### Department of Rehabilitation Medicine - Motion Analysis Laboratory

The Motion Analysis Laboratory, located on the ground floor of ERH, is one of four laboratory spaces for studies concerning sensori-motor control at the ERH.  The lab is 775 square feet and includes a seven camera Motion Capture System (Vicon MX ), a split-belt treadmill instrumented with force platforms embedded within each belt (Bertec, USA), an AMTI force platform, an 8-channel EMG system (Biopac USA), 2 footswitch systems (Noraxon USA), 2 digital video cameras, 3 electrical stimulators (Digitimer, Astromed, Biopac), two 2-channel custom-built electrical stimulator for functional electrical stimulation (FES), and a LabVIEW-based control system for delivering FES to ankle dorsi- and plantar-flexor muscles during walking. The lab has a single-pulse transcranial magnetic stimulation (TMS) unit (Magstim, USA), a custom bat-wing coil for lower extremity TMS experiments (Magstim, USA). The lab includes 2 personal computers for data collection and 3 personal computers for data storage and analysis. The lab space is adequate to conduct the necessary clinical evaluation, gait evaluation, and gait training sessions, and is fully accessible to individuals with physical disability.