Materials List for:

Subject-specific Musculoskeletal Model for Studying Bone Strain During Dynamic Motion

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Materials

Name	Company	Catalog Number	Comments
CT Scanner	GE Medical System	N/A	Light Speed VCT. For performing tibia CT scan.
Motion Capture System	Vicon Inc	N/A	Vicon FX40 high speed cameras. For performing 3D motion capture.
Force plates	AMTI Inc	N/A	Collecting 3D ground reaction forces
Vicon Nexus	Vicon Inc	N/A	Motion capture software program. For processing visual marker trajectory data.
Visual 3D	C-Motion Inc	N/A	Biomechanics analysis software. For computing 3D kinematics and kinetics of human movements.
MATLAB	Mathworks Inc	N/A	Computer programming software. For performing raw data filtering, data conversion, and data processing.
ADAMS 2012	MSC Software Inc	N/A	Multibody dynamic computer simulation program.
LifeMOD	Lifemodeler Inc	N/A	A software Plug-in in ADAMS. For building human body musculo-skeletal models.
MIMICS 13	Materialise Inc	N/A	Image processing program. A 3D modeling tool to process imaging data. For creating 3D tibia model from CT scans.
MARC 2012	MSC Software Inc	N/A	Finite element analysis software. For performing volumn meshing, generating tibia FE model, and running modal FE analysis.
SPSS 19	IBM Inc	N/A	Statistical analysis software.