

Interested?

For more information regarding this study please do not hesitate to ask your doctor for more information regarding participation in this study.

Only your healthcare provider and researchers (Dr. Songning Zhang, Derek Yocum, M.S, and Erik hummer, M.S.) at in the lab will have access to any personal information. All Information provided to the researchers will be held in a password-protected file on a secure server that is only accessible to the researchers.

More information regarding the Biomechanics and Sports Medicine Lab can be found at:
<http://krss.utk.edu/centers-labs/biomechanics-laboratory/>

136 HPER Building
1914 Andy Holt Avenue
Knoxville, TN 37996-2700
Phone: 865-974-2091
Email (Dr. Zhang): szhang@utk.edu
Email (Derek Yocum):
dyocum@vols.utk.edu

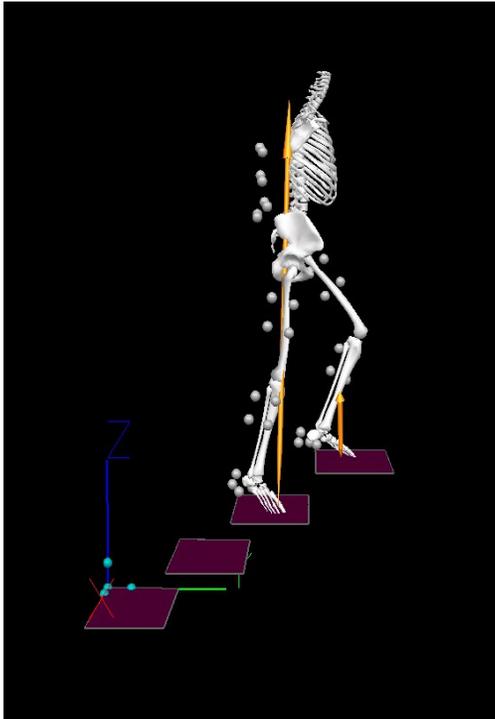
**University of
Tennessee,
Knoxville**



**Department of Kinesiology,
Recreation, and Sport Studies**

**Biomechanics and Sports
Medicine Lab**

Tel: 865-974-2091



Biomechanics

At The Biomechanics and Sport Medicine Lab, conveniently located on the campus of the University of Tennessee, Knoxville, we study how the body moves using high-speed 3D cameras, force plates, as well as electromyography.

This system allows the researchers to peer inside what is happening in the human body. This includes the amount of pressure (or force) is being experienced within the knee joint.

We use information collected to provide critical information to those working in clinics. Through our work, clinicians can modify rehabilitation strategies that are specific to the patient.

Current Research

Our lab collaborates with many outside partners in order to develop knowledge in all fields of human movement. Recently, our lab has collaborated with the NFL, MatMarket Orthotics, as well as the knee replacement manufacturer Smith-Nephew.

Total Knee Replacement

The lab is currently collaborating with The University of North Carolina, Charlotte, in conjunction with Smith-Nephew, to study two types of knee replacements, the Journey-II BCS and the Persona. The goal of this research is to explore how these two types of replacements compare over the first year after replacement.

What to Expect

You will be asked to travel to the lab two times, with an additional phone interview. You will be evaluated in your ability to move your knees, both with and without assistance, walk up and down stairs, walk on level ground, getting in and out of a chair, if able, balance on one leg, and finally, your ability to feel your knee movement. Additionally, you will fill out forms indicating your physical and mental well-being, pain levels, and overall satisfaction with your knee replacement.

Journey-II BCS

Pictured below from the Smith-Nephew Journey-II BCS product brochure. The brochure for this knee replacement can be found at: http://www.smith-nephew.com/global/assets/pdf/products/surgical/journeyii_bcs_mb_00741.pdf

Persona

The brochure for the Persona knee replacement can be found at: <http://www.zimmerbiomet.com/content/dam/zimmer-biomet/medical-professionals/knee/persona-knee-system/persona-the-personalized-knee-brochure.pdf>

