PROJECT TITLE: Changes in the Sensorimotor Control of Target Capture Movements with Aging

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TIMEFRAME OF PROJECT: Jan 2014 - Dec 2014

RESEARCH SUMMARY: This proposal seeks to involve an undergraduate engineering student in the collection and analysis of human motor performance data as well as in the dissemination of the results at an IEEE conference. Project activities are designed to broaden the educational opportunities for an undergraduate engineering student while also supporting the submission of a revision to a scored NIH R01 proposal. Proposed activities include: construction of a test fixture for use during data collection; the collection of 96 hours of kinematic and electromyographic data from neurotypical human participants with ages between 20 and 89 years; analysis of the resulting data to identify changes in the sensorimotor control of the arm and hand during reaching and grasping; drafting and submitting a 1-page conference paper summarizing the experimental findings.

RESEARCH OUTCOME: Project is on-track for collection of preliminary data in support of a re-submission of an NIH proposal by Nov 5 and for the submission of a 1-page conference paper by Dec 1, 2014.

LOCATION OF RESEARCH ACTIVITIES: Cramer Hall 173C

COLLEGE RESOURCES: Lab Space: EH322/328; DLC (3D printing)

COMMENTS: Summer progress was delayed due to a scheduling conflict that arose on the part of the student.