

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

**Instructions:**

Please fill out the form and return via email to Michele Sisco ([mcoral@shp.rutgers.edu](mailto:mcoral@shp.rutgers.edu)) by **March 25, 2024**. **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:	March 25, 2024
Faculty Name:	Soha Saleh
Department/Program:	RMS
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**Project Detail:**

Project Title: (56 characters max)	Integrative Training Approach for Inducing Neuroplasticity
Hypothesis:	Integrative Training Approach results in significantly larger mobility and cognitive improvements than basic physical training and larger change in neuroplasticity.
Description: (Include design, methodology, data collection, techniques, data analysis to be employed, evaluation and interpretation methodology for research component)	Student is expected to perform literature review following guidelines defined by Rutgers University library. In parallel to working on literature review, the student can participate in a single-blind, 2-arm RCT that compares the effects of a 12-session GAT intervention with an active control condition on functional and neuroimaging outcomes in 30 individuals with multiple sclerosis. Upon satisfying inclusion/exclusion criteria, participants will undergo baseline mobility, cognitive, and neuroimaging outcome assessments. Following baseline testing, participants will be randomly assigned to either the intervention (Gait adaptability training, GAT) or active control (basic physical training, BPT) condition. GAT will involve completing 12 training sessions using mixed reality (MR) over 4 weeks. BPT will involve completing 12 sessions of upper extremity movement and walking without purposeful gait adaptations over 4 weeks (i.e.,

	walking alone). After the 4-week study period, participants will complete the same assessments as at baseline (i.e., follow-up) with blinded assessors.
Specific Student Responsibilities:	Specific student responsibilities will include review of the literature on clinical trials that included elements of integrative training. The student is expected to contribute to writing a review paper on this topic. The student is also expected to assist in few data collection and training sessions during the internship period.
Start / end date of project:	June until August 2024

**Educational**

WHAT OTHER EDUCATIONAL OPPORTUNITIES ARE AVAILABLE TO STUDENTS? (e.g., journal club, seminars, clinic, rounds)	We will have a journal club in the summer and the student is expected to participate in this educational activity.
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)	The student will contribute to a paper that will be published as peer reviewed journal article.

**CHECK ALL APPROPRIATE BOXES BELOW AND PROVIDE REQUESTED INFORMATION.**

This project is:  clinical  laboratory  behavioral  survey  educational  
 Other: please specify \_\_\_\_\_

This project involves the use of human subjects (including chart review, retrospective studies and questionnaires).

Pending  Approved  IRB Protocol Number \_\_\_\_\_

***IRB approval must be obtained by June 2024***

 PT, DPT, PHD.

3/26/24

\_\_\_\_\_  
Signature of Department Chair

\_\_\_\_\_  
Date

OR-For internal use

**Form: (1)**

**Reviewed date:** \_\_\_\_\_

**Date processed on website:** \_\_\_\_\_