

Syncrude Centre for Motion & Balance

The Syncrude Centre for Motion & Balance is a motion analysis service that uses technologies like motion capture, EMG (muscle activations), high speed video, and foot pressure measurement to give clinicians in the multidisciplinary team a better understanding of how patients are walking.

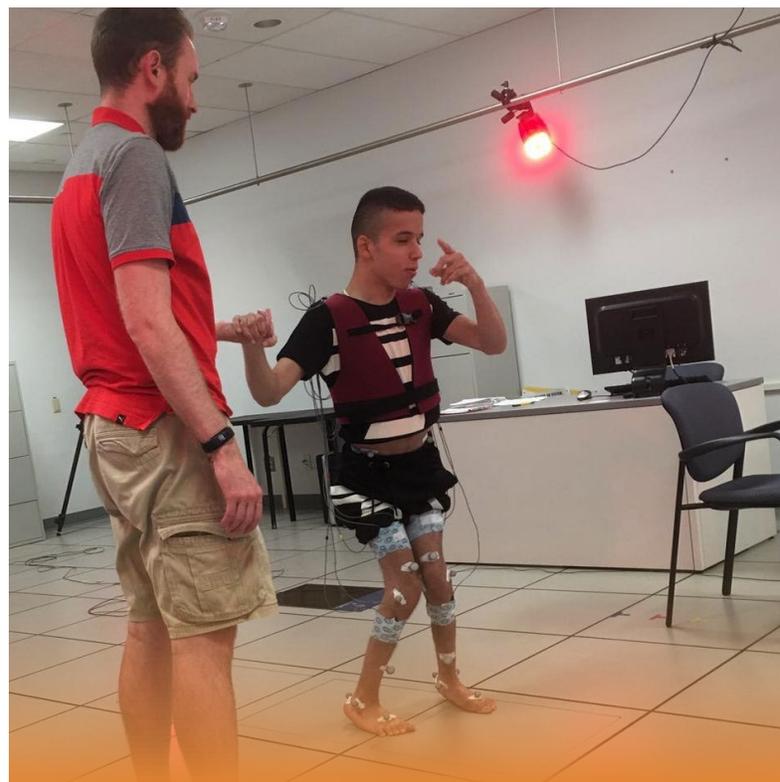
This type of analysis is also referred to as clinical gait analysis. Patients have various diagnoses from cerebral palsy, stroke, brain injury, amputation or any neurological or muscular problem that has led to a difficult to assess gait pattern.

THE TEAM

The team consists of a motion analyst (kinesiologist), physical therapist, physiatrists, and orthopaedic surgeons who use the information to help guide treatment as well as assess the outcomes of treatments that are undertaken.

COLLABORATION

Research, teaching and supervising students are other important aspects of the motion lab. We collaborate with investigators from the University of Alberta as well as generate our own research. In addition, we routinely teach physical therapy and kinesiology students.



Hussain's Story

Hussain was diagnosed at birth with Cerebral Palsy and has been using Motion Analysis Technologies since he was five to improve his walking and guide his treatment plans. To most young children, being connected to wires and sensors might be overwhelming and frightening; however, Hussain says that the staff at the Syncrude Centre were able to put these feelings at ease. "The Syncrude Centre gave my parents the assurance to know I would live a relatively normal life. There might be challenges, but with work, they could be overcome."

—Hussain Alhussainy