



## 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](mailto:ns1115@shp.rutgers.edu)) by **March 31, 2023**. 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:	3/28/2023
Faculty Name:	David Kietrys
Department/Program:	RMS / DPT
Telephone number:	856-566-7186
E-mail:	<a href="mailto:kietrydm@shp.rutgers.edu">kietrydm@shp.rutgers.edu</a>

### Project Detail:

Project Title: (56 characters max)	<b>Neuropathy Walks</b>
Hypothesis:	<p>Hypothesis for Aim 1 (cross-sectional phase): Temporal and spatial characteristics of gait, walking endurance, physical performance scores and pain pressure threshold scores will be worse, and physical activity will be lower, in those with DSP than in those without DSP.</p> <p>Hypothesis for Aim 2 (interventional phase): There will be a beneficial effect on all clinical and functional outcomes in each of the 2 intervention groups (mindfulness meditation; TENS) compared to a standard care group.</p>
Description: (Include design, methodology, data collection, techniques, data analysis to be employed, evaluation and interpretation methodology for research component)	<p>Aim 1. Determine if the presence of painful distal sensory polyneuropathy in the feet adversely affects function (gait and physical performance), physical activity, and pain pressure threshold in persons living with HIV (PLHIV). All enrolled participants (those with DSP and those without DSP) are involved with the cross-sectional phase for Aim 1. Data is collected via an array of non-invasive tests (pain pressure threshold and physical performance tests) and questionnaires. Data analysis will involve group comparisons using appropriate parametric and/or non-parametric statistical tests. <a href="https://clinicaltrials.gov/ct2/show/NCT04889521">https://clinicaltrials.gov/ct2/show/NCT04889521</a></p> <p>Aim 2. Determine the feasibility and effects of (1) mindfulness meditation or (2) transcutaneous nerve stimulation (TENS) on clinical and functional outcomes in persons with HIV-associated painful distal sensory polyneuropathy in the feet. Only participants with DSP and foot pain continue on into the interventional phase for Aim 2. Data is collected via an array of non-invasive tests (pain pressure threshold and physical performance tests) and</p>

	questionnaires. Data analysis will involve between group and within group outcomes using appropriate parametric and/or non-parametric statistical tests. <a href="https://clinicaltrials.gov/ct2/show/NCT04868123?term=pain++peripheral+neuropathy+HIV&amp;draw=3&amp;rank=11">https://clinicaltrials.gov/ct2/show/NCT04868123?term=pain++peripheral+neuropathy+HIV&amp;draw=3&amp;rank=11</a>
Specific Student Responsibilities:	<ol style="list-style-type: none"> <li>1. Recruitment and eligibility screening.</li> <li>2. Consenting of participants.</li> <li>3. Data collection</li> <li>4. Preliminary data analysis</li> </ol>
Start / end date of project:	Enrollment has been underway since May 2022. We are currently 50% enrolled. Anticipated end date of study is Oct. 2023.

### **Educational:**

WHAT OTHER EDUCATIONAL OPPORTUNITIES ARE AVAILABLE TO STUDENTS? (e.g., journal club, seminars, clinic, rounds)	<p>Participation in American Physical Therapy Association HIV Special Interest Group if student is an APTA student member.</p> <p>Attend lecture on HIV disease provided by Dr. Kietrys in summer 2023 (part of a required course for DPT-Blackwood students; if intern is not a DPT-Blackwood student, they will be invited to attend lecture as a guest.</p>
WHERE DO YOU PLAN TO PRESENT OR PUBLISH THE FINDINGS WITH THE STUDENT?	<p>APTA Combined Sections Meeting 2024</p> <p>SHP Research and Scholarship Symposium 2024</p>

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

This project is: clinical, including behavioral outcomes. Some data collection involves use of surveys.

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

IRB Protocol Number **Pro2020003234 (Status: Approved)**

**IRB approval must be obtained by June 2023**

 PT, DPT, PhD.

Signature of Department Chair

March 28, 2023  
Date

OR-For internal use

**Form: (1)**

**Reviewed date:** 4/4/23

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