

Job Description

The Aging, Mobility, and Cognitive Neuroscience Lab at Vancouver General Hospital and the University of British Columbia focuses broadly on defining the role of targeted exercise training and physical activity to improve the health and quality of life of older adults. In particular, our research program aims to optimize function among those most vulnerable to both physical and cognitive decline, such as those with cognitive impairment and dementia. The lab is seeking a student that will help achieve research goals by making the lab more efficient as we acquire and analyze data obtained from our trials. Student will help reach our recruitment goals and help maintain a safe and comfortable environment for participants during exercise and cognitive intervention programs. Reaching these goals will allow us to improve our understanding of how different interventions may prevent cognitive decline in older adults with chronic stroke, how to increase sleep quality and quantity in older adults, and how older adults expend energy.

Duties and Responsibilities: Assist in several aspects of multiple randomized controlled trials concurrently running in the Aging, Mobility, and Cognitive Neuroscience Lab. Studies include several different exercise groups including aerobic and resistance training intervention programs that may help promote cognitive functioning in older adults with mild cognitive impairment, including a population of chronic stroke patients. Specifically, within these studies, a student with a personal training or fitness instructor certification will have the opportunity to administer exercise intervention programs under the supervision of the research coordinator. This will include greeting participants, setting up for classes, learning to lead exercise and balance and toning classes to research participants, using heart rate monitors and learning exercise physiology principles of older adults with vascular issues, data collection during classes, and training and supervising lower level work learns assisting with classes and data collection. Student will also have the opportunity to administer assessments including physical measurements, brain functioning tasks, and questionnaires. Other administrative tasks within the lab as necessary when not at exercise classes.

Supervision: Daily supervision by a doctoral student or research coordinator; weekly 1:1 check-in with professor; monthly check-in with professor and lab in a group meeting setting. Student will not lead any classes until both the student and research coordinator are comfortable. Complexity: Tasks are straightforward and clearly described in lab protocols, but with a high level of in-the-moment decision making where good judgement is necessary. Student will be trained and helped to complete the tasks until they are able to complete them independently with minimal supervision (i.e., pre-processing).

Qualifications

Upper undergraduate or Masters student must have a fitness or group instructor or personal training certification (ex: NSCA, ACSM, BCRPA, etc.), be willing to learn new skills and adapt, and an interest in geriatrics and exercise neuroscience. The candidate should have a solid understanding of exercise physiology, musculoskeletal anatomy, biomechanics, and strength and conditioning principles. Eligible for UBC's Work Learn Program. Reliable, especially regarding agreed upon work hours. Strong organizational skills (e.g., able to complete a lab notebook, as instructed). Strong communication skills (e.g., student must be able to communicate comfortably with older adults, communicate any issues that arise during their work within the lab, and will be encouraged to communicate ideas about solving issues and improving methods within the lab). An excellent team player, who also is able to work independently where appropriate.

Faculty/VP: Faculty of Medicine

UBC Department: Physical Therapy

Student Learning Components (UBC Vancouver Work Study/Work Learn program)

Orientation and training: During the first two weeks, student will be directly trained to complete the necessary tasks.

Student will be taught how to keep and ensure data confidentiality and safety (i.e., back-up). Student will be taught about causes, symptoms, and outcomes of a stroke, normal outcomes of the procedures, and to report any concerns about issues that may have arisen. Student will be trained on successfully following study exercise intervention protocols and organizing/leading a group class. The student will be supervised in their tasks until they can reliably perform them without supervision.

Feedback/on-going support/reflection: Student will be given informal feedback regularly (daily at first, weekly later). Once a semester, student will be given more formal feedback from professor, after consultation with lab members. Student will be encouraged to learn about the experiments going on in the lab and will be given articles to read to strengthen their background understanding. Student will be incorporated into lab functions, including lab group meetings and discussions.

Mentorship opportunities: More experienced students will be given the opportunity to mentor less experienced students in study procedures and techniques. Student will have the opportunity to be mentored by doctoral students and post-doctoral fellows.

Personal and professional development/workplace skills: Student will have the opportunity to learn how to properly perform, teach, and spot older adults in resistance training. Student will also have the opportunity to become adept at interacting with older adults, many who have cognitive disabilities, and learn how these cognitive disabilities directly affect the daily lives of older adults and their caregivers. Through assessments, the student will also learn about the brain's different executive functions, and how they present in older adults with mild cognitive impairment. The student will learn to work in a team setting. Student will learn randomized controlled trial principles, how to work and communicate with older adults with varying physical abilities, the basics of activity and sleep data analysis, how to perform and interpret oxygen uptake measurements, and the effects and outcomes of strokes. The student will also have the opportunity to attend educational public forums and hear from international researchers related to exercise intervention and healthy aging. The student will have the educational opportunity to attend and participate in research meeting, as well as review scholarly journals. The student gets direct hands-on experience with a vulnerable population of older adults and get the chance to help them increase their quality of life.

Complementing classroom learning: Student will get hands-on clinical research experience, learning the research process and ethics involved within clinical research. Student will be exposed to the process of asking questions, where the answers are unknown, dealing with the complexity of data, and following up on leads until hypotheses can be confirmed or rejected. Student will develop skills using different technologies to measure outcomes such as sleep and oxygen uptake, and how these technologies are used in research. From lab measurement outcomes and complimentary research papers, student will learn principles of exercise, biomechanics, physiology, and how the brain functions as we age. The student will also get hands-on experience with vulnerable clinical populations and work with research participants who have many of the comorbidities you learn about in school such as stroke, diabetes, high blood pressure, and arthritis.

Networking: Students will work in the Centre for Brain Health and the Centre for Hip Health and Mobility, in an open lab environment that encourages students from different labs to meet and interact. Student will have one-on-one contact with scientists at different stages (other undergraduate student researchers, graduate students, a technician, and a professor).

Hours Per Week: 10 Salary / Wage: 18.04 Preferred Degrees/Disciplines: Health Sciences, Human Kinetics/Kinesiology Additional Documents (preferred): Cover Letter, Unofficial Transcript, Class Schedule Anticipated Start Date: September 1, 2020 Experience Level: Current Students in an Undergraduate Program, Current Students in a Masters Program ID: 875440 Supervisor: Teresa Liu-Ambrose Organization Type: UBC Faculty, Department, Unit or Student Group 14917 95 ave Surrey, BC V3R 7W4

August 12, 2020

Dr. Teresa Liu-Ambrose, Professor Department of Physical Therapy 212 Friedman Building, 2177 Wesbrook Mall Vancouver, BC V6T 1Z3

Dear Dr. Teresa Liu-Ambrose,

After reading through the job posting I am very interested in a position as a Student Leader for your Exercise Interventions Lab. I am currently a 4th year Kinesiology student and have worked positions and hold certifications that I believe make me an excellent candidate for your team.

As noted in my resume, I have worked as a Cardiac Rehab Volunteer, Activity Coach, and Shuttle Driver. Working with older adults was a key aspect of these positions and the skills learned would transfer wonderfully to your lab. Additionally, my position in Cardiac Rehab has involved me working with a clinical population requiring more care and attention. I also hold an ACSM Personal Training certification which I completed to complement my degree in Kinesiology. This, along with my personal involvement in strength training gives me a strong foundation to build on within your lab. I will have no problem picking up new skills or techniques required for the role.

If you think I'd be a positive addition to your team please feel free to call me at (604) 445-4925 or email me at money_sd@hotmail.com. I am excited to possibly hear back and appreciate your time and consideration.

Sincerely,

Money Dhaliwal

Encl. Resume

Money Dhaliwal

14917 95 ave || Surrey, BC V3R 7W4 || 604-445-4925 || money_sd@hotmail.com

Objective

To obtain a position working with a clinical population, in preparation for a career in Physiotherapy.

Education

University of British Columbia

Bachelor of Kinesiology

Work Experience

Physiomed

• Fit braces, orthotics, sleeves, etc. on clients along with delivery of product

YMCA - Choose to Move Program

Activity Coach

• Carry out one-on-one consultations to determine participants' starting points and goals, group meetings with presentations on various health topics and monthly phone call check-ins for physical activity support

White Rock Honda

Shuttle driver

Shuttled customers while handling various responsibilities around the dealership

UBC Food Services

Cashier

Worked cash register and ensured quick check-out along with keeping store tidy

Extracurricular

Fraser Health

Cardiac Rehab Assistant (Volunteer)

- Responsible for recording HR, BP, RPE, & exercise settings along with setting up 5-lead telemetry monitor
- Socialize with patients, provide help when necessary and bring up any concerns to Exercise Physiologist
- Lead resistance training, stretching and balance routine

CBI Health Group

Work Experience Placement

- Shadowed and assisted the clinic's Physiotherapists, Kinesiologists and Occupational Therapists
- Assisted patients with warm-up routines and form correction

References available upon request

December 2019 - Present

September 2019 - July 2020

Expected 2021

June 2017 - January 2020

September 2016 - January 2017

March 2017 (90 hours)

April 2019 - Present

Custom Orthotics Assistant

Money Dhaliwal 14917 95 ave Surrey, BC V3R 7W4

August 12, 2020

Monka Tsia, Clinical Exercise Specialist Fraser Health Authority 9750 140 St Surrey, BC V3T 0G9

Dear Monika,

I hope you have been doing well over the summer. I have had a wonderful experience volunteering with you and the Cardiac Rehab team over the past year. As the person I interact with most at the clinic, I thought you would be great to ask for a reference.

I am currently in the process of applying for a position on a research team at UBC concerning exercise interventions for older adults. As you know, I am aiming to become a Physiotherapist and this position would provide me with valuable and relevant experience. Since I have worked with you extensively, I believe you would be able to speak to my qualifications in regards to this role. For reference, I have attached my resume if you would like to review.

Please let me know if you are open to being a reference for me. If you need any extra information just reach out through email or phone.

Best,

Money Dhaliwal

Money Dhaliwal 14917 95 ave Surrey, BC V3R 7W4

August 12, 2020

Samantha Hartley-Folz, Director YMCA of Greater Vancouver 300-5055 Joyce St Vancouver, BC V5R 6B2

Dear Sam,

I hope you have been doing well this summer. I am in the process of applying for a position as a Student Leader for a lab at UBC. As you know, I am aiming to become a Physiotherapist and this position would be very valuable for it's experience and networking opportunities. Since you were my manager for about a year over various different positions at the YMCA, I believe you are in a great position to speak on my qualities as an employee.

For reference I have included my resume for you to review. If you feel comfortable as one of my references please let me know.

Best,

Money Dhaliwal

Money Dhaliwal 14917 95 ave Surrey, BC V3R 7W4

August 12, 2020

Amandeep Sangha, Clinical Exercise Specialist & Physiotherapist Fraser Health Authority 9750 140 St Surrey, BC V3T 0G9

Dear Amy,

I hope you are doing well. I am reaching out as I am currently applying for a position at a UBC search lab. I have very much enjoyed working with you and Monika over the past year and thought it would make sense to have you as a reference. The position I am applying to provide me with invaluable experience in the field of exercise and rehab. If you feel you would be able to speak to my qualifications in regards to this role, please let me know.

I have attached my resume if you would like to review and I am open to any questions you may have. Thank you for our time and I hope to hear back.

Best,

Money Dhaliwal