

Faculty Project Proposal for MPT Research Projects 2023-24

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| Personal Information | | | | | | | | | |
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| Project Details | | | | | | | | | |
| Project Title: | Enhancing functional neurorecovery for individuals with neurological conditions | | | | | | | | |
| Expected Start Date: | April 2024 | | | | | | | | |
| Project Length: | | | ☐ Full Project (300 Hours) | | | ☐ Half Project (150 Hours) | | | |
| Project Level | |] First | Year Second Yea | | Second Year | | ☐ First or S | econd Y | <mark>ear</mark> |
| Project Type: | ☐ Clin | <mark>ical</mark> | ☐ Biomedical | | | ☐ Quality Improvement | | | |
| ☐ Retrospective Chart Review ☐ Other (specify): | | | | | | | | | |
| Will this project be linked to a research clinical placement? | | | | | | possibl | y 🛭 Yes | / 🗆 | No |
| If yes, have you received approval from the Academic Coordinator of Clinical Education? Please attach a letter of support | | | | | | ☐ Yes / ☐ No | | | |
| Project Description | | | | | | | | | |
| Include background, research topic, and description of general duties. | | | | | | | | | |
| Methods of priming the brain to enhance neuroplasticity are gaining interest in people with neurological conditions. Measures of neuroplasticity to help | | | | | | | | | |

Methods of priming the brain to enhance neuroplasticity are gaining interest in people with neurological conditions. Measures of neuroplasticity to help evaluate recovery include neurophysiological approaches like function near-infrared spectroscopy (fNIRS) and trans-cranial magnetic stimulation (TMS). The details of this opportunity will be shaped based on student's interest but will include some data analysis of neuroplasticity measures (e.g., fNIRS data), some literature review, and the opportunity to participate in some data collection (e.g., using brain priming for individuals with neurological conditions).