

Experimental Joint Biomechanics

Research:

- Knee biomechanics
- Knee laxity assessments
- *In vitro* physiological simulations
- Kinematics during daily activities
- Evaluation of total knee prostheses
- ACL injury simulation

Collaborating Faculty:

FEA probabilistic and wear models: P. Rullkoetter (U. Denver) and M. Taylor (U. Southampton)

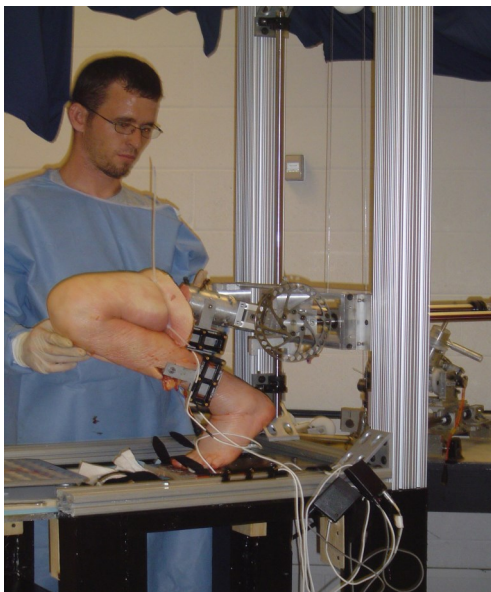
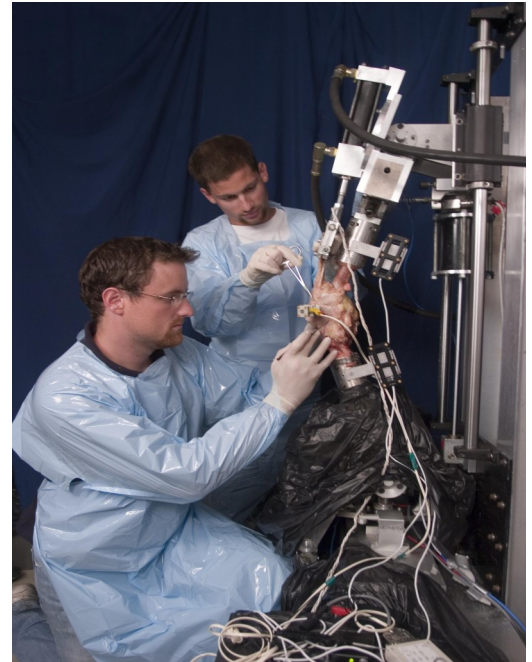
Anthropometric characterization: D. FitzPatrick (U. College Dublin)

MRI biomechanics measures: A. Lerner (U. Rochester)

Multi-scale Modeling: T. Guess (UMKC)

Equipment:

Five-axis servo-hydraulic knee simulator; Quasi-static knee loading rig; OptoTrak motion measurement system; Ligament strain measurement (DVRT); 6 Degree of Freedom Triaxial load cell; Two axis digital inclinometer



Director:

**Lorin Maletsky,
Ph.D.**

(Purdue, 1999)

Associate Professor,
Mechanical Engineering



maletsky@ku.edu

Courses:

Dynamics, Biomechanics, Design for
Manufacturability, Product Design,

Go to bio.engr.ku.edu to learn more.