

The University of Maryland Baltimore is seeking old and young adults to participate in a research study (HP-00101447). The purpose of this study is to understand the age-associated changes in weight transfer in different step directions.

You are eligible to participate if:

- You are 18-35 years old or 65 years old or more.
- You have no history of leg and/or foot surgery or injury, such as lower extremity fracture, tendon or ligament repair, or surgical correction of leg length discrepancy in the last 5 years.
- You have no history of neurological or muscular disorders such as cerebral palsy, Down syndrome, muscular dystrophy, or myopathy.

Your participation will last for approximately 3 hours across two testing sessions. In one session you are going to go through a CT scan (~40 min) while in another session (~2 h) you are going through different clinical and balance assessments. We will ask you to perform a series of stepping tasks while muscle activity is recorded. A set of clinical assessments will be performed, and also ultrasound measures.

If you are an young female, you are also going to be asked to perform a pregnancy test.

The study will occur at the Allied Health Research Building, 100 Penn St. Baltimore, MD 21201. If you decide to stop taking part, please contact the investigator Dr. Marcel Lanza on 1-410-706-7308.