

## Dr. Olufemi Ayeni

*“A Comprehensive Approach to Evaluating and Managing FAI: An Evidence Based Program”*

Dr. Ayeni has spent the past 10 years exploring the diagnosis and optimal treatment options for femoroacetabular impingement (FAI), a debilitating condition that causes hip pain in the young adult and can lead to the development of hip osteoarthritis in certain patients. FAI occurs as a result of a size and shape mismatch between the femoral head (ball) and the acetabulum (socket) of the hip. The abnormal femoral head and acetabular rim of the hip joint collide or “impinge” during movements such as hip flexion and rotation.

Dr. Ayeni’s work has culminated in the landmark ‘Femoroacetabular Impingements Randomised controlled Trial’ (FIRST) (N=220) conducted across 12 clinical sites in Canada, Finland, and Denmark that will definitively address the efficacy of surgical interventions for this hip condition (i.e. reshaping the ball and socket (“osteoplasty” or “rim trimming”) arthroscopically so that they fit together more easily while repairing any other existing soft tissue damage in the hip joint (e.g. labral repair) versus lavage (washing out the hip joint of painful debris)). **The rationale for the FIRST trial was based upon: (1) an epidemic of FAI surgery with resultant increased health care costs over the last 2 decades, (2) worldwide disparity in perceptions about its utility, (3) consensus that definitive evidence for or against surgical approaches was lacking, (4) a large body of preparatory research including systematic reviews and survey studies completed by Dr. Ayeni’s team, and (5) a highly successful pilot phase that supported feasibility for the expanded multi-center, multi-national RCT. This trial was funded by the Canadian Orthopaedic Foundation, American Orthopaedic Society for Sports Medicine, Canadian Institutes of Health Research (CIHR), and Hamilton Health Sciences.**

Building on this work, Dr. Ayeni is currently leading a CIHR-funded global longitudinal study of 200 adolescent patients (aged 12-14) to evaluate the impact of sport specialization on the development of FAI related changes in the hip. He is also the Principal Investigator for a Delphi consensus study that will bring together global experts in an attempt to evaluate, define, and validate standardized criteria for both the quality of FAI surgery and hip-related complications (consensus meeting to be held at the International Society for Hip Arthroscopy Conference 2020).

These initiatives will not only produce some of the highest level evidence for the treatment of FAI, but also represent some of the first high-quality, evidence-based, global research collaborations in the sports medicine field to transform the care of patients with FAI.