Seminar: Treatment outcomes in club foot: Technical measures and real-world locomotor behaviour

Club foot is a common orthopaedic problem in children. Increasing success in treating club foot with serial casting and physical therapy protocols has substantially reduced the frequency of primary surgical interventions over the past decade. The short- and medium-term outcomes have shown dramatic improvements in terms of technical gait measures related to foot and ankle function. But we still do not know how these technical outcomes influence locomotor behavior in real-world settings. Novel methods to record real-world movements using wearable sensors are now enabling more detailed analysis of our success in restoring locomotor abilities in patients with club foot pathologies. This talk will examine ways of connecting technical measures from the gait laboratory to real-world movement behaviors.

Michael Orendurff is the division director of the Movement Science Laboratory at Texas Scottish Rite Hospital for Children in Dallas, Texas. He has a strong interest in medical treatment outcomes, especially those undertaken to restore movement capacity and functional performance in children with orthopaedic and neuromuscular pathologies. We welcome Dr Orendurff as a Visiting Fellow to the Gait CCRE.