Materials List for:

Functional Near Infrared Spectroscopy of the Sensory and Motor Brain Regions with Simultaneous Kinematic and EMG Monitoring During Motor Tasks

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Materials

Name	Company	Catalog Number	Comments
CW6	TechEn	http://nirsoptix.com/	fNIRS machine with variable number of sources and detectors, depending on the number of modules included
MX system with ten T40-series cameras	Vicon Motion Systems Ltd., Oxford, UK	http://www.vicon.com/System/TSeries	Motion capture cameras
reflective 4 mm markers	Vicon Motion Systems Ltd., Oxford, UK		Markers used by the motion capture cameras to locate fNIRS optodes, Ar, Al, Nz, and hand coordinates.
reflective 9.5 mm markers	Vicon Motion Systems Ltd., Oxford, UK		Markers used by the motion capture cameras to locate arm and leg coordinates. Clusters are used for the limb segments, and markers with offsets are uses for PSIS and Iz to improve reliability in data capture.
Trigno Wireless EMG system	Delsys, Inc. Natick, MA	http://www.delsys.com/products/wireless-emg/	Electromyography
Bertec split-belt instrumented treadmill	Bertec Corporation, Columbus, OH	http://bertec.com/products/instrumented-treadmills.html	Treadmill
ZeroG body-weight support system	Aretech, LLC, Ashburn, VA	http://www.aretechllc.com/overview.html	Track and passive trolley used to support cables, harness can be used for patient safety during gait trials
3DS Max 2013	Autodesk, Inc., San Francisco, CA	http://www.autodesk.com/	3-D animation software used to animate animals for instructional videos
Windows Movie Maker	Microsoft Corporation, Redmond, WA	http://windows.microsoft.com/en-us/windows-live/movie-maker	software used to combine animation footage with music
Audacity	open source	http://audacity.sourceforge.net/	Software used to alter musical beat to appropriate cadence