 months later (6 months post baseline) and 9 months later (12 months post baseline). Focus groups using semi-structured interviews will be conducted separately with teens and caregivers at the end of the program to explore experiences of participation in telehealth PEERS® for teens. A range of process related outcomes (e.g., attendance rates, adherence to homework, "issues register") will be collected to understand potential barriers and facilitators to implementation of the program in clinical practice. We anticipate that youth with brain injuries who complete telehealth PEERS® for teens will have improved confidence in social situations and develop skills to make and keep friends with an overarching positive impact on quality of life. Importantly, we anticipate that caregivers will develop the skills to coach their teen in challenging social situations, and these skills will enable sustainability of outcomes of this intervention in the longer term.

Telehealth PEERS® comprises 14 weekly sessions of 90-minute duration (45 minutes PEERS®, 15 minutes break, 30 minutes PEERS®). A concurrent parent group is run in a different virtual zoom room. The parent group run for 1 hour, in order to allow parents time to support their child to set up and join the teen group. Telehealth PEERS® will be delivered using zoom, with breakout rooms for smaller within group activities. Three individual sessions will be offered to each child-caregiver dyad. The first individual session focuses on collaborative goal setting of 2-3 social participation goals. A further two sessions are offered around the mid and endpoint of the program. Timing of individual sessions are flexible and reflect the needs of families. The commercially available PEERS treatment manual includes topics such as conversational skills, electronic communication, choosing appropriate friends, using humour, entering and exiting conversations, hosting and attending get-togethers, good sportsmanship, handling teasing and embarrassing feedback and bullying, changing a bad reputation and handling disagreements, rumours, and gossip. Each adolescent session includes a homework review, didactic lesson with modelling, role playing, and behavioural rehearsal and socialization activities. The caregiver group comprises problem-solving regarding social coaching of adolescents, review of adolescents' didactic lessons for the week, and homework assignment. The first treatment group concluded in November 2023 with 5 participants. The first waitlist group is underway at the time of reporting with 6 participants. The study will run the last cohort in February 2025 and has finalised recruitment. Data analysis will start soon after the closure of the project.



Contact details: Study coordinator Sarah Goodman, E: s.goodman@uq.edu.au
Investigators: A/Prof. Leanne Sakzewski, Rosemary Gilmore, Nicola Hilton, Megan Kentish, Prof. Roslyn Boyd.
Funding: This study is supported by a project grant from the National Injury Insurance Scheme Queensland (NIISQ).
Publications: Sakzewski, L. et al, (2025). *BMJ Open*, *15*(2), e081843. https://doi.org/10.1136/bmjopen-2023-081843

PACT-Online[15]: Randomised Trial of Parenting Acceptance and Commitment therapy for Parents of children with neurodevelopmental disabilities

PACT-Online: Randomised Trial of Parenting Acceptance and Commitment Therapy for Parents of children with neurodevelopmental disabilities.
Leveraging from the achievements of PACT and Early PACT, Dr Koa Whittingham and the team have been further awarded $1.45M from a NHMRC MRFF Clinician Researchers grant early in 2023 to conduct a wider RCT of the updated PACT Online program. The newly launched PACT Online project is a four-year Australia-wide Hybrid randomised controlled trial focussing on both effectiveness and implementation, with 300 families

[15] **PACT Online: https://qcprrc.centre.uq.edu.au/supportforparentspact**

of children aged 0-10 years diagnosed with, or at increased likelihood of, neurodevelopmental disabilities (including cerebral palsy, autism, intellectual impairment, and foetal alcohol spectrum disorder) and/or developmental delay.

The RCT will assess the impact of PACT Online on the parent-child relationship (emotional availability), parenting, parent and child health, adjustment and wellbeing, and parent and child regulatory abilities as measured by heart rate variability. Implementation will be examined grounded in the consolidated framework for implementation research (CFIR) and through qualitative interviews with parents, preparing PACT for broader translation. Recruitment launched in 2024 and an early spike in demand was seen with 241 expressions of interest received from families. Since then, 83 families have enrolled in the study and 24 families have completed the PACT Online intervention which includes both self-paced online modules and one-on-one telehealth sessions with a therapist. Qualitative feedback received so far from families who have already completed the program has been positive and we are seeing success on parent-selected child, parenting, and self-care goals. The first group of families assigned to the waitlist control group are now completing the intervention.

Contact details: Dr Grace Kirby (Study Coordinator) pactonline@uq.edu.au

Chief Investigators: Dr Koa Whittingham, Prof. Roslyn Boyd, Prof. Iona Novak, Dr Amy Mitchell, Dr Natasha Reid, Dr Syed Afroz Keramat, A/Prof Kristelle Hudry, A/Prof Josephine Barbaro, Dr Jacqui Barfoot.

Research Team: Dr Grace Kirby, Dr Jaqui Barfoot

Funding: This work is supported by an NHMRC MRFF Clinician Researchers – Nurses Midwives and Allied Health Grant (2023688) $1,458,919.95 (2023-2026)

AutInsight – A parent support program for parents of autistic children informed by autistic adults.

Autism (Otherwise known as autism spectrum disorder) is a neurodevelopmental disability characterised by differences in social emotional communication as well as restrictive and repetitive behavioural patterns. In Australia, approximately 1 in 31 children are diagnosed with autism, with the numbers increasing every year. Most autistic individuals are between 5 and 19 years old at point of diagnosis as reported in the latest survey of disability, ageing and carers conducted by the Australian Bureau of Statistics in 2024. The quality of the parent-child relationship, including attachment, is a strong predictor of many childhood outcomes—including emotional regulation, language, and empathy - and has flow-on effects into adulthood. Within the current published research literature, no research exists relating to what kind of parenting autistic individuals desired from their parents or what they think would be important for parents of autistic children to understand. Most intervention research has largely been informed by reports from family members or observations by professionals, rather than autistic people themselves. There is an increasing impetus and importance of involving autistic people with lived experience to inform interventions and research that will influence them and their community.

Seeing the need and knowledge gap, Sarah Lee (PhD Candidate; Clinical Psychologist) has taken on the opportunity to conduct a PhD study with QCPRRC's Dr Koa Whittingham. The aim of Sarah's PhD is to understand what contributes to "good" parenting according to autistic people, and to develop and test a consumer-informed parent support program grounded in this understanding for parents of autistic children. This was achieved through 4 studies: a thematic analysis, a systematic review, a measurement development study, and finally, a pilot randomised controlled trial of a parent support program, AutInsight. The proposed program will seek to help parents i) understand autism from the inside out, drawing on the perspectives of autistic adults; ii) cultivate insight into their child, including the specific constellation of characteristics of autism that their child experiences; and iii) develop a positive relationship with their child that is rich in parental sensitivity. Ms Lee has published four papers in Review Journal of Autism and Development Disorders (https://doi.org/10.1007/s40489-024-00482-x) and Journal of Autism and Developmental Disorders (https://doi.org/10.1007/s10803-023-06188-z; https://doi.org/10.1007/s10803-024-06630-w; https://doi.org/10.1007/s10803-025-06764-5) highlighting the current outcomes of the studies. Ms Lee has submitted her thesis in December 2024 and awaiting feedback from her examiners.

PhD Candidate: Sarah Lee, sarah.jy.lee@uq.edu.au

Supervisors: Dr Koa Whittingham (Principal), Dr Amy Mitchell (Associate).

Translational research

Practical approaches to research for children with cerebral palsy

CP-KASP (Cerebral Palsy Knowledge, Advocacy Skills, and Support Program): co-designed with families to optimise evidence-based support through the NDIS.

Testimonial:
"I would like to assist other families to access services without the difficulty I experienced. I had to advocate very hard to get support and there was no useful guidance on processes." Caregiver co-designer

Parents have expressed the need for advocacy skills and a deeper understanding of evidence-based therapies to navigate the NDIS system effectively. With 186 available therapies and over 1,000 service providers, making informed choices can be overwhelming.

Launched in 2024, CP-KASP is a groundbreaking, web-based, multi-component platform co-designed with individuals who have lived experience of CP or CP-like condition, alongside allied health professionals. This peer-driven and peer-led initiative aims to fill the gap in capacity-building programs for parents of children with cerebral palsy and similar conditions. CP-KASP will be developed, tested, and implemented with families during the early years to enhance their knowledge and skills. The platform will empower parents to navigate the NDIS, advocate effectively for their child and family, and create evidence-informed management plans to ensure timely and appropriate interventions. We have successfully recruited members for our consumer advisory and co-design groups. Focus groups to develop platform content will commence in early 2025.

Testimonial:
"It's important more than ever for families to get 'bang for their buck' in their NDIS packages. Families are often navigating not only a new health diagnosis but also the health system and disability system at a time when they are likely grieving and needing support themselves" OT co-designer

Contact details: Study Coordinator Dr Pam Gabrovska, p.gabrovska@uq.edu.au, and Project Officer Mrs Amanda Clayton (consumer), amanda.clayton@unisq.edu.au

Chief Investigators: A/Prof Leanne Sakzewski, Dr Fiona Russo (consumer), Prof Roslyn Boyd, Dr Koa Whittingham, Dr Shaneen Leishman (consumer), Dr Andrea Burgess, Dr Katherine Benfer, Dr Zephanie Tyack, A/Prof Jodie Copley, Prof Robert Ware, Dr Sarah McIntyre

Associate Investigator: Dr Syed Afroz Keramat (Health Economist)

Post-doctoral Fellow: Dr Elloise Hummell (consumer)

Funding: This project is funded by MRFF consumer-led research grant (APP 2028202)

TRANSMIT - TRANslation Strategy iMprovIng funcTion

Significant progress was made in 2024 on our NHMRC Partnerships Project Grant ($1.42Million; 2022-2027) TRANSMIT: a multifaceted knowledge TRANslation Strategy iMprovIng funcTion in children and youth with cerebral palsy. This study aims to improve health literacy and outcomes using a comprehensive knowledge translation (KT) strategy to close the research to practice gap. In partnership with families, clinicians, and NDIS policymakers, an extensive co-design process was undertaken to build our prototype mobile Health (mHealth) app, officially named cpThrive by our Research Partners with lived experience. cpThrive curates and filters biomedical research findings—such as clinical practice guidelines and intervention effectiveness data—to match individual child goals and family priorities. The app aims to improve functional outcomes, reduce healthcare costs, and empower people in self-management. KT products, clinical decision-making algorithms, and other content, has been developed for embedding within the app. A clinical trial evaluating cpThrive as a decision support tool is in establishment stage. Outreach activities including conference presentations, workshops and an international crowdsourcing project have also been undertaken.

Investigators: Prof Iona Novak, Prof Nadia Badawi, Dr Catherine Morgan, A/Prof Leanne Sakzewski, Prof Roslyn Boyd, Prof Michael Fahey, Prof Joshua Burns, Dr Michelle Jackman, Dr Dana Bradford, Prof Maria McNamara

Funding: This project is funded by NHMRC Partnership Project Grant (APP2015018). Managed by University of Sydney

KiTE CP[16]: Early identification of infants with cerebral palsy: implementation study.

The aim of KiTE CP is for the implementation of early identification and diagnosis of infants who have cerebral palsy (CP) or who are at high-risk of CP by six months-of-age. Infants born extremely preterm (gestational age <28 weeks), extremely low birthweight (birth weight <1000 g) or have neonatal encephalopathy or neurological risk factors (e.g. congenital disabilities, seizures, stroke) were recruited in Victoria, New South Wales and Queensland. Infants are assessed in the first six months of life and then again at 2-years corrected age. Families completed the 2-year assessment with researchers over the phone, which has avoided the necessity of a clinic or home visit during the COVID-19 pandemic.

In Queensland, recruitment commenced in June 2020 at Queensland Children's Hospital and Royal Brisbane Women's Hospital) using the 'Early detection of infants at risk or with cerebral palsy: QLD Clinical network (QEDIN-CP)' to help identify eligible infants. Recruitment in Queensland was expanded to Townsville and Cairns, with 194 infants enrolled in the KiTE-CP study in Queensland (597 recruited Australia-wide). The final the 2-year follow-up interviews were completed in July 2023. It is anticipated that KiTE CP may assist in identifying CP earlier than is currently possible. Children at-risk could then receive targeted early intervention programs during critical periods of brain development, potentially improving long-term developmental outcomes. A preliminary paper on baseline data has been published in the Journal of Pediatrics.

Contact Details: QEDIN Clinical Coordinator, QCPRRC@uq.edu.au

Chief Investigators: Prof. Alicia Spittle, Prof. Iona Novak, Prof. Roslyn Boyd, Dr Cathy Morgan, Prof. Paul Scuffham, Prof. Russell Dale, Prof. Paul Colditz, Prof. Michael Fahey, Prof. Rodney Hunt, Dr Kerstin Pannek

Funding: This project is funded by NHMRC partnership grant (APP158200)

Publications: Kwong, A. K. L. et al, (2024). *The Journal of Pediatrics*, *268*. https://doi.org/10.1016/j.jpeds.2024.113949

[16] **KiTE CP: https://qcprrc.centre.uq.edu.au/KiTE**

Population health

Assessing factors that influence the health of the paediatric population with cerebral palsy

School Readiness[17]: 4–6-year-old follow-up of randomised trials of neuroprotection and rehabilitation for children at risk of CP

In 2021, the teams at QCPRRC, Cerebral Palsy Alliance, Monash University and Perth Children's Hospital were collectively awarded $1.44M from the Medical Research Future Fund to follow up children who participated in our early intervention clinical trials (REACH, GAME, PACT & Early PACT) and Early Neuroprotection clinical trials (Protect ME), from QLD, NSW, VIC, and WA to determine the impact on school readiness outcomes in the 'School Readiness: 4–5-year-old follow-up of Randomised Trials of Neuroprotection and Rehabilitation for Children at risk of CP' study. Recruitment commenced in February 2022. To-date, 176 children have been recruited and completed the assessments (73 in Qld, 75 in NSW, 9 in WA, 17 in Victoria and 2 at Ohio State University, USA. Thus far, a further 13 are booked in for assessment across these sites.

School readiness is a framework for assessing profiles of strengths and vulnerabilities of the preschool child in the context of transition to school, and includes abilities in cognition, motor, physical activity, health, language, and readiness to learn, and is strongly linked to later academic attainment. The "School Readiness study" is the first study of its kind and data obtained from this study will help to determine the impact of early intervention (<6 months old) on school readiness of children identified as being at "high risk" of cerebral palsy in infancy. Preliminary findings from the study show children at high risk of CP in infancy are on average delayed in 3.4 to 7.5 out of 12 standardised assessments of key school readiness domains at school-entry age, depending on confirmation of CP diagnosis and severity of motor impairment.

Podium presentations of these preliminary research findings have been delivered at the American Academy of Developmental Medicine and Child Neurology (ACPDM) in 2023 and 2024, as well as at the Australasian ACPDM in 2024 and the European Academy of Childhood-onset Disability in 2024. At these conferences, the study team have also delivered a novel workshop on school readiness assessment in children with CP. In 2024, two consumer reference groups meetings were facilitated. Consumers have provided guidance on how to approach recruitment, assessment and reporting to maximise participation and further improve participant experiences, and are now working on the most impactful way of sharing findings to advocate for increased support in the transition to school for children with CP.

Contact Details: Study Coordinator Laura Gascoigne-Pees, schoolreadiness@uq.edu.au

Chief Investigators: Prof. Roslyn Boyd, Prof. Iona Novak, Dr Catherine Morgan, A/Prof. Leanne Sakzewski, A/Prof. Michael Fahey, Prof. Robert Ware, A/Prof. Tracy Comans, Dr Koa Whittingham, Dr Kerstin Pannek

Funding: This project is funded by MRFF Maternal First 2,000 Days and Childhood Health, APP2007292

Publications: Boyd, R. N. et al, (2023). *BMJ Open*, *13*(2), e068675-e068675. https://doi.org/10.1136/bmjopen-2022-068675

MRFF Australian CP Musculoskeletal Health Network[18]

In 2022 our team was awarded a Medical Research Future Fund (MRFF, $2.5M 2023-2027) for the 'The Australian CP Musculoskeletal Health Network' to conduct a longitudinal follow-up of 500 children with Cerebral Palsy (Gross Motor Function Classification Level II-IV-V) who don't ambulate independently. This 5-year study is assessing the Musculoskeletal Health in children aged 4-9 years at entry across 5 sites in QLD, NSW, VIC and New Zealand (NZ). While the brain lesion in children with CP is static the musculoskeletal health can decline progressively in non-ambulant children which may lead to Hip Displacement, Scoliosis and Bone Fragility. We will evaluate annual status and development of musculoskeletal health, hip displacement,

[17] **School Readiness:** https://qcprrc.centre.uq.edu.au/https%3A//qcprrc.centre.uq.edu.au/project/school-readiness

[18] **AusCP-MSK:** https://cre-auscpctn.centre.uq.edu.au/AusCPMSK

scoliosis, skeletal fragility, motor skills, nutrition and physical activity and evaluate health resource cost and consequences in children with CP. The assessments will be completed at a one-off appointment every year for 4 years. Recruitment has commenced at Queensland Children's Hospital (QLD) in February 2024 and the remaining sites will begin recruitment in 2025: The Royal Children's Hospital (VIC), The Children's Hospital at Westmead (NSW), Sydney Children's Hospital (NSW) and Starship Hospital (NZ).

Contact details: Study Coordinator Maddison Taylor auscp.msk@uq.edu.au.

Chief Investigators: Prof. Craig Munns, Prof. Roslyn Boyd, Prof. Peter Pivonka, Prof. Natasha Nassar, Prof. Stewart Trost, Assoc Prof. Judith Little, Assoc Prof. Kylie Tucker, Prof. Joshua Burns, Assoc Prof. Leanne Sakzewski, Dr Simon Paget, Nadia Badawi, Prof. Robert Ware, Prof. Tracy Comans, Dr Kate Willoughby, Dr Katherine Langdon

Post Doctoral Fellow: Dr Laura Bentley

Funding: This project is funded by MRFF $2.5M 2023-2027, APP2015970

Publications: Munns, C. F. et al, (2025). *BMJ Open*, *15*(4), e095526. https://doi.org/10.1136/bmjopen-2024-095526

Studies Concluded

Early PACT[19]: Parenting Acceptance and Commitment Therapy for children under 3 years of age

We know that when a likelihood of a diagnosis of CP is flagged, it is a stressful time for many families. Families have told us that they want support that is accepting, supportive and tailored to their needs. Our Early PACT study is a trial of an online support intervention grounded in Acceptance and Commitment Therapy (ACT) for parents of babies and young children (<3 years) where there is high likelihood of CP.

The Early PACT content was adapted from the PACT intervention trialled with families of children (4-10 years) with CP, with input from parents of babies identified as high risk of CP to adapt the content to suit the earlier timepoint. The PACT trial showed impacts on the parent-child relationship, parental mindfulness, and child quality of life and has been published in Behaviour Research and Therapy.

The Early PACT intervention has been designed to minimise parent burden and maximise parent support. The online content includes short videos, text, online activities, moments of reflection, guided mindfulness, acceptance and compassion exercises with a moderated discussion board and participants will also receive virtual consultations with an experienced clinician. All participants will receive early PACT, either immediately or after a short delay.

Early PACT concluded recruitment in 2023 with a total number of competing participants of 54. Data analysis is currently ongoing with the goal of submission for publication by mid-2025.

Chief Investigators: Dr Koa Whittingham, Dr Jeanie Sheffield, Prof. Roslyn Boyd

Research Team: Dr Jacqui Barfoot, earlypact@uq.edu.au.

Funding: Project is part of the program for the Advance Queensland Innovation Partnership Grant (2016-2020) $1,499,710. Cerebral Palsy Alliance Project Grant (PG11917: 2017-2022) $91,000.

SMART - Strengthening Mental Abilities through Relational Training: A randomised controlled trial of a novel online cognitive rehabilitation program for children with cerebral palsy.

Cerebral palsy (CP) is typically associated with motor impairments, but children with cerebral palsy (CP) experience deficits in nonverbal reasoning. The SMART online cognitive intervention has been associated with gains in IQ and nonverbal IQ in previous studies in typically developing school-aged children and children experiencing educational difficulties. SMART is founded upon relational frame theory, which suggests that language and complex thinking are underpinned by our ability to understand relationships between objects, known as relational framing. If the program was found to be effective, it would allow children with CP to train relational framing ability and potentially improve complex reasoning from home.

The SMART RCT aimed to assess the efficacy, acceptability and feasibility of an online cognitive intervention in school-aged children with CP. This pilot study recruited 21 children with CP, mean age 9y 8m, who were randomised into the intervention group (n=9) or a waitlist control group. Participants were assessed on measures of intelligence, academic ability, attention and executive functioning, and social-emotional functioning at baseline, then after completing the training, or the waitlist period. Semi-structured interviews explored participants' experiences with the training. No significant effect of training was found for the primary outcome of intelligence, or for any secondary outcomes. Participants reported barriers and facilitators for accessing the program. Cognitive training programs addressing relational framing ability may require significant modifications before they can be effectively tested with children with CP. Jane Wotherspoon is an Educational and Developmental Psychologist undertook this project for her PhD research. Jane published the study protocol in BMJ Open in June 2019, and the RCT study has been published in Journal of Developmental and Physical Disabilities. Jane was awarded her PhD thesis in March 2024.

[19] **PACT & Early PACT: https://qcprrc.centre.uq.edu.au/project/earlypact**

Chief Investigators: Dr Koa Whittingham, Dr Jeanie Sheffield, Prof. Ros Boyd, Dr Jane Wotherspoon.

Funding: Commonwealth Research Training Program Stipend, QCPRRC living top-up scholarship. Joseph Sleight Bursary (2019)

Publications: J Wotherspoon, et al - BMJ open, 2019 - doi: 10.1136/bmjopen-2018-028505; J Wotherspoon, et al. *J Dev Phys Disabil* 36, 187–202 (2024). https://doi.org/10.1007/s10882-023-09905-9

REACH[20]: Rehabilitation Early for Congenital Hemiplegia

REACH was a novel multisite RCT study which recruited families from Australia (Queensland, New South Wales, Victoria and Western Australia) and the United States (Minnesota, Ohio and Riverside County). The aim was to compare two types of therapy, an intensive infant friendly modified Constraint Induced Movement Therapy (mCIMT) to an equally intensive approach using Bimanual Therapy (BIM). Infants with asymmetric brain lesions were recruited before the age of 9 months corrected age (c.a.) and randomised to one of the two groups. They were assessed on a range of outcomes including unimanual capacity and bimanual co-ordination, fine motor skills and cognitive development at 12-15 months c.a. and 24 months c.a. In all 96 infants were recruited to the study and completed the home therapy visits, with all 24-month assessments completed. The investigators presented their findings at the International IAACD-AusACPDM conference in March 2022 and the American Academy of Cerebral Palsy and Developmental Medicine in October 2023. The results have been published in the peer reviewed publication "Early Developmental Trajectories of the Impaired Hand in Infants with Unilateral Cerebral Palsy." in the Developmental Medicine and Child Neurology Journal. (doi/10.1111/dmcn.16240). The primary results demonstrated that both groups improved their early hand development and children who commenced intervention earlier had faster hand development than those who commenced after 6 months C.A. have been published in the Journal of Pediatrics in late 2024.

Chief Investigators: Prof. Roslyn Boyd, Prof. Jenny Ziviani, Dr L Sakzewski, Prof. I Novak, Prof. Nadia Badawi, Dr K Pannek, Prof. C Elliott, Dr Susan Greaves, Dr Andrea Guzzetta, Dr Koa Whittingham.

Associate Investigators: Prof. Jane Valentine, Prof. Paul Colditz, Dr Robert Ware, Dr Cathy Morgan, Dr Margaret Wallen, Dr Karen Walker, Dr Russell Dale, Prof. Stephen Rose, Dr Roz Ward, Dr Mary Sharp, Ms Lisa Findlay, Dr Priya Edwards.

US sites: Dr Bernadette Gillick, Dr Jill Heathcote, Dr Natalie Maitre.

Funding: NHMRC project grant 1078877 (2015-2018) $939,038

Publications: Boyd, R. N. et al, (2017). BMJ Open, 7(9), e017204. https://doi.org/10.1136/bmjopen-2017-017204

PREDICT CP[21]: Comprehensive surveillance to predict outcomes for children with CP.

The PREDICT CP NHMRC cohort study, which is a continuation of the CP Child Study and the Growth, Nutrition and Physical Activity Study (GNPA), aimed to explore the relationship between brain development and physical capacity, growth, physical activity, communication, cognition, participation, and educational outcomes of children who have CP. This important information enabled us to build prediction models that allowed us to develop timely and effective interventions and predict future outcomes for children with CP.

We recruited 94 families from all over Queensland and northern New South Wales. The QCPRRC team worked with health economics experts (led by Prof. Paul Scuffham, Griffith University) for data analysis, and three papers were published in 2023 respectively in Developmental Medicine & Child Neurology (doi:10.1111/dmcn.15439), Physical & Occupational Therapy In Pediatrics (doi: 10.1080/01942638.2023.2207635) and Res Dev Disabil (doi: 10.1016/j.ridd.2024.104690).

Chief Investigators: Prof. R Boyd, Prof. P Davies, Prof. J Ziviani, Prof. S Trost, Dr L Barber, Dr R Ware, A/Prof. S Rose, Dr K Whittingham, Dr K Bell

Associate Investigators: Prof. A Coulthard, A/Prof. A Guzzetta, Dr C Carty, Dr D Brookes, A/Prof. J Walsh, Dr K Weir, Dr L Sakzewski, Dr L Copeland, Ms M Kentish, Dr P Edwards

[20] **REACH:** https://qcprrc.centre.uq.edu.au/project/randomised-trial-early-rehabilitation-congenital-hemiplegia-reach

[21] **PREDICT CP: https://qcprrc.centre.uq.edu.au/predict-cp-0**

Research Team: Prof. P Scuffham, Mr O Lloyd, Dr K Weir, Dr K Benfer, C Davenport, C Finn, K Morris, S Reedman, A Burgess, J Wotherspoon, Dr S Leishman

Funding: NHMRC Partnership Grant 1077257 (2014-2019) $774,450

Publications: Boyd, R.et al, (2017). *BMJ Open*, *7*(7), e014950. https://doi.org/10.1136/bmjopen-2016-014950

GAME[22]: Harnessing Neuroplasticity to Improve Motor Performance in Infants with Cerebral Palsy - a Pragmatic Randomized Controlled Trial

The GAME study has been comparing the effects of an infant-friendly intensive, specific enriched training to traditional passive early intervention. Child development was assessed at the beginning of the study and again at 1-and 2 years-of-age to assess the difference between the two groups. GAME involved weekly intervention focusing on active motor training, parent education and environmental enrichment. Therapists visited families in their home weekly to coach parents in how to provide motor training and cognitive stimulation within their child's natural playtime.

The study has successfully reached its recruitment milestone of 300 families across Australia in 2021 (with Queensland team recruiting 62 families) making it the largest early intervention trial in CP internationally. Follow-up and the final analysis have now been completed, and results were presented in national and international conferences in 2024. A protocol paper has been published in BMJ Open.

Chief Investigators: Prof. Iona Novak, Dr Cathy Morgan, Prof. Nadia Badawi, Prof. Roslyn Boyd, A/Prof. Alicia Spittle, Prof. Russell Dale, Ms Adrienne Kirby, A/Prof. Rod Hunt, Dr Kerstin Pannek, Dr Koa Whittingham.

Associate Investigators: A/Prof. Andrea Guzzetta, Claire Galea, Dr Karen Walker, Kristina Prelog, Prof. Michael Fahey, Shannon Clough, Prof. Stephen Rose.

Study Personnel QLD: Sarah Gibson, Christine Finn, Kym Morris, Ellena Oakes, Dr Andrea Burgess.

Funding: NHMRC project grant 1120031 (2017-2021) $2,736,349

Publications: Morgan C, et al. BMJ Open 2023;13:e070649. doi: 10.1136/bmjopen-2022-070649

SuPreme study: Neuroprotective role of sulphate among preterm babies

Preterm birth places more than 4,000 Australian infants born each year at an increased risk of life-long adverse health outcomes, including cerebral palsy and cognitive dysfunction. We are addressing this important health issue with our current NHMRC-funded research into the neuroprotective role of sulphate among preterm babies. To date, our study has recruited more than 1,050 preterm infants (born less than 32 weeks gestation) at the Mater Mothers' Hospital and the Royal Brisbane Women's Hospital. A total of 1,505 infants are required for our study. We have shown that by one week of age, preterm infants become deficient in sulphate. Since sulphate is important for modulating brain development, we propose that sulphate deficiency is detrimental to normal neurodevelopment. In late 2017, our study commenced assessing clinical outcomes in 2-year-old children to determine whether sulphate deficiency after birth correlates with adverse neurodevelopment. If our hypothesis is proven, then neonatal sulphate supplementation may prove a simple and effective, low-cost, low-risk intervention universally available to all preterm infants to improve their chances of a normal neurodevelopmental outcome.

The study is currently undergoing data and health economics analysis, with outcomes presented at the Perinatal Society Meeting (PZANZ) in 2015 and final results to be submitted for publication by mid-2025. Current publications: https://doi.org/10.1136/bmjopen-2023-076130.

Chief Investigators: A/Prof. Paul Dawson (MRI-UQ), Dr E Hurrion (MMH), Prof. N Badawi (CP Alliance), Prof. R Boyd, Prof. V Flenady (MRI-UQ), Prof. F Bowling (MRI-UQ), Dr P Koorts (RBWH), Prof. S Kumar (MRI-UQ).

Funding: NHMRC Project grant (APP1081911, $720k, 2015-2019).

Publications:

[22] **GAME: https://cre-auscpctn.centre.uq.edu.au/project/game-harnessing-neuroplasticity-rct-goal-directed-motor-enrichment-infant-cp**

Centre Membership in 2024

Academic, General and Research Staff, and conjoint, adjunct, or honorary members specifically appointed to or affiliated with this centre and whose research activity occurs primarily in this centre.

QCPRRC Academic Staff

Title	First Name	Last Name	QCPRRC Position
Prof.	Roslyn	Boyd	Scientific Director, Professor of Cerebral Palsy Research
A/Prof.	Leanne	Sakzewski	Deputy Director, A/Professor of Cerebral Palsy Research (Occupational Therapy)
A/Prof.	Koa	Whittingham	Senior Research Fellow/Senior Lecturer (Psychology)
Dr	Ellen	Armstrong	Postdoctoral Research Fellow (Physiotherapy)
Dr	Sarah	Ashcroft	Postdoctoral Research Fellow (Physiotherapy)
Dr	Jacqui	Barfoot	Postdoctoral Research Fellow (Occupational Therapy)
Dr	Andrea	Burgess	Postdoctoral Research Fellow (Occupational Therapy)
Dr	Syed (Afroz)	Keramat	Postdoctoral Research Fellow (Health Economy)
Dr	Gaela	Kilgour	Postdoctoral Research Fellow (Physiotherapy)
Dr	Grace	Kirby	Postdoctoral Research Fellow (Psychology)
Dr	Carly	Luke	Postdoctoral Research Fellow (Physiotherapy)
Dr	Stina	Oftedal	Postdoctoral Research Fellow (Nutrition & Dietetics)
Dr	Sarah	Reedman	Postdoctoral Research Fellow (Physiotherapy)
Dr	Katherine	Benfer	NHMRC Early Career Fellow (Speech Pathology)
A/Prof.	Melek	Volkan Yazici	Visiting Academic- Senior Research Fellow (from Yüksek İhtisas University, Turkey)

QCPRRC Professional Staff

Title	First Name	Last Name	QCPRRC Position
Dr	Ilaria	Stefani	General Manager
Dr	Shaneen	Leishman	Operations Manager
Ms	Jacqueline	Robinson	Principal Research Governance Officer
Ms	Erin	Murphy	Senior Administration Officer
Dr	Heledd	Brown-Wright	Clinical Research Coordinator
Dr	Natalie	Dos Santos	Clinical Research Coordinator
Ms	Pam	Gabrovska	Clinical Research Coordinator
Ms	Laura	Gascoigne-Pees	Clinical Research Coordinator
Ms	Sarah	Goodman	Clinical Research Coordinator
Mr	Edward	Hayes-Woods	Clinical Research Coordinator
Ms	Laura	Purcell	Clinical Research Coordinator
Dr	Morgan	Carlton	Clinical Research Coordinator

QCPRRC Clinical Staff

Title	First Name	Last Name	Hospital Appointment
Dr	Jane	Wotherspoon	Research Psychologist
Dr	Carly	Luke	Senior Research Physiotherapist
Mrs	Christine	Finn	Senior Research Physiotherapist
Ms	Lucy	Fogarty	Research Physiotherapist
Ms	Sarah	Gibson	Research Physiotherapist
Ms	Anya	Gordon	Research Physiotherapist
Mrs	Kym	Morris	Research Physiotherapist (Retired October 2024)
Ms	Hailey	Williams	Casual Research Physiotherapist
Mr	Alix	Gennen	Casual Research Physiotherapist
Ms	Bridget	Dodds	Casual Research Physiotherapist
Ms	Hailey	Williams	Casual Research Physiotherapist
Ms	Zoe	Pearson	Casual Research Physiotherapist
Ms	Ellena	Oakes	Research Occupational Therapist
Ms	Bernadette	Shannon	Research Occupational Therapist
Ms	Nicole	Topping	Casual Research Occupational Therapist
Ms	Sarah	Goodman	Research Speech Pathologist

QCPRRC Honorary-Adjunct Staff / Research Affiliates

Title	First Name	Last Name	QCPRRC Position	Other Affiliation/Appointment	University Appointment
Dr	Lee	Barber	Honorary Senior Fellow	Senior Lecturer, Griffith University	Academic Title
Dr	Kristie	Bell	Academic Title Holder	Clinical Specialist Dietician, Qld Children's Hospital	Academic Title
A/Prof.	Chris	Carty	Honorary Senior Fellow	Clinical Motion Analysis Consultant, Qld Children's Hospital	Academic Title
Dr	Lisa	Copeland	Academic Title Holder	Paediatric Rehabilitation Specialist, Qld Children's Hospital	Academic Title
Dr	Corrine	Dickinson	Industry Fellow	Clinical Psychologist, Qld Children's Hospital	Industry Fellow
Dr	Priya	Edwards	Clinical Director	Director, QLD Paediatric Rehabilitation Service	Academic Title
Ms	Lisa	Findlay	Research Affiliate	Occupational Therapist, Qld Children's Hospital	Academic Title
Dr	Joanne	George	Academic Title holder	Advanced Physiotherapist, Qld Children's Hospital	Academic Title
Prof.	Andrea	Guzzetta	Honorary Senior Fellow	Paediatric Neurologist and Psychiatrist, University of Pisa	Honorary Senior Fellow
Dr	Diana	Hermith-Ramirez	Data Manager	Research Fellow and Data Manager, Griffith University	Industry Fellow
Ms	Megan	Kentish	Academic Title Holder	Program Director, Qld Paediatric Rehabilitation Service	Academic Title
Mr	Owen	Lloyd	Research Affiliate	Neuropsychologist, Qld Paediatric Rehabilitation Service	Casual Coordinator/Lecturer
Dr	Olga	Laporta-Hoyos	Industry Fellow	Psychologist, University of Barcelona, Spain	Industry Fellow
Dr	Lynne	McKinlay	Academic Title Holder	Deputy Director of Medical Services, Qld Children's Hospital	Academic Title

The Centre's wider membership

Other members who collaborate closely in this centre's research, but whose appointment or research activity is primarily affiliated somewhere else at UQ.

Title	First Name	Last Name	School/Centre/ Institute	University/ School Appointment	Hospital or other appointment
Prof.	Craig	Munns	Director, CHRC; Mayne Professor of Paediatrics	Academic Level E	Senior Medical Officer, Paediatric Endocrinology and Diabetes, Qld Children's Hospital
Prof.	Karen	Barlow	CHRC; Acquired Brain Injury in Children – Program Lead	Academic Level E	A/Prof. Paul Hopkins MAIC Chair of Paediatric Rehabilitation
Dr	Margot	Bosanquet	Townsville University Hospital	Honorary Research Fellow	Paediatrician
Dr	Dana	Bradford	E-Health, CSIRO	Honorary Research Fellow	Group Leader, Health Services
Dr	Denise	Brookes	Postdoctoral Research Fellow, Faculty of Medicine	Academic Level A	Clinical Bone Densitometry
Emeritus Prof.	Paul	Colditz	UQCCR	Director, Perinatal Research Centre	Neonatologist
Dr	Jurgen	Fripp	E-Health, CSIRO	Honorary Research Fellow	Image Analysis Team Leader
Dr	Kerstin	Pannek	E-Health, CSIRO	Honorary Research Fellow	Postdoctoral Research Fellow
Dr	Alex	Pagnozzi	E-Health, CSIRO	Honorary Research Fellow	Postdoctoral Research Fellow
Dr	Christian	Redd	E-Health, CSIRO	Honorary Research Fellow	Postdoctoral Research Fellow
Prof.	Stephen	Rose	E-health, CSIRO	Honorary Professor	-
Dr	Javier	Urriola	E-Health, CSIRO	Honorary Research Fellow	Postdoctoral Research Fellow
Dr	Liza	Van Eijk	James Cook University	Honorary Research Fellow	Lecturer
Prof.	Robert	Ware	Griffith University	Professor of Biostatistics	-
Em.Prof.	Jenny	Ziviani	School of Health and Rehabilitation Sciences	Em. Prof. of Occupational Therapy	

Our Students – Research Degrees in progress in 2024

Name of Student	Topic	PhD / MPhil	FT / PT	Start Year	University, Faculty / School	Advisors	Advisory Role
Jane Wotherspoon	Get 'SMART': a randomised controlled trial of a novel cognitive training program for children with cerebral palsy. *Graduated in April 2024*	PhD	PT	2017	UQ, Faculty of Medicine	Dr Koa Whittingham Dr Jeanie Sheffield Prof Roslyn Boyd	PRIN ASSOC ASSOC
Dr Andrea McGlade	ENACT (Environmental enrichment for infants; parenting with ACT): A randomised controlled trial of an innovation intervention for infants at risk of Autism Spectrum Disorder	PhD	PT	2018	UQ, Faculty of Medicine	Dr Koa Whittingham Prof. Roslyn Boyd	PRIN ASSOC
Carly Luke	Early Detection of Indigenous infants at risk of Neurodevelopmental Disability and relationship to motor and cognitive outcomes at 12 months *Graduated in November 2024, with Deans Award*	PhD	FT	2020	UQ, Faculty of Medicine	Prof. Roslyn Boyd Dr Katherine Benfer	PRIN ASSOC
Ella Macdonald	Reliability of the PLAYfun assessment tool in children with cerebral palsy.	Honours	FT	2020	UQ, Faculty of Health and Behavioural Sciences	Dr Sjaan Gomersall Dr Sarah Reedman	PRIN ASSOC
Kate McLeod	Intensive motor training for preschool children with bilateral CP: impact on gross motor function	PhD	PT	2020	UQ, Faculty of Medicine	A/Prof Leanne Sakzewski Dr Sarah Reedman	PRIN ASSOC
Leeann Ramsamy	LEAP-CP: indigenous cultural adaptation	PhD/ Indigenous Scholar	FT	2020	UQ, Faculty of Medicine	Prof. Roslyn Boyd Dr Katherine Benfer	PRIN ASSOC
Sarah Lee	AutInsight - A parent support program for parents of autistic children informed by autistic adults	PhD	FT	2021	UQ, Faculty of Medicine	Dr Koa Whittingham Dr Amy Mitchell	PRIN ASSOC
Karen Mistry	Identifying neonatal structural MRI markers for 6-year motor outcomes in children born <31 weeks gestational age	PhD	FT	2022	UQ, Faculty of Medicine	Dr Joanne George Prof. Roslyn Boyd A/Prof Sam Bora Dr Alex Pagnozzi	PRIN ASSOC ASSOC ASSOC
Bianca Thompson	CP ArtS: Optimising social skills in primary school-aged children with acquired brain injury and cerebral palsy through active participation	PhD	FT	2022	UQ, Faculty of Medicine	A/Prof. Leanne Sakzewski Dr Jacqui Barfoot	PRIN ASSOC

	in a group-based Creative and Performing Arts Social skills program						
Lisa Hong, MD	Very Early Prediction of Neurodevelopmental Outcomes (E-PINO)	PhD	PT	2023	UQ, Faculty of Medicine	Prof. Roslyn Boyd Prof Paul Colditz	PRIN ASSOC
Kaely Bastock	Early feeding difficulties in infants with cerebral palsy: impact on caregivers, co-design, and pilot of an early feeding intervention	PhD	FT	2024	UQ, Faculty of Medicine	Dr Stina Oftedal Dr Kath Benfer Prof. Roslyn Boyd	PRIN PRIN ASSOC
Tommaso Biagioni, MD	Relationship between HD-EEG, early clinical biomarkers and Brain Imaging to predict adverse Neurological Outcomes in high-risk infants.	PhD	FT	2024	UQ, Faculty of Medicine	Prof Roslyn Boyd Prof Paul Colditz, A/Prof James Roberts Dr Jurgen Fripp	PRIN ASSOC ASSOC ASSOC
Linda Bonezzi, MD	Relationship between Brain Structure on MRI and early Clinical Biomarkers of neurodevelopment in High-risk infants.	PhD	FT	2024	UQ, Faculty of Medicine	Prof Roslyn Boyd Dr Jurgen Fripp Prof Paul Colditz	PRIN ASSOC ASSOC
Anya Gordon	Very early Clinical Biomarkers of neurodevelopment in High-risk infants.	PhD	FT	2024	UQ, Faculty of Medicine	Prof. Roslyn Boyd Dr Carly Luke Prof Ari Bos	PRIN ASSOC ASSOC
Simone Martin, MD	Evaluating the use of the BabyMoves Application to improve neurodevelopmental follow-up programs for high-risk NICU graduates in the Northern Territory	PhD	FT	2024	UQ, Faculty of Medicine CP Alliance PhD Fellowship	Prof. Roslyn Boyd Prof Kath Benfer	PRIN

Research Grants and Income

Research Income in 2024

UQ Internal and Philanthropic Funding

Year	Total Funding Amount	Funding received in 2023	Project Title	Type of Funding and organisation/ company	Names of recipients or chief investigators	Admin Unit
2020-2025	$2.5M	$500,000	Moving forward in cerebral palsy research	Merchant Charitable Foundation via Children's Hospital Foundation Queensland	Boyd RN	UQ-CHRC (QCPRRC)
2020-2025	$685K	$137,000	Moving forward in cerebral palsy research	The University of Queensland, Vice-Chancellor's Strategic Initiatives Fund	Boyd RN	UQ-CHRC (QCPRRC)
2020-2025	$685K	$137,000	Moving forward in cerebral palsy research	The University of Queensland, Deputy Vice-Chancellor (Research)'s Strategic Initiatives Fund	Boyd RN	UQ-CHRC (QCPRRC)
2020-2025	$1.12M	$225,000	Moving forward in cerebral palsy research	The University of Queensland, Faculty of Medicine	Boyd RN	UQ-CHRC (QCPRRC)

External Competitive Research Funding – Active Project Grants

Year	Total Funding Amount	Funding received in 2024	Project Title	Type of Funding and organisation/ company	Names of recipients or chief investigators	Admin Unit
2024-2028	$4,937,575	$129,648	First Peoples co-designed cohort to support improved perinatal and early childhood outcomes	National Health and Medical Research Council	Rae K, **Boyd R, Benfer K,** Reid N, **Whittingham K**	UQ-CHRC
2024-2027	$105,000	$35,000	Evaluating the use of the BabyMoves Application to improve neurodevelopmental follow-up programs for high-risk NICU graduates in the Northern Territory	Cerebral Palsy Alliance PhD scholarship	**Martin S, Boyd RN**	UQ-CHRC (QCPRRC)

2024-2026	$994,907	$499,023	CP-KASP (Cerebral Palsy Knowledge, Advocacy Skills, and Support Program): co-designed with families to optimise evidence-based support through the NDIS.	Medical Research Future Fund	**Sakzewski L,** Russo F, **Boyd R, Whittingham K, Leishman S, Burgess A, Benfer K**, Tyack Z**,** Copley J, Ware R, McIntyre S.	UQ-CHRC (QCPRRC)
2023-2026	$1,458,918	$470,688	E-PACT: Randomised Trial of Parenting Acceptance and Commitment therapy for Parents of children with neurodevelopmental disabilities CIA Whittingham	Medical Research Future Fund	**Whittingham K, Barfoot J, Boyd R**	UQ-CHRC (QCPRRC)
2023-2026	$768,887	$401,558	Run4Health	Medical Research Future Fund	**Reedman R, Sakzewski L, Boyd R**	UQ-CHRC (QCPRRC)
2023-2026	129,380	$65,541	PEERS (Program for the Education and Enrichment of Relational Skills) ® Primary	National Injury Insurance Scheme Queensland	**Sakzewski L**	UQ-CHRC (QCPRRC)
2023-2026	139,677	$64,075	PEERS (Program for the Education and Enrichment of Relational Skills) ® Telehealth	National Injury Insurance Scheme Queensland	**Sakzewski L**	UQ-CHRC (QCPRRC)
2022-2026	$1,441,281	$15,211	School Readiness: 4–5-year-old Follow-up of Randomised Trials of Neuroprotection and Rehabilitation for Children at risk of CP	Medical Research Future Fund – Maternal First 2,000 Days and Childhood Health	**Boyd RN**, Novak I, Morgan C, **Sakzewski L**, Fahey M, Ware R, Comans T, **Whittingham K**, Pannek K.	UQ-CHRC (QCPRRC)
2022-2026	$5,000,000	$1,059,033	Cerebral Palsy SYNERGY Network to Protect, Repair and improve Outcomes	National Health and Medical Research Council – Synergy Program	**Boyd R,** Novak I, Rose S, Fahey M, Colditz P, Hunt R, Badawi N, Fripp J, **Sakzewski L**, Corbett	UQ-CHRC (QCPRRC)
2022-2026	$2,401,294	$581,979	Active Strides: RCT of Intensive Rehabilitation (Combined Intensive Gait & Cycling Training) for children with moderate to severe CP	National Health and Medical Research Council – Cohort and Clinical Trials	**Sakzewski L, Boyd R,** Elliott C, Novak I, Pool D, Trost S, Ware R, Comans T, Toovey R, Peterson M.	UQ-CHRC (QCPRRC)
2022-2026	$2,500,000	$32,016	Australian Cerebral Palsy Musculoskeletal Health Network	MRFF	**Munns C, Boyd R, Sakzewski L,** Trost S, Ware R, Comans T,	UQ-CHRC
2022-2026	$500,000	$105,250	AInCP Clinical validation of Artificial Intelligence for providing a personalized motor clinical profile assessment and	EU-NHMRC Partnership Grant	**Boyd R,** Pagnozzi A, **Sakzewski L**	UQ-CHRC (QCPRRC)

			rehabilitation of upper limb in children with unilateral Cerebral Palsy			
2022- 2027	$2,500,000	$6,504	DRIVE CP: Directing Research in Very Early Cerebral Palsy	NHMRC CRE	Novak I, RN Boyd, L Sakzewski,	University of Sydney
2019-2024	$830,000	$85,553	PREBO-6: Prediction of childhood Brain Outcomes in infants born preterm using neonatal MRI and concurrent clinical biomarkers	NHMRC Project Grant	**George J,** Pagnozzi, Bora S, **Boyd RN.**	UQ-CHRC (QCPRRC)
2020-2024	$499,732	$22,344	BornToGetThere & LEAP-CP Indigenous	EU-NHMRC Partnership Grant	**Boyd RN, Benfer K**	UQ-CHRC (QCPRRC)
2019-2024	$172,730	$3,285	VISIBLE: Vision Intervention for Seeing Impaired Babies through Learnings and Enrichment	Cerebral Palsy Alliance	**Boyd RN,** Guzzetta A, Novak I, Morgan C, Salt A, Elliott C, Gole G, **Philip S**, Badawi N, Rose S, Fripp J, Pannek K	UQ-CHRC (QCPRRC)
2020-2024	$150,000	$3,032	Peer delivered early intervention for Indigenous Australian infants at high risk of cerebral palsy: a pilot RCT study (Qld)	Cerebral Palsy Alliance	**Benfer K, Boyd RN,** Novak I, Morgan C, **Whittingham K,** Ware R	UQ-CHRC (QCPRRC)
2020-2024	$150,000	$31,578	Peer delivered early intervention for Indigenous Australian infants at high risk of cerebral palsy: a pilot RCT study (WA / NT)	Cerebral Palsy Alliance	**Benfer K, Boyd RN,** Novak I, Morgan C, **Whittingham K,** Ware R	UQ-CHRC (QCPRRC)
2022-2024	$278,000	$55,768	LEAP Indigenous: Families Together	Cerebral Palsy Alliance	**Benfer K, Boyd R**	UQ-CHRC (QCPRRC)
2020-2023	$299,800	$1,370	Peer delivered early intervention for Indigenous Australian infants at high risk of cerebral palsy: an RCT study	Children's Hospital Foundation	**Benfer K, Boyd RN,** Novak I, Ruben A, Morgan C, **Whittingham K,** Koh G, Kumar P, McNamara L, Bosanquet M	UQ-CHRC (QCPRRC)
2020-2023	$105,000	$8,201	Early detection of Indigenous infants at risk of neurodevelopmental disability and relationship to motor and cognitive outcomes at 12 months	Cerebral Palsy Alliance	**Luke C, Boyd RN**	UQ-CHRC (QCPRRC)
2020-2024	$298,472	$39,741	Preschool HABIT-ILE: Intensive rehabilitation to improve skills of young children (aged 2 to 5 years) with bilateral cerebral palsy.	Ramaciotti Health Investment Grants The University of Queensland	**Sakzewski L, Boyd R,** Bleyenheuft Y, Novak I, Elliott C, Morgan C, Dowson N, Pannek K	UQ-CHRC (QCPRRC)

External Competitive Research Funding – Fellowships

Year	Total Funding Amount	Funding received in 2024	Project Title	Type of Funding and organisation/ company	Names of recipients or chief investigators	Admin Unit
2021-2025	$2,090,000	$480,707	NHMRC Investigator Grant L1: Early Detection and Early Intervention for Cerebral Palsy	National Health and Medical Research Council	Boyd RN	UQ-CHRC (QCPRRC)
2018-2026 (Part Time)	$322,952	All funding received	Peer delivered early intervention for infants at high risk of cerebral palsy in Indigenous Australia	NHMRC Early Career Fellowships	Benfer K	UQ-CHRC (QCPRRC)

Courses and Workshop Income

Year	Payments received in 2024	Project Title	Names of recipients or chief investigators	Admin Unit
2024	$137,250	General Movement Courses	Boyd RN	UQ-CHRC (QCPRRC)
2024	$6,040	Systematic Review	Boyd RN, Sakzewski L	UQ-CHRC (QCPRRC)
2024	$5,000	Workshop Fees	Boyd RN, Sakzewski L	UQ-CHRC (QCPRRC)

National and International Collaborations in 2024

Name and Position	Company/Institute/Department	Collaboration
Prof. Giovanni Cioni Head, Developmental Neuroscience	University of Pisa, Stella Maris Institute.	Co-investigator on early intervention studies and co-investigator on EU Horizon Submission, and co-supervision of PhD students
Prof. Andrea Guzzetta Prof of Child Neurology	University of Pisa, Stella Maris Institute.	Co-investigator on early intervention studies, project funding, and co-supervision of PhD students
Prof. Arend F (Arie) Bos Professor of Neotanology	Beatrix Children's Hospital, University Medical Center of Groningen	Implementation of General Movements training for early detection of Cerebral Palsy in India and Australia
Em Prof. Paul Colditz Director, Perinatal Research Centre	UQ Centre for Clinical Research, The University of Queensland	Co-investigator on neuroimaging and parenting studies, competitive project funding, co-supervision of PhD students
Prof. Matthew Sanders Director, Parenting and Family Support Centre	School of Psychology, The University of Queensland	Co-investigator on Triple P parenting studies, and co-supervision of PhD students
Prof. Tracy Comans NHMRC Boosting Dementia Research Leadership Fellow	Centre for Health Services Research The University of Queensland	Co-investigator on School Readiness and CP Synergy projects
A/Prof. Sam Bora Group Leader, Neurodevelopmental Follow-Up and Outcomes	Honorary Associate Professor Mater Research Institute-UQ Faculty of Health, Medicine and Behavioural Sciences	Co-investigator on PREBO-6 and School Readiness projects
Dr Jürgen Fripp Image Analysis Team Leader Research Scientist	Australian eHealth Research Centre, Commonwealth Scientific and Industrial Research Organisation CSIRO	Collaborator with expertise in HARDI imaging, dMRI analysis. Development of 30 week neonatal atlas based on Albert Atlas.
Dr Kerstin Pannek Postdoctoral Fellow	Australian eHealth Research Centre, Commonwealth Scientific and Industrial Research Organisation CSIRO	Co-investigator on neuroimaging studies and competitive project funding.
Prof. Robert Ware Professor of Biostatistics	Menzies Health Institute Queensland, Griffith University	Co-investigator and associate investigator on NHMRC grants providing strong expertise in analyses of longitudinal data sets (prediction modelling) and RCTs.
Prof. Stewart Trost Professor of Child Health, Children's Physical Activity Research Group	School of Human Movement Studies The Univesity of Queensland	Co-investigator on Cerebral Palsy Alliance Grant, School Readiness and Active Stride projects
A/Professor Christopher Carty Clinical Gait Consultant	Queensland Children's Motion Analysis Service, Centre for Children's Health Research, Children's Health Queensland Hospital and Health Service.	Collaborator with expertise in clinical gait analysis and musculoskeletal modelling

Dr Michelle Jackman, PhD Post Doctoral Fellow	John Hunter Hospital, Sydney	Investigator on Development of Therapy Fidelity Tool
Prof. Alicia Spittle, PhD Principal Research Fellow Assoc Dean Medicine	Murdoch Childrens Research Institute The University of Melboune	Development of an App for General Movements assessment and implementation of General Movements training for early detection of Cerebral Palsy; KiTE CP
Dr Margot Bosanquet Paediatrician, Rehabilitation Specialist	Townsville University Hospital Townsville Hospital & Health Services	Site Principal Investigator for KiTE-CP and LEAP-CP Indigenous studies
Dr Lynda McNamara PhD Physiotherapist	Cairns Hospital Cairns & Hinterland Hospital & Health Servics	Site Principal Investigator for KiTE-CP and LEAP-CP Indigenous studies
Prof Gulam Khandaker	Director Public Health, Central Queensland Hospital & Health Service	Development of CP register on Tanna, Vanuatu
Dr Olga Laporta-Hoyos, Post Doctoral Neuroscientist	University of California San Francisco	Associate investigator on NHMRC grants
Dr Terry Swartz, Paediatric Opthalmologist	Cincinnati Children's Hospital Medical Center	Co-investigator on VISIBLE early intervention study
Dr Karen Harpster, PhD Paediatric Occupational Therapist	Cincinnati Children's Hospital Medical Center	Co-investigator on VISIBLE early intervention study
Prof. Nana Tatishvili Director, Head of Child Neurology	M.Tashvili Children central Hospital, Georgia	Co-investigator on LEAP-CP early intervention studies
Prof Mark Peterson, Charles E. Lytle Jr Research Professor	University of Michigan USA	Co-investigator on Active Strides-CP study
Prof Annette Majnemer, Senior Scientist	McGill University, Canada	Co-investigator on Participate CP study
A/Prof Keiko Shikako, Canada Research Chair in Childhood Disability: participation and knowledge translation	McGill University, Canada	Associate-investigator on Participate CP study
Prof Yannick Bleyenheuft	Universite Catholic de Louvain, Belgium	Co-investigator on HABIT-ILE studies
Mr Gopi Kitsanamy	Director and Founder, Cerebral Palsy Lanka	Co-investigator on LEAP-CP early intervention studies
Dr Ana Carollina Campos	University of San Carlos, Brazil	Associate-investigator on LEAP-CP

Conference Presentations & Community Activities in 2024

NATIONAL

Person	Oral/Poster or Activity	Name of Society/ Organisation/ Conference	Date and Location
Sarah Lee	Poster	Parental Acceptance and Understanding of Autistic Children (PAUACS) – an instrument development study	International Society for Autism Research (INSAR), 15th May – 18th May Melbourne, Australia.
Angelica Allermo Fletcher	Oral	Partnering with whānau and health professionals to implement best practice recommendations for early diagnosis of CP in Aotearoa, New Zealand.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Angelica Allermo Fletcher	Oral	PĒPI ARC – Partnering early to provide for infants at risk of cerebral palsy: implementing early detection through a regional Hub.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Jacqui Barfoot	Oral	Activating parents in early childhood intervention: Implementation of a relationally based program at The Benevolent Society.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Jacqui Barfoot	Oral	Looking after ourselves while we look after children and families: Evaluating a well-being and resilience workshop for early childhood practitioners.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Jacqui Barfoot and Grace Kirby	Oral	Promoting Wellbeing for Children, young people and their families: A practical approach	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Kath Benfer	Oral	Embedding for Mob: Incorporating perspectives into a First Nations early family support program (LEAP-CP) for bubs with cerebral palsy.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Laura Bentley	Oral	Musculoskeletal Complications in young people with cerebral palsy	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Roslyn Boyd	Oral	Long term outcomes and predictive factors after RCT of Baby-CIMT and Baby-BIM for children at risk of unilateral cerebral palsy.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Aida Brankovic	Oral	Myelin mapping: White matter associations with motor outcomes at 6 years in infants born very preterm.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.

Jessica Bugeja	Oral	Early diffusion weighted imaging shows promise for predicting cognitive outcomes in preterm or low birthweight neonates: Initial systematic review results.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Andrea Burgess	Oral	Efficacy of upper limb therapies for children with cerebral palsy: Systematic review and network meta-analysis.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Andrea Burgess	Oral	Establishment of a cerebral palsy register of children aged 0 to 18 years in Tanna Island, Vanuatu.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Andrea Burgess	Oral	Tools for early detection of developmental concerns and/or disability in young children (aged birth–5 years 11 months): A scoping review.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Rebecca Caesar	Oral	The PREMTIME study: Implications for targeted surveillance of preterm infants.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Kate Cameron	Oral	Parent experiences of early screening for cerebral palsy: A qualitative study.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Rex Chan	Oral	Evaluation of implementation of Bodyweight Supported Treadmill Training for clients with cerebral palsy according to RE-AIM and CFIR frameworks.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Gaela Kilgour	Oral	Aligning theory and practice: Using the Family of Participation-Related Constructs to guide intervention planning and fidelity.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Gaela Kilgour	Oral	Active Start Active Future: Pre-post feasibility study of a physical activity intervention for pre-school age children with cerebral palsy	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Gaela Kilgour	Oral	Efficacy of a participation-focused high-level mobility programme from the voice of adolescents with cerebral palsy and their parents: Delivering beyond attendance and involvement	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Gaela Kilgour	Oral	Effect of a high-level-mobility skills training programme (HLMP) on sustained community participation in physical activity of adolescents with cerebral palsy.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Gaela Kilgour	Bfast session - oral	Participation in healthcare by young adults with cerebral palsy: Exploring relationships among attendance, involvement, and associated health conditions.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.

Gaela Kilgour	Workshop - Oral	Infinite Horizons: A Workshop for Everyone – Babies to Adults with Cerebral Palsy, Real People to AI Advancements	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Amanda Kwong	Oral	Outcomes from the Knowledge Translation of Early Cerebral Palsy (KiTE CP) study: Predictive validity of high risk of CP diagnosis	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Amanda Kwong	Oral	Parent satisfaction and perspectives on optimizing early movement screening for cerebral palsy.	Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Carly Luke	Oral	Implementation of a state-wide early detection network predicts neurodevelopmental outcomes at 2 years in an 'at risk' infant cohort.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Carly Luke	Oral	Early screening tools predict neurodevelopmental outcomes at 12 months in a developmentally vulnerable First Nations infant cohort.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Carly Luke	Oral	Motor optimality score-revised and hammersmith infant neurological examination predict high likelihood of autism in developmentally vulnerable first nations infants.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Carly Luke, Roslyn Boyd	Mini-Symposia	Use of the Motor Optimality Score-Revised (MOS-R)- to predict Cerebral Palsy and other adverse Neurodevelopmental Outcomes (NDO)	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Andrea McGlade	Oral	Does general movements assessment motor optimality score predict 12-month developmental outcomes in infant siblings at elevated likelihood of autism?	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Andrea McGlade	Oral	Speed of attention disengagement is associated with autism symptoms in a prospective study of infants at elevated likelihood of autism.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia
Kate McLeod	Oral	The preschool HABIT-ILE approach: Best responders in young children aged 2 to 5 years with bilateral cerebral palsy.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Leeann Mick-Ramasamy	Oral	The baby movement check: A culturally informed early detection program for First Nations Australian infants with birth-identifiable cerebral palsy risk factors.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Karen Mistry	Oral	Could early neonatal MRI predict adverse motor outcomes in children born preterm? Evidence from a systematic review and meta-analysis.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.

Karen Mistry	Oral	Relationship between clinically accessible neonatal MRI scoring and 6-year motor outcomes in a prospective longitudinal cohort of very preterm-born infants.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Cathy Morgan	Oral	Harnessing neuroplasticity to improve developmental outcomes in infants with cerebral palsy: The GAME trial.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Golam Moula	Oral	Implementation of Learning through Everyday Activities with Parents of Infants with CP (LEAP CP) early detection and intervention program in India.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Tiffany Nesakumar	Oral	Early detection of high-risk infants in the tea plantations of Sri Lanka under 12 months CA for neurodevelopmental outcomes.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Stina Oftedal	Oral	School readiness outcomes of children identified as high risk of cerebral palsy in infancy.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Stina Oftedal	Oral	Considerations for Effective School Readiness Assessment of Children with Cerebral Palsy	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Stina Oftedal	Oral	Diet quality by eating, drinking, and motor ability at 4 to 6 years in children at risk of cerebral palsy in infancy.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia
Alex Pagnozzi	Oral	Neonatal brain MRI of very preterm infants before and at term equivalent age predicts 2-year motor and cognitive outcomes.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Kerstin Pannek	Oral	Associations between neonatal advanced diffusion MRI fixel-based metrics and 6-year motor outcomes in children born very preterm without cerebral palsy.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Kerstin Pannek	Oral	Semiquantitative MRI scores for preterm infants are not consistent between protocols.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Ziya Que	Oral	Brain structural networks in early school-age children born very preterm.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Sarah Reedman	Oral	Predictors of upper limb performance response to hand-arm bimanual intensive therapy including lower extremity in children with bilateral CP.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.

Sarah Reedman	Oral	Predictors of gross motor response to Hand-Arm Bimanual Intensive Therapy Including Lower Extremity (HABIT-ILE) in children with bilateral CP.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Leanne Sakzewski	Oral	Participate-CP 2: Optimizing participation in physically active leisure for children with cerebral palsy: Phase III randomized controlled trial.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Leanne Sakzewski	Oral	HABIT-ILE Australia: Randomized trial of hand-arm bimanual intensive training including lower extremity for children with bilateral cerebral palsy.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Claire Smart	Oral	Playfulness and individualized TechToys for young non-ambulant children with cerebral palsy	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Bianca Thompson	Oral	Efficacy of group social skills interventions on social functioning and social participation in children with brain injuries: A systematic review.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Koa Whittingham	Oral	Burnout, Flexibility and Resilience: Taking Care of Ourselves so we can Take Care of Children and Families	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Koa Whittingham	Oral	Randomised controlled trial of ENACT effects on maternal mental health and the parent-child relationship in families of children with an increased chance of autism	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Kavindri Vargas	Oral	RCT of ENACT: Effects on the parent-child relationship and mental health of families of infants at increased chance of autism.	Australasian Academy of Cerebral Palsy and Developmental Medicine, 31st July-3rd August 2024, Cairns, Australia.
Kath Benfer, Carly Luke, Leeann Mick-Ramsamy	Oral	LEAP: Learning through Everyday Activities with Parents. A culturally-informed model of early identification and family support for First Nations bubs with a high chance of neurodevelopmental disabilities	Mater Growth and Development Conference, 7th November, Brisbane, Australia
Koa Whittingham	Oral	Supporting parents to parent well with acceptance and commitment therapy (ACT)	Mater Growth and Development Conference, 7th November, Brisbane, Australia
Koa Whittingham	Oral	PACT: Building an intervention to shift emotional availability	Australasian Human Development Conference , 21-22 November, Brisbane

INTERNATIONAL

Person	Oral/Poster or Activity	Name of Society/ Organisation/ Conference	Date and Location

Roslyn Boyd	Mini-Symposia	Implementation of Early Intervention evidence from Clinical Trials for infants and young children with high chance of cerebral palsy	European Academy of Childhood Disability, 29th May- 1st June, Bruges, Belgium
Roslyn Boyd	Poster	Long term School Readiness outcomes after a randomised trial of infant friendly Baby-CIMT and Baby-BIM for young children at risk of Unilateral Cerebral Palsy.	European Academy of Childhood Disability, 29th May- 1st June, Bruges, Belgium
Carly Luke	Oral	Early screening tools predict neurodevelopmental outcomes at 12 months in a developmentally vulnerable First Nations infant cohort.	European Academy of Childhood Disability, 29th May- 1st June, Bruges, Belgium
Carly Luke	Oral	Motor optimality score-revised (MOS-R) and Hammersmith infant neurological examination (HINE) predict high likelihood of autism at 12 months corrected age in a developmentally vulnerable infant cohort.	European Academy of Childhood Disability, 29th May- 1st June, Bruges, Belgium
Carly Luke	Oral	Implementation of a state-wide early detection network and prediction of neurodevelopmental outcomes in a developmentally vulnerable infant cohort.	European Academy of Childhood Disability, 29th May- 1st June, Bruges, Belgium
Stina Oftedal	Oral	School readiness outcomes of children who were at high risk of cerebral palsy in infancy	European Academy of Childhood Disability, 29th May- 1st June, Bruges, Belgium
Stina Oftedal	Poster	Growth status and diet quality at school-entry in children who were at high risk of CP	European Academy of Childhood Disability, 29th May- 1st June, Bruges, Belgium
Stina Oftedal	Oral	Use of Wearable sensors to track Physical Activity in Free living and in response to Interventions in children with cerebral palsy	European Academy of Childhood Disability, 29th May- 1st June, Bruges, Belgium
Leanne Sakzewski	Oral	HABIT-ILE Australia: Randomised trial of Hand-Arm Bimanual Intensive Training Including Lower Extremity for Children with bilateral cerebral palsy.	European Academy of Childhood Disability, 29th May- 1st June, Bruges, Belgium
Leanne Sakzewski	Oral	Optimising participation in physically active leisure for children with disabilities: Participate-CP	European Academy of Childhood Disability, 29th May- 1st June, Bruges, Belgium
Roslyn Boyd	Mini-Symposium	Implementation of the LEAP Program for the Early Detection of Infants at High Risk of Cerebral Palsy and Implementation of the Early Intervention in Low Resource Settings	American Academy of Cerebral Palsy and Developmental Medicine, 26th-29th October, Quebec City, Canada
Roslyn Boyd	Oral	Long term outcomes and predictive factors after a randomised trial of Baby-CIMT and Baby-BIM for young children at risk of unilateral cerebral palsy.	American Academy of Cerebral Palsy and Developmental Medicine, 26th-29th October, Quebec City, Canada

Andrea Burgess	Oral & Abstract	Tools for early detection of developmental concerns and/or disability in young children (aged birth–5 years 11 months): A scoping review.	American Academy of Cerebral Palsy and Developmental Medicine, 26th-29th October, Quebec City, Canada
Andrea Burgess	Oral & Abstract	Efficacy of upper limb therapies for children with cerebral palsy: A systematic review and network meta-analysis.	American Academy of Cerebral Palsy and Developmental Medicine, 26th-29th October, Quebec City, Canada
Andrea Burgess	Oral & Abstract	Establishment of a cerebral palsy register of children aged 0 to 18 years in Tanna Island, Vanuatu	American Academy of Cerebral Palsy and Developmental Medicine, 26th-29th October, Quebec City, Canada
Kate Cameron	Oral & Abstract	Parent experiences of early screening for cerebral palsy: A reflexive thematic analysis.	American Academy of Cerebral Palsy and Developmental Medicine, 26th-29th October, Quebec City, Canada
Carly Luke	Oral	Motor Optimality Score-revised and Hammersmith Infant Neurological Examination predict high likelihood of autism at 12 months corrected age in a developmentally vulnerable infant cohort.	American Academy of Cerebral Palsy and Developmental Medicine, 26th-29th October, Quebec City, Canada
Carly Luke	Oral	Early screening tools predict neurodevelopmental outcomes at 12 months in a developmentally vulnerable First Nations infant cohort.	American Academy of Cerebral Palsy and Developmental Medicine, 26th-29th October, Quebec City, Canada
Carly Luke	Oral	Implementation of a state-wide early detection network predicts neurodevelopmental outcomes at 2 years in an 'at risk' infant cohort.	American Academy of Cerebral Palsy and Developmental Medicine, 26th-29th October, Quebec City, Canada
Carly Luke, Roslyn Boyd	mini-symposia	Use of the Motor Optimality Score-Revised (MOS-R)-to predict Cerebral Palsy and other adverse Neurodevelopmental Outcomes (NDO)	American Academy of Cerebral Palsy and Developmental Medicine, 26th-29th October, Quebec City, Canada
Amanda Kwong A,	Oral	Outcomes from the Knowledge Translation of Early Cerebral Palsy (KiTE CP) study: Predictive validity of high risk of CP diagnosis	American Academy of Cerebral Palsy and Developmental Medicine 23-26 October 2024, Quebec, Canada
Karen Mistry	Oral & Abstract	Associations between clinically accessible neonatal MRI scoring and 6-year motor outcomes in a prospective longitudinal cohort of infants born preterm. **Winner Gayle Arnold Award (best paper)**	American Academy of Cerebral Palsy and Developmental Medicine 23-26 October 2024, Quebec, Canada
Karen Mistry	Oral & Abstract	Diagnostic accuracy of early neonatal MRI in predicting adverse motor outcomes in children born preterm: Systematic review and meta-analysis. analysis.	American Academy of Cerebral Palsy and Developmental Medicine 23-26 October 2024, Quebec, Canada
Cathy Morgan	Oral & Abstract	Harnessing neuroplasticity to improve motor performance, cognition, and function in infants with cerebral palsy: A randomized controlled trial.	American Academy of Cerebral Palsy and Developmental Medicine 23-26 October 2024, Quebec, Canada

Stina Oftedal	Poster	School readiness outcomes of children identified as high risk of cerebral palsy in infancy	American Academy of Cerebral Palsy and Developmental Medicine, 26th-29th October, Quebec City, Canada
Stina Oftedal	Oral	Considerations for Effective School Readiness Assessment of Children with Cerebral Palsy	American Academy of Cerebral Palsy and Developmental Medicine, 26th-29th October, Quebec City, Canada
Stina Oftedal	Oral	Diet quality and parental concern about diet adequacy in children with cerebral palsy at school entry age.	American Academy of Cerebral Palsy and Developmental Medicine, 26th-29th October, Quebec City, Canada
Karen Pannek K	Oral	Neonatal advanced diffusion MRI measures are associated with 6-year motor outcomes of children born very preterm: A fixel-based analysis.	American Academy of Cerebral Palsy and Developmental Medicine 23-26 October 2024, Quebec, Canada
Leanne Sakzewski	Oral	Optimising participation in physically active leisure for children with cerebral palsy: Phase III randomized controlled trial.	American Academy of Cerebral Palsy and Developmental Medicine 23-26 October 2024, Quebec, Canada
Leanne Sakzewski	Oral	Participate-CP 2: Optimising participation in physically active leisure for children with cerebral palsy: Phase III randomized controlled trial.	American Academy of Cerebral Palsy and Developmental Medicine 23-26 October 2024, Quebec, Canada
Isabela Sudati	Oral & Abstract	Efficacy of intensive training targeting mobility for children and adolescents with cerebral palsy: A systematic review and meta-analysis.	American Academy of Cerebral Palsy and Developmental Medicine 23-26 October 2024, Quebec, Canada
Urriola J	Oral	Task-based and resting-state functional magnetic resonance imaging outcomes of school-age children born very preterm.	American Academy of Cerebral Palsy and Developmental Medicine, 26th-29th October, Quebec City, Canada
Gaela Kilgour	Oral	Active Start Active Future: Feasibility of a participation-focused behaviour-change intervention in young children with cerebral palsy	Participation – Inclusion in Action conference 16-18th November 2024. Lifelong Learning Institute Singapore
Gaela Kilgour	Oral	Exploring the implementation of a participation-focused intervention on the constructs described within the fPRC: a qualitative follow up study.	Participation – Inclusion in Action conference 16-18th November 2024. Lifelong Learning Institute Singapore
Gaela Kilgour	Oral	Participation in healthcare by young adults with cerebral palsy: Exploring relationships among attendance, involvement, and associated health conditions.	Participation – Inclusion in Action conference 16-18th November 2024. Lifelong Learning Institute Singapore
Gaela Kilgour	Oral	Using the involvement continuum to support optimum involvement in physical activity.	Participation – Inclusion in Action conference 16-18th November 2024. Lifelong Learning Institute Singapore

Gaela Kilgour	Workshop	Understanding and building the experience of involvement: How do we capture the experience of participation	Participation – Inclusion in Action conference 16-18th November 2024. Lifelong Learning Institute Singapore
Leanne Sakzewski	Oral	Participate CP 2: Optimising attendance and involvement in physically active leisure for children with cerebral palsy: Phase III randomized controlled trial	Participation – Inclusion in Action conference 16-18th November 2024. Lifelong Learning Institute Singapore

QCPRRC Journals Publications 2024

1	**Boyd RN,** Greaves S, Ziviani J, Novak I, Badawi N, Pannek K, ... **Sakzewski L** et al. Randomized comparison trial of rehabilitation very early for infants with congenital hemiplegia. The Journal of Pediatrics. 2025;277. https://doi.org/10.1016/j.jpeds.2024.114381
2	Wotherspoon J, **Whittingham K**, Sheffield J, **Boyd RN**. Randomised controlled trial of an online cognitive training program in school-aged children with cerebral palsy. Research in Developmental Disabilities. 2024;150. https://doi.org/10.1016/j.ridd.2024.104752
3	**Whittingham K**, **Benfer K**, **Sakzewski L**, Wotherspoon J, **Burgess A**, Comans T, ... **Boyd RN** et al. Sleep problems in a population-based cohort of primary school age children with Cerebral Palsy. Res Dev Disabil. 2024;147:104690. https://doi.org/10.1016/j.ridd.2024.104690
4	**Thompson BAD**, Gilmore R, **Barfoot J**, **Sakzewski L**. A systematic review of the efficacy of group social skills interventions on social functioning and social participation in children with acquired brain injury or cerebral palsy. Child Care Health Dev. 2024;50(2):e13242. https://doi.org/10.1111/cch.13242
5	**Sudati I**, **Sakzewski L**, Fioroni Ribeiro da Silva C, Jackman M, Haddon M, Pool D, ... **Boyd RN** et al. Efficacy and threshold dose of intensive training targeting mobility for children with cerebral palsy: A systematic review and meta-analysis. Developmental medicine and child neurology. 2024;66(12):1-16. https://doi.org/10.1111/dmcn.16040
6	Orton J, Doyle LW, Tripathi T, **Boyd R**, Anderson PJ, Spittle A. Early developmental intervention programmes provided post hospital discharge to prevent motor and cognitive impairment in preterm infants. Cochrane Database of Systematic Reviews. 2024;2024(2). https://doi.org/10.1002/14651858.cd005495.pub5
7	**Oftedal S**, McCormack S, Stevenson R, **Benfer K**, **Boyd RN**, Bell K. The evolution of nutrition management in children with severe neurological impairment with a focus on cerebral palsy. Journal of Human Nutrition and Dietetics. 2024;38(1). https://doi.org/10.1111/jhn.13277
8	Musco H, Beecher K, Chand KK, **Boyd RN**, Colditz PB, Wixey JA. The search for blood biomarkers that indicate risk of adverse neurodevelopmental outcomes in fetal growth restriction. Frontiers in Pediatrics. 2024;12:1-7. https://doi.org/10.3389/fped.2024.1396102
9	McNamara LM, Scott KM, **Boyd RN**, Webb AE, Taifalos CJ, Novak IE. Effectiveness of early diagnosis of cerebral palsy guideline implementation: a systematic review. Minerva Pediatrics. 2024;76(3):414-24. https://doi.org/10.23736/s2724-5276.22.07112-9
10	**Luke C**, **Mick-Ramsamy L**, Bos AF, **Benfer KA**, Bosanquet M, Gordon A, ... **Boyd RN** et al. Relationship between early infant motor repertoire and neurodevelopment on the Hammersmith Infant Neurological Examination in a developmentally vulnerable First Nations cohort. Early Hum Dev. 2024; 192:106004. https://doi.org/10.1016/j.earlhumdev.2024.106004
11	Laporta-Hoyos O, Fiori S, Pannek K, Pagnozzi AM, Ware RS, **Boyd RN**. Longitudinal assessment of brain lesions in children with cerebral palsy and association with motor functioning. European Journal of Paediatric Neurology. 2024;49:27-34. https://doi.org/10.1016/j.ejpn.2023.11.011
12	Kwong AKL, Eeles AL, Anderson PJ, Badawi N**, Boyd RN**, Cameron KL, et al. The Knowledge Translation of Early Cerebral Palsy (KiTE CP) Study: Implementing Screening Among a High-Risk Prospective Cohort of Australian Infants. The Journal of Pediatrics. 2024;268:113949. https://doi.org/10.1016/j.jpeds.2024.113949
13	Jackman M, Thorley M, Toovey R, **Burgess A**, Blatch-Williams R, **Sakzewski L**, ... **Boyd RN** et al. Implementing clinical practice guidelines for improving function in cerebral palsy: development of a fidelity tool. Pediatric Physical Therapy. 2024. https://doi.org/10.1097/PEP.0000000000001155
14	Gilmore R, Ziviani J, McIntyre S, **Goodman S**, Tyack Z, **Sakzewski L**. Exploring caregiver and participant experiences of the Program for the Education and Enrichment of Relational Skills (PEERS((R))) for youth with acquired brain injury and cerebral palsy. Disabil Rehabil. 2024;46(3):515-23. https://doi.org/10.1080/09638288.2023.2167008
15	Garcia-Galant M, Blasco M, Moral-Salicru' P, Soldevilla J, Ballester-Plane' JI, Laporta-Hoyos O, …, **Boyd R**, Pueyo R. Understanding social cognition in children with cerebral palsy: exploring the relationship with executive functions and the intervention outcomes in a randomized controlled trial. European Journal of Pediatrics. 2024;183(9):1-12. https://doi.org/10.1007/s00431-024-05635-y
16	Easton T, **Boyd RN**, Scuffham PA, Downes MJ. Health care resource use in preschool children with cerebral palsy. Developmental Medicine & Child Neurology. 2024;66(11):1476-84. https://doi.org/10.1111/dmcn.15964

17	Colditz PB, **Boyd RN,** Winter L, Pritchard M, Gray PH, **Whittingham K**, et al. Corrigendum to " Randomized Trial of Baby Triple P for Preterm Infants: Child Outcomes at 2 Years of Corrected " J Pediatr. 2019;210:48-54. The Journal of Pediatrics. 2024;275. https://doi.org/10.1016/j.jpeds.2024.114293
18	Cameron KLI, Coulston F, Kwong AKL, **Whittingham K**, Morgan C, **Boyd RN**, et al. Parents' experiences of early screening for cerebral palsy: A qualitative reflexive thematic analysis. Developmental Medicine & Child Neurology. 2024. https://doi.org/10.1111/dmcn.16190
19	Caldu' X, Reid LB, Pannek K, Fripp J, Ballester-Plane' JI, Leiva D, **Boyd RN** et al. Tractography of sensorimotor pathways in dyskinetic cerebral palsy: Association with motor function. Annals of Clinical and Translational Neurology. 2024;11(10):2609-22. https://doi.org/10.1111/dmcn.16190
20	**Burgess A**, **Oftedal S**, **Boyd RN**, **Reedman S**, Trost SG, Ware RS, **Sakzewski L**. Construct Validity of the Both Hands Assessment Using Wrist-Worn Accelerometers. Phys Occup Ther Pediatr. 2024;44(1):42-55. https://doi.org/10.1080/01942638.2023.2207635
21	**Burgess A**, **Luke C**, Jackman M, **Wotherspoon J**, **Whittingham K**, **Benfer K**, et al. Clinical utility and psychometric properties of tools for early detection of developmental concerns and disability in young children: a scoping review. Developmental Medicine and Child Neurology. 2024. https://doi.org/10.1111/dmcn.16076
22	Boettcher-Hunt E, **Boyd RN**, Gibson N. Hip displacement in children with post-neonatal cerebral palsy and acquired brain injury: a systematic review. Brain Injury. 2024:1-13. https://doi.org/10.1080/02699052.2024.2350049
23	Blazek JW, Colditz PB, Guzzetta A, Ware RS, Chatfield MD, Hough JL, ... **Boyd RN** et al. Sensitivity and specificity of the Neonatal Visual Assessment to predict motor and cognitive outcomes in infants born very preterm. Early Human Development. 2024;195:1-9. https://doi.org/10.1016/j.earlhumdev.2024.106068
24	Blasco M, García-Galant M, Ballester-Plané J, Laporta-Hoyos O, Caldú X, Leiva D, **Boyd R**, Ortibus E, PueyoR, and The Clinic Practice Group. Transferability of an executive function intervention in children with cerebral palsy: A randomized controlled trial. Developmental Medicine & Child Neurology. 2024. https://doi.org/10.1111/dmcn.16057
25	**Benfer KA**, **Whittingham K**, Ware RS, Ghosh AK, Chowdhury S, Moula G, et al. Efficacy of early intervention for infants with cerebral palsy in an LMIC: An RCT. Pediatrics. 2024;153(4):1-15. https://doi.org/10.1542/peds.2023-063854
26	Mak, C., Waller, C., **Barfoot, J., & Whittingham, K.** (2024). Psychological flexibility, professional quality of life and psychological adjustment in workers in the disability sector. Journal of Workplace Behavioral Health, 1–17. https://doi.org/10.1080/15555240.2024.2432334
27	**Kilgour G**.,Lu, A., Kozelji, N., Tracy, J., Hickey, L., Granlund, M., Shields, N., Morgan, P., Drake, G., Johnston, L., Imms, C. 2024. Participating together in CP-Achieve: Experiences, opportunities and reflections from a collaborative research team of lived experience experts and health care professionals. Childhood 31 (3),407-426; https://doi.org/10.1177/0907568224126968
28	Allermo-Fletcher, A., **Kilgour, G**., Sandle, M., Sheppard, A., Swallow, S., Stott, N.S., Battin, M., Korent, W., Williams, S. 2024. Partnering Early to Provide for Infants At Risk of Cerebral palsy (PĒPI ARC): Protocol for a feasibility study of a regional hub for early detection of cerebral palsy in Aotearoa New Zealand. Frontiers in Pediatrics, 12; https://doi.org/10.3389/fped.2024.1344579
29	**Mistry KH**, Bora S, Pannek K, Pagnozzi AM, Fiori S, Guzzetta A, Ware RS, Colditz PB, **Boyd RN** and George JM, Diagnostic accuracy of neonatal structural MRI scores to predict 6-year motor outcomes of children born very preterm. *NeuroImage: Clinical*. 45, 103725, Accepted December 2024.
30	**Mistry KH, Boyd RN**, Pagnozzi AM, Bora S, Ware RS and George JM, Diagnostic accuracy of early neonatal MRI in predicting adverse motor outcomes in children born preterm: Systematic review and meta-analysis, Developmental Medicine and Child Neurology, 1–15, Accepted November, 2024.
31	Toohey M, Blatch-Williams R , Budini K, Ferreira A, Griffin A , Hines A, Jackman M, Lind K, Massey J, Mc Namara M, Mitchell J, Morgan C, Norfolk E, Paton MCB., Polyblank D, **Reedman S**, and Novak I. (2024). Effectiveness of postural interventions in cerebral palsy: umbrella systematic review. Paediatrics and Child Health (United Kingdom) 34 (8) 257-278. https://doi.org/10.1016/j.paed.2024.06.003.
32	**Reedman S** (2024). Critically appraised paper: Hand-arm bimanual intensive therapy including lower extremities (HABIT-ILE) improves bimanual performance and gross motor function in pre-school children with unilateral cerebral palsy. Journal of Physiotherapy 70 (2) 150 1-1. https://doi.org/10.1016/j.jphys.2024.02.004
33	**Sakzewski L**, Gilmore R, Hilton N, Kentish M, **Goodman S, Whittingham K, Barfoot J, Boyd RN.** Protocol for a mixed methods randomised trial of telehealth Program for the Education and

	Enrichment of Relational Skills (PEERS®) for adolescents with brain injuries. BMJ Open. Accepted 23 Jan 2025.
34	**Thompson BA**, Gilmore R, **Barfoot J**, Hilton N, **Boyd RN, Whittingham K, Sakzewski L**. Investigating a caregiver-assisted social skills group programme for primary and early high school-aged children with acquired brain injury or cerebral palsy: protocol for a pilot mixed-methods, two-group randomized trial of PEERS Plus. BMJ Open 2025, Jan 4:15(1):e095354. doi: 10.1136/bmjopen-2024-095354.
35	**Sakzewski L**, Greaves S, Eliasson AC, Wallen M, Novak I, Ware R, **Boyd RN.** Early development of the impaired hand during the first 15 months of life in infants with unilateral cerebral palsy. Developmental Medicine & Child Neurology 2025, Jan 18. doi: 10.1111/dmcn.16240. Online ahead of print.
36	Ogilvie L, **Sakzewski L**, Davidson SA, Garbellini S, Elliott C. Key elements of Goal Directed Training for children with cerebral palsy: A qualitative content analysis. British Journal of Occupational Therapy 2024, Oct 8. https://doi.org/10.1177/03080226241269

QCPRRC Conferences Publications 2024

1	**Sakzewski L**, Novak I, Elliott C, Reedman S, Majnemer A, Ziviani J, ... **Boyd RN** et al. Participate-CP 2: optimizing participation in physically active leisure for children with cerebral palsy: phase III randomized controlled trial. Developmental Medicine and Child Neurology; Cairns, QLD Australia2024. p. 35-.
2	**Sakzewski L**, Bleyenheuft Y, Novak I, Elliott C, **Reedman S**, Morgan C, ... **Boyd RN** et al. HABIT-ILE Australia: Randomized trial of hand-arm bimanual intensive training including lower extremity for children with bilateral cerebral palsy. Developmental Medicine & Child Neurology; Cairns, QLD Australia2024. p. 29-. https://doi.org/10.1111/dmcn.15701
3	**Sakzewski L**, Bleyenheuft Y, Novak I, Elliott C, **Reedman S**, Morgan C, ... **Boyd RN** et al. HABIT-ILE Australia: Randomised trial of Hand-Arm Bimanual Intensive Training Including Lower Extremities for children with bilateral cerebral palsy. Developmental Medicine and Child Neurology; Bruges, Belgium2024. p. 49-.
4	**Reedman S**, **Kilgour G**, Gomersall S, L S, Trost S, **Boyd R**. Active-start-active-future: feasibility of behaviour-change intervention to reduce sedentary behaviour and promote physical activity in young children with cerebral palsy. Developmental Medicine and Child Neurology; Cairns, QLD Australia2024. p. 34-.
5	**Oftedal S**, **Boyd RN**, Novak I, Badawi N, **Whittingham K,** Morgan C, et al. School readiness outcomes of children who were at high risk of cerebral palsy in infancy. Developmental Medicine and Child Neurology; Bruges, Belgium 2024. p. 80-.
6	**Oftedal S**, **Boyd R**, Novak I, Badawi N, **Whittingham K,** Morgan C, et al. School readiness outcomes of children identified as high risk of cerebral palsy in infancy. Developmental Medicine and Child Neurology; Cairns, QLD Australia2024. p. 57-8.
7	Moula M, **Benfer K**, **Boyd R**, **Sakzewski L**. Implementation of Learning through Everyday Activities with Parents of Infants with CP (LEAP CP) early detection and intervention program in India. Developmental Medicine and Child Neurology; Cairns, QLD Australia2024. p. 62-3.
8	**McLeod K, Reedman S**, **Boyd R**, **Sakzewski L**. The preschool HABIT-ILE approach: Best responders in young children aged 2 to 5 years with bilateral cerebral palsy. Developmental Medicine and Child Neurology; Cairns, QLD Australia. 2024. p. 32-.
9	**Luke C,** Mick-Ramsamy L, **Benfer K**, Ware RS, Leishman S, Bosanquet M, ... **Boyd RN** et al. Early screening tools predict neurodevelopmental outcomes at 12 months in a developmentally vulnerable First Nations infant cohort. Developmental Medicine and Child Neurology; Quebec, QC, Canada2024. p. 36-.
10	**Luke C**, Mick-Ramsamy L, **Benfer K**, Ware RS, Leishman S, Bosanquet M, V et al. Early screening tools predict neurodevelopmental outcomes at 12 months in a developmentally vulnerable First Nations infant cohort. Developmental Medicine and Child Neurology; Cairns, QLD, Australia2024. p. 25-6.
11	**Luke C**, Mick-Ramsamy L, **Benfer K**, Ware RS, Leishman S, Bosanquet M, ... **Boyd RN** et al. Early screening tools predict neurodevelopmental outcomes at 12 months in a developmentally vulnerable First Nations infant cohort. Developmental Medicine and Child Neurology; Bruges, Belgium2024. p. 22-.

12	**Luke C, Benfer K**, Ware RS, Leishman S, Bosanquet M, Gordon A, ... **Boyd RN** et al. Motor Optimality Score-revised and Hammersmith Infant Neurological Examination predict high likelihood of autism at 12 months corrected age in a developmentally vulnerable infant cohort. Developmental Medicine and Child Neurology; Quebec, QC, Canada2024. p. 33-.
13	**Luke C, Benfer K**, Ware RS, Leishman S, Bosanquet M, Gordon A, ... **Boyd RN** et al. Motor Optimality Score-Revised and Hammersmith Infant Neurological Examination predict high likelihood of autism in developmentally vulnerable First Nations infants. Developmental Medicine and Child Neurology; Cairns, QLD, Australia2024. p. 27-.
14	**Luke C, Benfer K**, Ware RS, Gordon A, Williams H, Taifalos C, ... **Boyd RN** et al. Motor optimality score-revised (MOS-R) and Hammersmith infant neurological examination (HINE) predict high likelihood of autism at 12 months corrected age in a developmentally vulnerable infant cohort. Developmental Medicine and Child Neurology; Bruges, Belgium2024. p. 67-.
15	**Burgess A, Reedman S**, Hines A, Bleyenheuft Y, Novak I, Elliott C, ... **Boyd RN** et al. Predictors of upper limb performance response to hand-arm bimanual intensive therapy including lower extremity in children with bilateral CP. Developmental Medicine and Child Neurology; Cairns, QLD Australia 2024. p. 30-1.
16	**Burgess A, Luke C**, Jackman M, Wotherspoon J, **Whittingham K, Benfer K**, ... **Boyd RN** et al. Tools for early detection of developmental concerns and/or disability in young children (aged birth–5 years 11 months): A scoping review. Developmental Medicine and Child Neurology; Cairns, QLD Australia2024. p. 66-7.
17	**Burgess A, Luke C**, Jackman M, Wotherspoon J, **Whittingham K, Benfer K**, ... **Boyd RN** et al. Tools for early detection of developmental concerns and/or disability in young children (aged birth–5 years 11 months): A scoping review. Developmental Medicine and Child Neurology; Quebec, QC Canada2024. p. 91.
18	**Burgess A**, Chatfield M, Jackman M, Thorley M, **Reedman S,** Patel M, et al. Efficacy of upper limb therapies for children with cerebral palsy: systematic review and network meta-analysis. Developmental Medicine and Child Neurology; Bruges, Belgium2024. p. 16-.
19	**Burgess A,** Chatfield M, Jackman M, Thorley M**, Reedman S**, Patel M, ... **Boyd RN** et al. Efficacy of upper limb therapies for children with cerebral palsy: systematic review and network meta-analysis. Developmental Medicine and Child Neurology; Bruges, Belgium2024. p. 16-.
20	**Burgess A**, Chatfield M, Jackman M, Thorley M, **Reedman S**, **Boyd R**, **Sakzewski L**. Efficacy of upper limb therapies for children with cerebral palsy: Systematic review and network meta-analysis. Developmental Medicine & Child Neurology; Cairns, QLD Australia2024. p. 32-3.
21	**Boyd R**, **Sakzewski L**, **Oftedal S**, Novak I, Badawi N, Morgan C, et al. Long term outcomes and predictive factors after RCT of Baby-CIMT and Baby-BIM for children at risk of unilateral cerebral palsy. Developmental Medicine & Child Neurology; Cairns, QLD, Australia2024. p. 56-7.
22	**Kilgour, G.,** Lu, A., Kozelji, N., Tracy, J., Hickey, L., Granlund, M., Shields, N., Morgan, P., Drake, G., Johnston, L., Imms, C. Participation in healthcare by young adults with cerebral palsy: Exploring relationships among attendance, involvement, and associated health conditions. Participation – Inclusion in Action Conference, Singapore, November 2024.
23	**Mistry KH**, Bora S, Pannek K, Pagnozzi AM, Fiori S, Guzzetta A, Ware RS, Colditz PB, **Boyd RN** and George JM, Diagnostic accuracy of neonatal structural MRI scores to predict 6-year motor outcomes of children born very preterm. Developmental Medicine & Child Neurology; AACPDM. Awarded best paper the Gayle Arnold Award.
24	**Kilgour G, Reedman S**, Gomersall S, Trost S, **Sakzewski L, Boyd R**. Active Start Active Future: Pre-post feasibility study of a physical activity intervention for pre-school age children with cerebral palsy. Developmental Medicine and Child Neurology. AusACPDM, Cairns, 2024.
25	**Kilgour G,** Stott S, Steele M, Adair B, Hogan A, Imms C. Efficacy of a participation-focused high-level mobility programme from the voice of adolescents with cerebral palsy and their parents: Delivering beyond attendance and involvement. Developmental Medicine and Child Neurology. AusACPDM, Cairns, 2024.
26	**Kilgour G,** Stott S, Steele M, Adair B, Hogan A, Imms C. Effect of a high-level-mobility skills training programme (HLMP) on sustained community participation in physical activity of adolescents with cerebral palsy. Developmental Medicine and Child Neurology. AusACPDM, Cairns, 2024.
27	Allermo-Fletcher, A., **Kilgour, G.,** Sandle, M., Sheppard, A., Swallow, S., Stott, N.S., Battin, M., Korent, W., Williams, S PĒPI ARC – Partnering Early to Provide for Infants At Risk of Cerebral palsy: Implementing early detection through a regional Hub. Developmental Medicine and Child Neurology. AusACPDM, Cairns, 2024.
28	Allermo-Fletcher, A., **Kilgour, G**., Sandle, M., Sheppard, A., Swallow, S., Stott, N.S., Battin, M., Korent, W., Williams, S.Partnering With Whānau and Health Professionals to implement Best Practice Recommendations for Early diagnosis of CP through a regional Hub in Aotearoa, New Zealand. Developmental Medicine and Child Neurology. AusACPDM, Cairns, 2024.

29	**Kilgour G,** Stott S, Steele M, Adair B, Hogan A, Imms C. Exploring the implementation of a participation-focused intervention on the constructs described within the fPRC: a qualitative follow up study. Participation – Inclusion in Action Conference, Singapore, November 2024.
30	**Kilgour G, Reedman S**, Gomersall S, Trost S, **Sakzewski L, Boyd R**. Active Start Active Future: Feasibility of a participation-focused behaviour-change intervention in young children with cerebral palsy. Participation – Inclusion in Action Conference, Singapore, November 2024.

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