

## 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 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:

. dodiny dominated in the contract of the cont	
Date submitted:	3-28-23
Faculty Name:	Deutsch
Department/Program:	RMS
Telephone number:	2-2373
E-mail:	deutsch@rutgers.edu

VCYCLE: Virtual Cycling in Persons with Parkinson

Project Detail: Project Title: (56

Hypothesis:  Exercise intensity and enjoyment will be greater in the virtual environment using interval cycling compared to non-VR cycling  This study occurs over two sessions. Participants complete a clinical test of motor performance and questionnaire about physical activity. They then bicycle in a virtual environment in both an immersive and semi-immersive condition. On the second day they return and cycle in a semi immersive environment as well as without any virtual environment (4 bouts total) in both a continous or interval mode. Oxygen consumption is monitored with a metabolic cart. Participants report on enjoyment and effort in all trials. There are open ended questions about their experience.  Screening of participants for eligibility. Participation in data collection (administration of questionnaires and learning how to use the virtual environments and the metabolic cart) interim data analysis. Reading the literature as appropriate.	characters max)	Disease
(Include design, methodology, data collection, techniques, data analysis to be employed, evaluation and interpretation methodology for research component)  Specific Student Responsibilities:  (Include design, methodology, data collection, techniques, data analysis to be employed, evaluation and interpretation methodology for research component)  (Include design, methodology, data collection, techniques, data analysis to be employed, evaluation and interpretation methodology for research component)  (Include design, methodology, data collection, techniques, data analysis to be employed, evaluation and immersive and semi-immersive condition. On the second day they return and cycle in a semi immersive environment as well as without any virtual environment (4 bouts total) in both a continous or interval mode. Oxygen consumption is monitored with a metabolic cart. Participants report on enjoyment and effort in all trials. There are open ended questions about their experience.  Screening of participants for eligibility. Participation in data collection (administration of questionnaires and learning how to use the virtual environments and the metabolic cart) interim data analysis. Reading the literature as appropriate. Contribution to scientific writing	Hypothesis:	virtual environment using interval cycling compared to
Screening of participants for eligibility. Participation in data collection (administration of questionnaires and learning how to use the virtual environments and the metabolic cart) interim data analysis. Reading the literature as appropriate. Contribution to scientific writing	(Include design, methodology, data collection, techniques, data analysis to be employed, evaluation and interpretation methodology	complete a clinical test of motor performance and questionnaire about physical activity. They then bicycle in a virtual environment in both an immersive and semi-immersive condition. On the second day they return and cycle in a semi immersive environment as well as without any virtual environment (4 bouts total) in both a continous or interval mode. Oxygen consumption is monitored with a metabolic cart. Participants report on enjoyment and effort in all trials. There are open ended
	· ·	Screening of participants for eligibility. Participation in data collection (administration of questionnaires and learning how to use the virtual environments and the metabolic cart) interim data analysis. Reading the literature as appropriate. Contribution to scientific writing
Start / end date of	Start / end date of	To be discussed with students in order to best coordinate

4/5/2023

project:	with their schedule.	
Educational:		
WHAT OTHER EDUCATIONAL OPPORTUNITIES ARE AVAILABLE TO STUDENTS? (e.g., journal club, seminars, clinic, rounds)	Journal club Lab meetings Interaction with visiting scientists or international collaborators Interaction with other students in the lab.	
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)	Rehabilitation or Neural Engineering journals.  There will likely be intermediate dissemination opportunities to be determined as appropriate	
CHECK ALL APPROPRIATE BOXES BELOW AND PROVIDE REQUESTED INFORMATION.		
This project is: ☐ clinical X☐ laboratory ☐ behavioral ☐ survey ☐ educational		
Other: please specify		
☐ This project involves the use of human subjects (including chart review, retrospective studies and questionnaires).		
Pending Approved x IRB Protocol Number Pro2020000518		
IRB approval must be obtained by June 2023		
Signature of Department Cha	March 28, 2023	

OR-For internal use **Form: (1)** 

4/5/2023 2

Reviewed date:_	4/4/23
Date processed	on website:

4/5/2023