



Jesse Charlton, CSCS, MSc

2017 Collaborative Scholarship



Thanks to the wonderful opportunity provided by the 2017 OARSI Collaborative Scholarship, Jesse spent three months working with Dr. Pete Shull of the Wearable Systems Laboratory located at Shanghai Jiao Tong University. An ongoing collaboration between Dr. Shull, and Jesse's home lab at the University of British Columbia, spurred this international collaboration with the goal of preliminary testing of a novel wearable sensor device. Jesse's project focused on early testing of a shoe-worn wearable sensor that tracks walking biomechanics in the real-world. Ultimately, the project has led to a conference presentation at OARSI 2018 in Liverpool, UK, titled "*Over-ground walking validation of a Smart Shoe for estimating foot progression angle*". This project and experience also laid the ground work for a larger validity and reliability study that is in preparation for submission to the Journal of Biomechanics. Jesse's PhD thesis will extend this work by using the sensors in real-world clinical interventions for those with knee osteoarthritis. The projects and learning experience afforded by the OARSI Scholarship act as the foundation of his PhD thesis and have shaped the trajectory of his current and upcoming projects.

Jesse is incredibly grateful for the opportunity provided by OARSI and highly recommends this scholarship to other researchers