KINESIOLOGY PRACTICUM DESCRIPTION

Practicum Position Title: Biomechanics Research Assistant

Agency/Company: Department of Clinical Neurosciences, UCalgary

Location: McCaig Institute at HRIC (UCalgary – Foothills Campus)

Terms Available: Fall or Winter

Number of Positions: 2

Project Duties/Responsibilities:

Dr. Ranita Manocha is a physiatrist, a physician specializing in Physical Medicine and Rehabilitation. The patients Dr. Manocha typically works with have acute injuries or chronic disabilities, such as a sports injury, motor vehicle accident, orthopedic trauma, brain injury, spinal cord injury, amputation or peripheral nerve injury. Dr. Manocha is looking for enthusiastic and motivated students interested in gaining hands-on experience in biomechanics research or exercise delivery.

Under strict supervision, the student will work with Dr. Manocha and an interdisciplinary and collaborative research team to study the effect of crutches on human movement. During the interview process, the student’s interest will be matched with a specific research project. Examples of research projects may include:

- Analyzing upper extremity kinematics and kinetics during crutch-assisted gait using optical tracking system and surface electromyography
- Assessing the impact of shoulder strengthening exercises on crutch-assisted gait kinematics
- Questionnaire-based research from people prescribed crutches in emergency departments

Under supervision, the practicum student will:

- Assist with contacting and scheduling of study participants.
- Help the participants to complete questionnaires assessing their upper or lower extremity function and quality of life, and assist with collecting participant height and weight.
- Perform bedside assessments of upper extremity strength and motion, and properly fit a brace or gait aid
- Demonstrate upper extremity stretching and strengthening techniques to research subjects who have been assigned to a home exercise program.
- Collect 3D kinematic and kinetic data during crutch-assisted gait by setting up markers on participants and their devices, calibrating software, and collecting data into software.
- Use Microsoft Excel for basic data entry and analysis.
- Assist in writing and presenting research (if interested).

Required Student Qualifications:

- Completion of KNES 213 (Introduction to Research in Kinesiology)
- Completion and good recall of KNES 259/260 (Human Anatomy/Physiology)
- Completion of KNES 263 (Quantitative Biomechanics)
- Interest in biomechanics and clinical applications
- Computer skills – knowledge of Microsoft Word and Excel
Assets:
- Experience in delivering exercise-based interventions
- Previous research experience
- Courses in Epidemiology, Public Health, Research Methods, and Statistics

On-Site Supervisor: Dr. Ranita Manocha, MD, MSc, FRCPC, CSCN(EMG), ranita.manocha@ucalgary.ca
(Please provide your resume and transcript)
Kinesiology Practicum Application

Placement: **Department of Clinical Neurosciences, UCalgary**

*Students must have 60 units completed to qualify for a practicum, including 30 units of KNES*

*Students may participate in up to three practicums, with no more than two at the same location*

**INSTRUCTIONs**

1. Contact the on-site supervisor to arrange an interview.
2. Bring a copy of this application with the completed student portion to your interview to be completed by the On-Site Supervisor.
3. Submit application and required documentation (if applicable) to knespracticum@ucalgary.ca; our office will email your @ucalgary address within 5 business days with next steps for you and your On-Site Supervisor.

**STUDENT PORTION – COMPLETE PRIOR TO INTERVIEW**

**Practicum Term**

- Fall ________ (year)
- Winter ________ (year)
- Spring ________ (year)

**Student Information**

- Name:
- UCID:
- Phone Number:
- Email: @ucalgary.ca

**Student Practicum Expectations:** Why have you chosen this practicum placement? (1-2 sentences)

**Code of Conduct**

Students are responsible for compliance with the University of Calgary’s Code of Conduct.

- Yes ☐ No ☐ I have read and understood the University of Calgary’s Code of Conduct.
- Yes ☐ No ☐ Do you have a pre-existing relationship(s) with person(s) or group(s) associated with this practicum placement?
  - If yes, please briefly explain the nature of the relationship:

I agree that:

- No salary or payment will be received based upon my participation in a Kinesiology practicum placement
- I will meet the expectations of the practicum placement for which I am applying
- I will be punctual throughout my practicum placement and will adequately notify the On-Site Supervisor about any absence(s).
- I will complete 60-72 hours within the dates of the term.

**Start Date (first day of lectures)**

**End Date (last day of lectures)**

☐ I agree with the above-mentioned terms and conditions.

**Student’s Signature:**

**Date:**

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**ON-SITE SUPERVISOR PORTION**

**Name:** Dr. Ranita Manocha  
**Organization:** University of Calgary

**Phone:**  
**Email:** ranita.manocha@ucalgary.ca

As the On-Site Supervisor, I agree that:

- No salary or compensation will be given to the practicum student
- I will provide sufficient hours, supervision, and guidance during this practicum placement
- I will complete a mid-point and final evaluation for the practicum student.

☐ I agree with the above-mentioned terms and conditions.

**On-Site Supervisor’s Signature:**

**Date:**
CONFIDENTIALITY AGREEMENT

Practicum students and the agency must complete the signed confidentiality agreement and submit it (along with the practicum application form) to knespracticum@ucalgary.ca.

THIS AGREEMENT is made as of the_______day of__________, 20____.

BETWEEN:

__________________________________________________________

(herereinafter called the “Agency”)

AND:

__________________________________________________________

(herereinafter called the “Student”)

Whereas:

It is the Student’s legal and ethical responsibility to protect the privacy, confidentiality and security of all records, proprietary information and other confidential information relating to the Agency, including business, employment and medical information relating to patients, members, employees and health care providers. (“Confidential Information”).

And whereas:

The Agency has adopted policies and procedures regarding Confidential Information including its policies and procedures for complying with the Freedom of Information and Protection of Privacy Act and the Health Information Act (“Policies and Procedures”).

In witness hereof, the parties agree as follows:

1. The Agency agrees to disclose and the Student agrees to receive Confidential Information in furtherance of participating in his/her practicum with the Agency, as set out in the Practicum Agreement.

2. The Agency agrees to advise, instruct and guide the Student as to the Policies and Procedures.

3. Upon receipt of the information set out in paragraph 2 herein, the Student agrees to use his/her best efforts to comply with the Policies and Procedures and to protect the Confidential Information, or any part thereof, and prevent it from being disclosed to any person contrary to the Policies and Procedures.

IN WITNESS WHEREOF, the parties have duly executed this Agreement effective as of the day and year first written above.

Agency

Signed: ________________________________  Signed: ________________________________
Print Name: ________________________________  Print Name: ________________________________
Title: ________________________________  Date ________________________________

Student

2500 University Drive N.W., Calgary, Alberta, Canada  T2N 1N4  ucalgary.ca/knes