



Curtin University



Faculty of Health Sciences

2020 Australian Government Research Training Program Scholarships

Strategic Project Profile

PROJECT TITLE: LEAP (Learning through Everyday Activities with Parents): Co-creating intervention strategies for Aboriginal communities, families and infants at risk of Cerebral Palsy (CP) and Neuro-developmental Delay (NDD).

FIELD OF RESEARCH CODE: TBA

PROJECT SYNOPSIS: This project aims to harness the strengths and resilience of Aboriginal people living in rural and remote regions to implement and evaluate the impact of Learning through Everyday Activities with Parents (LEAP). It is a proactive approach to support families before challenges arise.

LEAP is delivered by members of the local community for their own community, allowing all Australian children to reach their potential.

LEAP supports parents and caregivers within their family/community context, and focuses on a collective, family unit. This encourages naturalistic, integrated care and supports the mental health of the caregiver and the community.

Aboriginal children and those living in rural/ remote and disadvantaged communities have an increased risk of neurodevelopmental disabilities (NDD), including cerebral palsy (CP), foetal alcohol spectrum disorder (FASD) and minor neurological disorder. Cerebral palsy (CP) is the most common childhood physical disability (1 in 700 Australians), with post-natally acquired CP five times more likely in Indigenous Australians. The rates of FASD and NDD in remote Aboriginal communities in Western Australia reported unprecedented estimates, among the highest globally in a third of children. Children in these contexts may have greater biological and psychosocial risk factors, including increased rates of central nervous system injury and infection, chronic illness, psychosocial deprivation, and prenatal alcohol exposure.

The solution: The first 1000 days of a baby's life are now well understood to lay a critical foundation for the individual's lifelong trajectory. It is therefore essential that infants at-risk of CP/ NDD are quickly identified to enable early targeted motor and cognitive training to stimulate the postnatal brain and musculoskeletal development. Our international clinical practice guideline has recommended that reliable detection of infants at risk of CP should occur from 12 weeks corrected age (CID, AIA-B). However, families living in remote locations often do not receive diagnosis or intervention until after the child's second birthday; missing a significant window of neuroplasticity. To identify these at risk infants and their parents, we need to implement simple affordable community surveillance models, and establish pathways to link high risk infants to local accessible evidence-based interventions. The lay health worker model has been highly effective in Indigenous, cross-cultural and hard to reach contexts, providing a novel service delivery model to improve intervention access, community empowerment and sustainability.

The Learning through Everyday Activities for Parents program (LEAP) represents a paradigm shift for the provision of evidence-based interventions for infants at high risk of CP/ NDD in rural/ remote and Indigenous communities in Australia. This novel approach delivered through Indigenous peer trainers provides a viable and scalable solution tailored to this context.

The PhD student will work in collaboration with Curtin University, Telethon Kids Institute, Perth Children's Hospital and local Aboriginal communities. The PhD student will develop and implement culturally relevant co-designed and community based interventions and build the capacity of the community to deliver these interventions, recognising families are key change agents. A Cerebral Palsy Alliance grant is available to support this PhD project.

WHAT MINIMAL ATTRIBUTES AND SKILLS EXPECTED BY THE CANDIDATE BE COMPETITIVE:

This scholarship will be for an Aboriginal researcher with an interest in improving outcomes in their communities with a focus on self-determination and cultural security.

An allied health undergraduate degree

Ability to work within a team.

Students are advised to contact the Project Lead listed below prior to submission of their scholarship application to discuss their suitability to be involved in this strategic project.

PROJECT LEAD CONTACT

NAME: Dr Courtenay Harris, Faculty of Health Sciences

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