



With an international reputation for success, Western ranks as one of Canada's top research-intensive universities. Our research excellence expands knowledge and drives discovery with real-world application. Western also provides an exceptional employment experience, offering competitive salaries, a wide range of employment opportunities and one of Canada's most beautiful campuses.

The Department of Physiology and Pharmacology is the largest basic medical science department within the Schulich School of Medicine & Dentistry. Our mission is to carry out world-class scientific research and evidence based teaching. We have award-winning teachers who are committed to delivering high-quality and innovative education at both the undergraduate and graduate levels. In addition, our department has a strong focus on research excellence with faculty members recognized internationally for their achievements.

The mission of the Pruszynski lab is to understand how the central nervous system controls reaching, grasping and object manipulation, and to determine how this control is compromised in the context of trauma and disease.

The **Research Associate** will be responsible for applying their expertise and knowledge to direct projects that test how the nervous system generates movements in the non-human primate model under the direction of a Principal Investigator (PI). The role will involve carrying out and overseeing original and independent research to assist the PI in achieving their research outcomes specifically interested in coupling neural recordings in the brain and spinal cord with recordings from large populations of single motor units via state-of-the-art electrodes being developed by collaborators at Emory University. In consultation with the PI and the collaborators in the consortium, the Research Associate will develop these technologies in non-human primates, carry out and oversee original studies based on these technologies and assume responsibility for the preparation of manuscripts for publication. In addition, the Research Associate will provide leadership with non-human primate experiments in the laboratory and assist in the training of graduate students and postdoctoral scholars in that environment.

Qualifications

Education:

- PhD in Neuroscience, Movement Science, or Physiology

Experience:

- 5 years' post-doctoral experience working in a research-intensive laboratory environment in the area of upper-limb motor control with an established publication record in peer-reviewed scientific journals
- Experience with and expert knowledge of working with non-human primates and training them in upper limb motor tasks
- Experience with and expert knowledge of single neuron recordings in the non-human primate brain and spinal cord
- Experience with and expert knowledge of recording and analyzing muscle activity at the level of single motor units
- Experience with and expert knowledge of data analysis platforms (e.g., Matlab, Python)

- Experience with multiple species of non-human primates is preferred
- Experience with recording muscle activity in humans is preferred

Knowledge, Skills & Abilities:

- In-depth knowledge in all aspects of working with non-human primates in an academic setting including welfare, training, experimental design, and data collection
- Expert knowledge of acquiring and analyzing the activity of single motor units
- In-depth knowledge with methods for research design, implementation, and analysis
- Knowledge of regulations and guidelines governing animal research ethics in an academic environment and with best practices for reviewing and writing grant proposals
- Ability to transfer and apply specialized scientific knowledge obtained in one setting to another in order to quickly adjust to rapidly changing developments in the field
- Demonstrated ability to carry out scientific presentations and publications
- Communication skills to describe technical concepts effectively to both novice and sophisticated users and with an ability to complete detailed analytics and reports
- Exceptional organizational skills and the ability to manage activities both for self and others effectively
- Detail-oriented with an ability to function and process information with high levels of accuracy
- Results-oriented with the ability to motivate and coach students and trainees to meet high performance standards, while working effectively as a member of the research team
- Strong record working independently with little supervision
- Self-driven, independent thinker who is highly motivated and possesses an intrinsic passion for quality work outcomes and strong productivity
- Flexibility to work outside of regular business hours and travel on occasion

Interested applicants are asked to visit: <https://recruit.uwo.ca> to apply online to job reference #23024.

The University invites applications from all qualified individuals. Western is committed to employment equity and diversity in the workplace and welcomes applications from women, members of racialized groups/visible minorities, Aboriginal persons, persons with disabilities, persons of any sexual orientation, and persons of any gender identity or gender expression.

Accommodations are available for applicants with disabilities throughout the recruitment process. If you require accommodations for interviews or other meetings, please contact Human Resources at hrhelp@uwo.ca or phone 519-661-2194.