What is this research project about?
This research analyzes the cross-sectional properties of bones of the forearm and lower leg of active adult participants over the age of 40. The researchers are particularly interested in the effects of racquet sports on bone shape. Limbs will be examined using a pQCT scanner. The CT scanner measures five different positions along each bone. The results of this study will provide new insight into the impact of aging on bone development and the changes in the geometric properties of bone.

What will be required of me as a participant?
First, a Lab Assistant will take your biometric measurements including height, weight, handgrip strength, and body fat percentage. (5 minutes)

Next, you will complete a questionnaire requesting information about your athletic history, lifestyle habits, and basic medical information. (10 minutes)

Lastly, the pQCT Scanner will be used to measure the bones of your forearms and lower leg. (75 minutes)

Are there any risks from the pQCT Scanner?
Peripheral QCT is associated with an extremely low radiation dose because radiosensitive organs are distant from the primarily exposed area. Studies have shown that the effective dose from pQCT examinations is lower than 0.01 mSv.

Despite these low levels, the Institutional Review Board maintains a zero risk policy and therefore requires all female participants to take a negative pregnancy test before scanning.

How can I be assured of total confidentiality and anonymity of my information?
As required by the Institutional Review Board, all data collected will be remain totally anonymous and will have no personal information attached to it. All files, questionnaires, and pQCT scan data will remain on a secure workstation in a locked laboratory.

What do I wear? How do I get to the lab?
Please plan to dress in a loose fitting, short-sleeved shirt and socks. A map with directions to KSU’s Skeletal Variation Lab is attached. Please call the Lab Coordinator if you get lost – (770) 241-2779.

Who is the KSU Research Team?
The Principle Investigator of the Lab is Dr. Alice Gooding, Assistant Professor of Anthropology at KSU. Dr. Gooding earned her Ph.D. in Biological Anthropology from the University of Tennessee and is the Forensic Anthropologist for the State of Georgia at large. Please reach out to Dr. Gooding if you have any questions about this research- alice.gooding@kennesaw.edu.
The Lab Coordinator is Larry Cates who earned his MS (Thunderbird School of Global Mgmt) & BS (KSU).

Congratulations on your selection to participate in this important research project!
This study #19-360 has been approved and is under the oversight of KSU’s IRB.

Directions to KSU’s Bone Biomechanics Lab

Please park in the KSU Visitor Parking Lot at the end of Kennesaw State University Drive (circled in red). Register your vehicle at the pay machine. Parking is $3 per hour.

Proceed to the Social Sciences building (red arrow). Take elevators to the 3rd floor. Turn right out of the elevators and then go left. At the end of the hallway, you will see the Bone Biomechanics Lab, room 3002. Please call the lab if you get lost: (770) 241-2779