CURRENT RESEARCH OPPORTUNITIES

**Graduate Program:** Anatomy & Cell Biology, Biochemistry, Epidemiology and Biostatistics, Family Medicine, Medical Biophysics, Microbiology & Immunology, Pathology & Lab Medicine, Physiology & Pharmacology, Neuroscience, Surgery

**Research Cluster(s):**
- Supervisor(s): Dr. Paul Gribble
- Keywords: Human sensorimotor control and motor learning

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**Vacancies:** 2

**MSc/PhD or Postdoc Available?:** PhD (4 years)

**Description:** My students and I study basic scientific questions about human sensory and motor systems. We study how the brain controls voluntary movement, and how plasticity in sensory and motor brain areas supports motor learning. Descriptions of ongoing research themes and a list of publications can be found on our lab website: https://www.gribblelab.org

**To Apply:** Applicants must independently apply to the program using the online Western application portal, including a clear reference to the supervisor.

**Application Deadline:** None at this time

**Contact Information:** Questions regarding the application process, or inquiries about the program may be addressed to the Academic Programs Coordinator, for more information about the description/design of the project, you may contact Dr. Gribble directly: pgribble@uwo.ca
CURRENT RESEARCH OPPORTUNITIES

Graduate Program: Anatomy & Cell Biology, Biochemistry, Epidemiology and Biostatistics, Family Medicine, Medical Biophysics, Microbiology & Immunology, Pathology & Lab Medicine, Physiology & Pharmacology, Neuroscience, Surgery

Research Cluster(s):

Supervisor(s): Dr. Andrew Pruszynski

Keywords: neuroscience, touch, motor control

Vacancies: 1

MSc/PhD or Postdoc Available?: PhD (4 years)

Description: We are looking for a graduate student to investigate the peripheral neural organization of neurons that innervate mechanoreceptive end organs in the primate skin and how these are modified over development and skill learning.

To Apply: Applicants must independently apply to the program using the online Western application portal, including a clear reference to the supervisor

Application Deadline: None at this time

Contact Information: Questions regarding the application process, or inquiries about the program may be addressed to the Academic Programs Coordinator, for more information about the description/design of the project, you may contact Dr. Pruszynski directly: andrew.pruszynski@uwo.ca
## CURRENT RESEARCH OPPORTUNITIES

**Graduate Program:** Anatomy & Cell Biology, Biochemistry, Epidemiology and Biostatistics, Family Medicine, Medical Biophysics, Microbiology & Immunology, Pathology & Lab Medicine, Physiology & Pharmacology, Neuroscience, Surgery

**Research Cluster(s):** Pain and neuroplasticity

**Supervisor(s):** Dr. Siobhan Shabrun

**Keywords:** pain, neuroplasticity, non-invasive brain stimulation

**Vacancies:** 3

**MSc/PhD or Postdoc Available?:** MSC, PhD, Postdoctoral Scholar

**Description:** My team's research interests include the discovery of cortical biomarkers that can predict who will develop chronic pain – even before pain begins, investigation of the neurobiological mechanisms that underpin the transition to chronic pain and the development and testing of non-invasive brain stimulation treatments. We use advanced imaging and stimulation techniques to probe and modulate human neuroplasticity including non-invasive brain stimulation and combined TMS-EEG. A range of projects within this scope are possible based on individual interests.

**To Apply:** Applicants must independently apply to the program using the online Western application portal, including a clear reference to the supervisor.

**Application Deadline:** None at this time

**Contact Information:** Questions regarding the application process, or inquiries about the program may be addressed to the Academic Programs Coordinator, for more information about the description/design of the project, you may contact Dr. Schabrun directly: sschabru@uwo.ca
CURRENT RESEARCH OPPORTUNITIES

Graduate Program: Anatomy & Cell Biology, Biochemistry, Epidemiology and Biostatistics, Family Medicine, Medical Biophysics, Microbiology & Immunology, Pathology & Lab Medicine, Physiology & Pharmacology, Neuroscience, Surgery

Research Cluster(s):

Supervisor(s): Dr. Vania Prado

Keywords: Alzheimer's; Parkinson's, Cholinergic system, mouse models, cognition, cell biology

Vacancies: 4

MSc/PhD or Postdoc Available?: PhD, Postdoctoral Scholar (5 years)

Description: We use mouse models of neurodegeneration, with main focus on Alzheimer's and Parkinson's disease, to investigate molecular and behavioural changes in neurodegenerative diseases. Our work is multidisciplinary and involves molecular, cellular, and behavioural studies. We use state of the art methodologies including, automated touchscreens, photometry analysis coupled to the behavioural tasks (to measure in vivo neurotransmitter release and/or neuronal activation), confocal and super-resolution imaging, single cell sequencing, DREADD, qPCR and RNAscope.

To Apply: Applicants must independently apply to the program using the online Western application portal, including a clear reference to the supervisor

Application Deadline: None at this time

Contact Information: Questions regarding the application process, or inquiries about the program may be addressed to the Academic Programs Coordinator, for more information about the description/design of the project, you may contact Dr. Prado directly: vprado@uwo.ca
CURRENT RESEARCH OPPORTUNITIES

Graduate Program: Anatomy & Cell Biology, Biochemistry, Epidemiology and Biostatistics, Family Medicine, Medical Biophysics, Microbiology & Immunology, Pathology & Lab Medicine, Physiology & Pharmacology, Neuroscience, Surgery

Research Cluster(s):

Supervisor(s): Dr. Daniel Ansari

Keywords: Numerical Cognition, Developmental Cognitive Neuroscience

Vacancies: 2

MSc/PhD or Postdoc Available?: MSC, PhD (2 years)

Description: Research in the lab focuses on understanding the developmental trajectory underlying typical and atypical development of numerical and mathematical skills, using both behavioural and neuroimaging methods.

To Apply: Applicants must independently apply to the program using the online Western application portal, including a clear reference to the supervisor

Application Deadline: None at this time

Contact Information: Questions regarding the application process, or inquiries about the program may be addressed to the Academic Programs Coordinator, for more information about the description/design of the project, you may contact Dr. Ansari directly: Daniel.ansari@uwo.ca
**CURRENT RESEARCH OPPORTUNITIES**

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<td>2</td>
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<td>PhD (4 years)</td>
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<tr>
<td>Description:</td>
<td>We are looking for graduate students interested in studying human motor learning and sensorimotor control using empirical and/or computational modeling approaches. For more details please see a list of current research themes and papers on our lab website here: <a href="https://www.gribblelab.org">https://www.gribblelab.org</a></td>
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CURRENT RESEARCH OPPORTUNITIES

Graduate Program: Anatomy & Cell Biology, Biochemistry, Epidemiology and Biostatistics, Family Medicine, Medical Biophysics, Microbiology & Immunology, Pathology & Lab Medicine, Physiology & Pharmacology, Neuroscience, Surgery

Research Cluster(s):

Supervisor(s): Dr. Ingrid Johnsrude

Keywords: functional neuroimaging, executive function, hearing loss, aging, speech perception

Vacancies: 2

MSc/PhD or Postdoc Available?: MSc, PhD, Postdoctoral Scholar (3-6 years)

Description: Clinical diagnosis of hearing impairment, and remediation with hearing aids, typically comes decades after people first notice they are struggling to understand speech in noisy environment. We use a variety of methods to understand the factors contributing to such difficulty. In our research program we leverage findings from cognitive neuroscience to accelerate progress: to develop sensitive tests that will enable more timely, and effective, diagnosis and treatment of hearing impairment, enabling social engagement and wellbeing into older age.

To Apply: Applicants must independently apply to the program using the online Western application portal, including a clear reference to the supervisor

Application Deadline: None at this time

Contact Information: Questions regarding the application process, or inquiries about the program may be addressed to the Academic Programs Coordinator, for more information about the description/design of the project, you may contact Dr. Johnsrude directly: ijohnsru@uwo.ca
CURRENT RESEARCH OPPORTUNITIES

Graduate Program: Anatomy & Cell Biology, Biochemistry, Epidemiology and Biostatistics, Family Medicine, Microbiology & Immunology, Pathology & Lab Medicine, Physiology & Pharmacology, Neuroscience, Surgery

Research Cluster(s): Cognitive & Developmental Brain Sciences

Supervisor(s): Dr. Blake Butler

Keywords: Neuroplasticity, Sensory Loss, MRI, Neuroimaging, Animal Models

Vacancies: 1

MSc/PhD or Postdoc Available?: MSc (2 years) or PhD (4 years)

Description: Our lab has an open position for a graduate student interested in studying neuroplasticity and sensory perception in a feline model of profound hearing loss. Core projects involve neuroimaging of visually-evoked cortical activity and whole-brain network analyses. Fluency in Matlab or Python would be an asset. Please contact me directly for more details.

To Apply: Applicants must independently apply to the Neurosciences program using the online Western application portal, including a clear reference to the supervisor.

Application Deadline: None at this time

Contact Information: Questions regarding the application process, or inquiries about the program may be addressed to the Academic Programs Coordinator. For more information about the description/design of the project, you may contact Dr. Butler directly: bbutler9@uwo.ca
CURRENT RESEARCH OPPORTUNITIES

Graduate Program: Anatomy & Cell Biology, Biochemistry, Epidemiology and Biostatistics, Family Medicine, Microbiology & Immunology, Pathology & Lab Medicine, Physiology & Pharmacology, Neuroscience, Surgery

Research Cluster(s): Psychology & The Brain and Mind Institute, Neuroscience

Supervisor(s): Dr. Jessica Grahn

Keywords: Music, rhythm, neuroimaging, brain stimulation, Parkinson's disease

Vacancies: 2 (see below)

MSc/PhD or Postdoc Available?: Masters (2 year), Doctoral (4 year)

Description: Projects areas available include: examining cross-species comparisons of rhythm and beat perception, using Transcranial Magnetic Stimulation to assess how motor excitability is affected by rhythmic auditory stimuli.
International students will need to obtain external funding to be likely to be considered.

To Apply: Applicants must independently apply to the Neuroscience program using the online Western application portal, including a clear reference to the supervisor (Please insert anything needed in addition to the traditional application)

Application Deadline: N/A

Contact Information: Questions regarding the application process, or inquiries about the program may be addressed to the Academic Programs Coordinator, for more information about the description/design of the project, you may contact Dr. Grahn directly: jgrahn@uwo.ca.
CURRENT RESEARCH OPPORTUNITIES

**Graduate Program:** Anatomy & Cell Biology, **Biochemistry**, Epidemiology and Biostatistics, Family Medicine, Medical Biophysics, Microbiology & Immunology, Pathology & Lab Medicine, Physiology & Pharmacology, **Neuroscience**, Surgery

**Research Cluster(s):** Biotherapeutics

**Supervisor(s):** Dr. Kun Ping Lu

**Keywords:** Cell signaling, Alzheimer’s disease, neurotrauma, stroke, cancer, sepsis, and pandemics, therapeutics, diagnostics

**Vacancies:** 5

**MSc/PhD or Postdoc Available?:** PhD (5 years)

**Description:** We have discovered a unique stress enzyme called Pin1 and developed innovative Pin1-targeted stereo-specific antibodies and small molecular inhibitors, which offer a new paradigm for early diagnosis and treatment of Alzheimer’s disease, neurotrauma, stroke, cancer, sepsis, and pandemics. Our research goals are to further develop their unique therapeutics and diagnostics specifically targeting Pin1-regulated phosphorylation signaling using cell cultures, animal models and human tissues, and then translate them to the clinic. Seeking motivated and goal-oriented postdoc or graduate students. For more details visit: https://drive.google.com/file/d/1mGxvc74Pcr8A9T1HEOdFjFi31JnfrC1/view?usp=sharing

**To Apply:** Applicants must independently apply to the program using the online Western **application portal**, including a clear reference to the supervisor

**Application Deadline:** None at this time

**Contact Information:** Questions regarding the application process, or inquiries about the program may be addressed to the **Academic Programs Coordinator**, for more information about the description/design of the project, you may contact Dr. Lu directly: klu92@uwo.ca
CURRENT RESEARCH OPPORTUNITIES

Graduate Program: Anatomy & Cell Biology, Biochemistry, Epidemiology and Biostatistics, Family Medicine, Medical Biophysics, Microbiology & Immunology, Pathology & Lab Medicine, Physiology & Pharmacology, Neuroscience, Surgery

Research Cluster(s):

Supervisor(s): Dr. Sue Peters

Keywords: Gait, sensorimotor mechanisms, rehabilitation

Vacancies: 2

MSc/PhD or Postdoc Available?: MSC, PhD (4 years)

Description: The objective of this project is to uncover fundamental neural mechanisms that underpin naturalistic locomotion in humans, with manipulations to posture and 1) somatosensation and 2) motor performance. We are looking to work with students with experience in neuroimaging, and/or gait kinematics, with an interest in exploring neural activation that links with behavioural elements that underpin locomotion in humans.

To Apply: Applicants must independently apply to the program using the online Western application portal, including a clear reference to the supervisor

Application Deadline: None at this time

Contact Information: Questions regarding the application process, or inquiries about the program may be addressed to the Academic Programs Coordinator, for more information about the description/design of the project, you may contact Dr. Peters directly: speter49@uwo.ca
CURRENT RESEARCH OPPORTUNITIES

Graduate Program: Anatomy & Cell Biology, Biochemistry, Epidemiology and Biostatistics, Family Medicine, Medical Biophysics, Microbiology & Immunology, Pathology & Lab Medicine, Physiology & Pharmacology, Neuroscience, Surgery

Research Cluster(s):

Supervisor(s): Drs. Lisa Saskida, Tim Bussey, Marco Prado, Vania Prado, Adrian Owen, Jacqueline Sullivan

Keywords: cognitive neuroscience; touchscreen cognition; epistemic community; optogenetics; fibre photometry

Vacancies: 3

MSc/PhD or Postdoc Available?: MSC (2 years)

Description: Three positions are available immediately to work with the Mouse Translational Research Accelerator Platform (MouseTRAP; https://mousetrapplatform.org/).


To apply: Send 1) statement of interest, 2) CV, 3) names & contact information of at least two references to: ngervai2@uwo.ca (*indicate which posting you are applying to)

To Apply: Applicants must independently apply to the program using the online Western application portal, including a clear reference to the supervisor

Application Deadline: None at this time

Contact Information: Questions regarding the application process, or inquiries about the program may be addressed to the Academic Programs Coordinator, for more information about the description/design of the project, you may contact Dr. Saskida directly: lsaksida@uwo.ca