





## FSEM / WFATT 2014



Faculty of Sports and Exercise Medicine 11<sup>th</sup> Annual Scientific Conference & World Federation of Athletic Training and Therapy World Congress

The sporting hip, groin and hamstring – a complete picture

Thursday, Friday & Saturday 4-6<sup>th</sup> September 2014

The Helix, Dublin City University, Ireland

## SCI90 Physiological and performance responses to a modified Loughborough Intermittent Shuttle Test compared to match day performance in Gaelic footballers.

Parker-McCabe C, Daly M, Mahony N & Donne B

Human Performance Laboratory, Anatomy Dept., Watt's Building, Trinity College Dublin, Ireland **Introduction:** The Loughborough Intermittent Shuttle Test (LIST) is a field-based fitness test, and a validated Soccer simulation protocol. Research has shown that the LIST closely simulates the physiological and physical demands of a Soccer match. The aim of the present study is to examine whether the LIST protocol replicates the physiological and physical demands of Gaelic football, a similarly high-intensity field sport. **Methods:** 15 male senior-level club Gaelic footballers perform a 60-minute LIST protocol and a 60-minute competitive Gaelic football match, at least 7 days apart. The following physiological and performance responses are monitored on both occasions: average heart rate; average velocity; distance covered walking/ jogging/ running/ sprinting; blood lactate concentrations immediately before/midway through/immediately after the LIST protocol/match performance. **Results:** Data collection, including anthropometric measures (age, height, body mass, body fat%), has commenced and projected completion of collection is end of July. The data will be analysed by means of equivalence testing, specifically 90% confidence intervals for difference between LIST and match performance in the monitored physiological and performance measures. **Discussion:** The authors anticipate that there will be no significant difference between the LIST protocol and the Gaelic match performance for any of the monitored physiological and performance measures, demonstrating that the LIST replicates the activity pattern and physiological demands of a Gaelic football match. These findings would support the use of the LIST as an assessment tool or training drill for Gaelic football match fitness, particularly as part of pre-season training and when players are returning from injury. In addition, the anticipated findings of the present study would act as a reference for future research studies that use the LIST protocol as a substitute for match performance on Gaelic football populations.