**Project Title:** Outcome of acquired cerebellar disease in childhood: An assessment of motor and cognitive abilities.

**Code:** CHWS

**Host School/ Institute** The Children’s Hospital at Westmead Clinical School

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**Project Type:** Literature Review, Data Analysis

**Project Category:** Rehabilitation, Neuroscience/ Neurology, Paediatrics/Child Health

**Project Keywords:**
1. Cerebellar Disease
2. Cognitive Abilities
3. Motor Function
4. Development

**Project Description:**

Outcome of acquired cerebellar disease in childhood: An assessment of motor and cognitive abilities.

Diseases that damage the cerebellum are not uncommon in childhood, these include inflammatory disease, cerebrovascular events and tumours. There is limited information about the outcome for children who have experienced such cerebellar damage or disease. Until recently it was thought that the long term impact was minimal but this has been challenged by emerging evidence of ongoing difficulties, particularly following resection of posterior fossa tumours. The role of the cerebellum in movement and coordination is well known but there is increasing evidence that the cerebellum also participates in higher level brain functions such as attention, memory and problem solving.

This project aims to find out how children who suffer disease or damage to their cerebellum recover and what disease factors might influence the outcome. It aims to examine the impact of cerebellar disease in childhood on the development of motor and cognitive skills and to provide further information about the role of the cerebellum in child development.

The successful applicant will work in Kids Rehab at The Children’s Hospital at Westmead, which is a large multi-disciplinary team caring for a large number of children with rehabilitation needs. Most data for this project has already been collected, including neurological examinations and neuropsychological testing. The successful applicant will be involved in statistical analysis of existing data, and gathering of some additional information from medical record review, through which they will have the opportunity to develop knowledge and an understanding of conducting clinical outcome studies, neurological and neuropsychological measurement techniques, and research specific computer skills. The student will be involved in relevant literature review and preparing the manuscript for publication through which they will learn valuable skills in scientific writing. We would expect to include the student as an author on the final publication depending on the level of their contribution. There will be opportunities to attend interesting educational research and clinical meetings.