SHP Student Interns for Research and Scholarly Activities
Application of Project Proposal Form

Instructions:
Please fill out the form and return via email to Nipa Sahasrabuddhe (ns1115@shp.rutgers.edu) by April 1, 2022. Please fill each box to the right of each required field. If you are sending attachments, please ensure your contact information is added to all your forms.

**Faculty Contact Information:**

| Date submitted: | 3/24/22 |
| Faculty Name: | Richard Ferraro, PT, PhD |
| Department/Program: | RMS – Physical Therapy (Blackwood) |
| Telephone number: | 856-566-6455 |
| E-mail: | ferrarra@shp.rutgers.edu |

**Project Detail:**

| Project Title: (56 characters max) | Expanding use of the IMTP to Clinical Populations |
| Hypothesis: | The isometric mid-thigh pull (IMTP) is a test of total body strength that has been used extensively with competitive athletes. However, it has not been used widely in patient populations. We recently completed data collection with a sample of healthy active individuals. Primarily, we are using the IMTP as a potential predictor of running related injury in the high school cross country athlete. We hypothesize that high school runners who go on to experience injury will demonstrate poorer overall force production than their uninjured counterparts. Secondly, we are implementing the IMTP as an outcome measure in a trial for patients with peripheral neuropathy. We hypothesize that patients with peripheral neuropathy who receive training in mindfulness techniques will improve their total body strength more than those in a control group. |
| Description: (Include design, methodology, data collection, techniques, data analysis to be employed, evaluation and interpretation methodology for research component) | Data are collected in the lab and in the community using a wired force transducer. Analysis is completed using Microsoft Excel and Stata. Students will be given training in use of both, as well as training to create patient-specific reports. Summary data will be discussed as a research team to determine the effects of strength on injury occurrence. |
| **Specific Student Responsibilities:** | Student Research Intern will be responsible for:  
- Participating in data collection for the IMTP tests for two IRB approved research studies  
- Reviewing collected data for validity and acceptability  
- Processing IMTP data using standard data analysis packages (Microsoft Excel, Stata)  
- Summarizing data for each study along with comparisons to normative data for submission of abstracts and manuscripts. |

| **Start / end date of project:** | 6/15/2022 to 8/15/2022 |

| **Educational:** | Students will participate in weekly research team meetings with the investigators to summarize weekly progress and plan out the upcoming week. Students will have the opportunity to be cross-trained in other data collection methods as well. |

| **WHAT OTHER EDUCATIONAL OPPORTUNITIES ARE AVAILABLE TO STUDENTS? (e.g., journal club, seminars, clinic, rounds)** | Student will be expected to submit findings for presentation at the SHP Research and Scholarship Symposium.  
Abstracts will be submitted for presentation at the APTA Combined Sections Meeting.  
Manuscripts will be submitted to the Physical Therapy Journal and the Journal of Orthopaedic & Sports Physical Therapy |

| **WHERE DO YOU PLAN TO PRESENT OR PUBLISH THE FINDINGS WITH THE STUDENT? (e.g., national or state meetings, newsletter or journal, SHP poster day)** |  
- SHP Research and Scholarship Symposium  
- APTA Combined Sections Meeting  
- Physical Therapy Journal  
- Journal of Orthopaedic & Sports Physical Therapy |

| **CHECK ALL APPROPRIATE BOXES BELOW AND PROVIDE REQUESTED INFORMATION.** |  
- This project is:  
  - ☑ laboratory  
  - ☐ clinical  
  - ☐ behavioral  
  - ☐ survey  
  - ☐ educational  
  - ☐ Other: please specify ________________________________  
- ☑ This project involves the use of human subjects (including chart review, retrospective studies and questionnaires).  
- Pending ☐   Approved X ☐  IMTP study Pro2020000488  
  Neuropathy Study Pro2020003234  
  **IRB approval must be obtained by June 2022**  

3/26/2022