

Dr. Ryan Degen

“A kinematic analysis of the hip following injury and repair of the capsule and labrum”

The purpose of this project is to develop a novel, biomechanical testing apparatus that will allow evaluation of hip joint kinematics in the intact hip and following various hip preservation surgical procedures. A cadaveric testing apparatus will be developed, utilizing optical tracking software, as well as CT imaging with radiostereometric analysis (RSA), to evaluate the kinematic effects of various procedures, focusing on range of motion, joint translation and soft-tissue strain. This research will provide important objective information on common procedures to allow critical appraisal to improve current treatment algorithms and improve patient outcomes.