The purpose of this research study is to collect MRI and MEG brain imaging data from individuals who have arm amputation and individuals with healthy movement control of both arms.

This data will assist neuroprosthetic researchers in the development of a wearable and implantable Brain-Computer Interface (BCI) system for upper limb amputees. This is a minimal risk study.

Testing will include questionnaires, a MR safety screening and multiple MRI and/or MEG brain imaging. MEG records magnetic fields produced by electrical currents occurring naturally in the brain, using very sensitive magnetometers.

Testing will be limited to 4 hours per visit and up to 5 visits. You will be compensated $50 plus a UPMC parking pass for each visit.