murdoch children's research institute

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Centre of Research Excellence Newborn Medicine

Do you have a passion for preterm birth research and want to work with a world leading team?

PhD Project Opportunity

The Victorian Infant Brain Studies group at The Murdoch Children's Research Institute is seeking a PhD student to join their team on a project investigating the impact of moderate-late preterm (MLP; 32 to <37 weeks' gestation) birth on neurodevelopment, brain development, and respiratory health at 9 years of age. The majority of preterm births are attributed to MLP births, and there is a growing evidence-base demonstrating that children born MLP experience more adverse outcomes in early childhood than their term-born peers. Specifically, children born MLP experience increased respiratory morbidity in infancy and early childhood than their term-born peers. Our previous research has also found that infants born MLP have smaller and less mature brains than term-born infants at term-equivalent age, although less is known about brain changes over time in this population.

Within the larger project, children in the study are wearing a tri-axial accelerometer to measure physical activity, sedentary behaviour and sleep patterns for one week, as well as completing a self-reported physical activity questionnaire. The PhD student will investigate one of the following areas in relation to these activity data:

- The association between physical activity levels and brain function in 9-year-old children born MLP compared with term-born controls. Children are undergoing brain MRI, and the PhD student will be supported by experts in the area of neuroimaging.
- The associations between sleep duration and quality and cognitive/behavioural outcomes in 9-year-old children born MLP compared with term-born controls. We are collecting detailed neuropsychological data, such as IQ, memory and academic achievement, alongside data concerning behavioural problems.

For expressions of interest or for more information, please contact Professor Jeanie Cheong Jeanie.cheong@mcri.edu.au

Working in partnership with:

murdoch children's research institute

The University of Melbourne

the women's the royal women's hospital victoria australia

Australian Government National Health and Medical Research Council

NHMRC

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