

Sports Medicine

Leadership



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Sports related injuries account for 30 to 40% of all unintentional injuries, and sports accidents are the leading cause of injury in young adults. The prevalence is higher amongst younger age groups as a result of immature bones, insufficient training, and overuse injuries. Sports injuries have lifelong effects on young individuals as they can interfere with skeletal growth, return to sport, and development of arthritis and joint degeneration in later life. Several international, high quality research studies are underway in the Division of Sports Medicine to optimize the management of these injuries.

Current Studies

PREVIEW

PREVIEW is an international, multi-centre 200-patient prospective cohort study that will evaluate the impact of sport activity and the development of hip impingement during the critical phase of hip maturation. The study aims to determine if sport specialization is associated with the development of femoroacetabular impingement (FAI), and, if the presence of FAI is associated with varying hip function and health-related quality of life in the adolescent population at 2 years.

Principal Investigator: Dr. Olufemi R. Ayeni

DEFINE

Despite an exponential increase in the number of arthroscopic procedures for femoroacetabular impingement (FAI) in the last decade, defining “adequate” correction to the hip is highly subjective and varies surgeon to surgeon. In addition, there is no standard for defining hip complications related to the index surgery. **DEFINE** is an expert consensus study with an aim to define a gold standard for the quality of FAI surgery as well as objective outcomes for future FAI research.

Principal Investigator: Dr. Olufemi R. Ayeni

FIRST-EPIC

FIRST EPIC is a 110-patient embedded prospective cohort study within the FIRST trial to allow for the evaluation of both efficacy and effectiveness of the osteochondroplasty and lavage

interventions. Enrollment for this study was completed in November 2017 and follow-up will be completed in early 2020.

Principal Investigator: Dr. Olufemi R. Ayeni

Knee Arthroscopy Wait Times Project

The Knee Arthroscopy Wait Times project is a prospective study that is evaluating the effect of extended wait times between initial consult and surgery date on patient quality of life, physical functional, and mental health.

Principal Investigator: Dr. Devin Peterson

STABiLiTY II

STABiLiTY II is an international randomized control trial of over 1200 ACL deficient patients to compare outcomes between patients who receive anterior cruciate ligament reconstruction (ACLR) surgery with either bone-patellar-tendon-bone or quadriceps tendon and patients who received ACLR plus/minus a lateral extra-articular tenodesis. Outcomes including failure rate, function, range of motion, and quality of life will be evaluated two years post-operatively.

Local Principal Investigator: Dr. Devin Peterson

Completed Studies

TISSUE BANKING INITIATIVE

Primary Paper

Mohr J, Germain M, Winters M, Fraser S, Duong A, Garibaldi A, Simunovic N, Alsop D, Dao D, Bessemer R, Ayeni OR. Disinfection of human musculoskeletal allografts in tissue banking: a systematic review. *Cell and Tissue Banking*. 2016 Dec;17(4):573-584.

Secondary Papers

Germain M, Strong DM, Dowling G, Mohr J, Duong A, Garibaldi A, Simunovic N, Ayeni OR. Bioburden Steering Committee and Cardiac Tissue Working group. Disinfection of human cardiac valve allografts in tissue banking: systematic review report. *Cell Tissue Bank*. 2016 Dec;17(4):593-601.

Johnston C, Callum J, Mohr J, Duong A, Garibaldi A, Simunovic N, Ayeni OR. Bioburden Steering Committee and Skin Working group. Disinfection of human skin allografts in tissue banking: a systematic review report. *Cell Tissue Bank*. 2016 Dec;17(4):585-592.

STABiLiTY I

Primary Paper

Getgood A, Bryant D, Firth A, STABILITY Group. The STABILITY study: a protocol for a multicenter randomized clinical trial comparing anterior cruciate ligament reconstruction with and without lateral extra-articular

tenodesis in individuals who are at high risk of graft failure. BMC Musculoskelet Disord. 2019;20(1):216.



Primary Paper

FIRST Investigators. A multi-centre randomized controlled trial comparing arthroscopic osteochondroplasty and lavage with arthroscopic lavage alone on patient important outcomes and quality of life in the treatment of young adult (18–50) Femoroacetabular impingement. BMC Musculoskelet Disord. 2015;16:64.

Protocol Paper

Simunovic N, Heels-Ansdell D, Thabane L, Ayeni OR; FIRST Investigators. Femoroacetabular Impingement Randomised Controlled Trial (FIRST) – a multi-centre randomized controlled trial comparing arthroscopic lavage and arthroscopic osteochondroplasty on patient important outcomes and quality of life in the treatment of young adult (18-50 years) femoroacetabular impingement: a statistical analysis plan. Trials. 2018;19(1):588.

