Departments of Physical and Occupational Therapy present

# Rehabilitation Science Dissertation Defense

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Candidate for PhD in
Rehabilitation Science
Final Dissertation Defense

UAB SCHOOL OF HEALTH PROFESSIONS
Knowledge that will change your world

## EVENT DETAILS

Free to UAB students, faculty and clinicians.

## DATE/TIME

November 8, 2018
2:30p-5:00p

## LOCATION

SHPB 224

## CONTACT

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## Vestibular and oculomotor function in children with Cerebral Palsy (CP)

Cerebral Palsy is the most common motor disability of childhood, caused by non-progressive permanent injury to the fetal or infant's brain. Visual and balance impairments are prominent hallmarks of these disorders. Although musculoskeletal and neuromuscular causes are well established in the literature, the role of vestibular and oculomotor abilities was not explored in this population. We aimed to describe the vestibular and oculomotor function in children with CP, aged 7-12years, GMFCS levels I-III, and determine the feasibility, retest reliability, sensitivity, and specificity of vestibular and oculomotor clinical tests in children with CP, compared to an age and gender matched group of children with typical development. We found that children with CP have evidence of central vestibular dysfunction, and were unable to match the velocity of the target during smooth pursuit eye movement. The saccadic dynamics of most children with CP were similar to their TD peers with no common variable among the children with CP and abnormal saccadic dynamics. We also examined a battery of vestibular and oculomotor clinical tests. The results showed that this battery was feasible and reliable in children with CP and sensitive to rule out evidence of central vestibular dysfunction. In summary, children with CP had evidence of central vestibular dysfunction and the clinical tests may be useful to guide assessment and intervention focus.

For more information about the Rehabilitation Science Program please checkout our website: http://www.uab.edu/shp/home/graduate/doctoral/phd-rehabilitation-science