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):**  
Cognitive & Developmental Brain Sciences

**Supervisor(s):**  
Dr. Blake Butler

**Keywords:**  
Neuroplasticity, Sensory Loss, Layer Specific MRI, Neuroimaging, Animal Models

**Vacancies:**  
1

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

**Description:**  
We’re seeking a postdoctoral associate interested in the study of sensory perception in a feline model of profound hearing loss. The successful candidate will work with researchers including the BrainsCAN Computational Core to develop pipelines for layer-wise analyses of neuroimaging data acquired on the research-dedicated Siemens 7T scanner housed at the Centre for Functional and Metabolic Mapping. They will also be encouraged to develop independent projects that build upon the laboratory’s ongoing work (this may include animal or human neuroimaging). Full ad here: https://bit.ly/383QFin

**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, Microbiology & Immunology, Pathology & Lab Medicine, Physiology & Pharmacology, *Neuroscience*, Surgery

**Research Cluster(s):** Computational Neuroscience

**Supervisor(s):** Dr. Lyle Mueller

**Keywords:** Computational Neuroscience, Computer Vision, Machine Learning, Vision, Memory

**Vacancies:** 2

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

**Description:** Applications are invited for our group in computational/theoretical neuroscience at the Department of Applied Mathematics and the Brain and Mind Institute (BMI). Projects focus on new algorithms for multisite data, network models, and computation with spatiotemporal dynamics in neural systems. Analysis, modeling, and theory will be conducted in close collaboration with experimental colleagues, including multi-site recordings in NHP (John Reynolds, Salk Institute; Julio Martinez-Trujillo, Western) and human clinical intracranial recordings (London Health Sciences Centre).

**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: lmuller2@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](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](mailto: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. Paul Gribble
Keywords: Human sensorimotor control and motor learning

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](mailto:), for more information about the description/design of the project, you may contact Dr. Pruszynski directly: [andrew.pruszynski@uwo.ca](mailto:andrew.pruszynski@uwo.ca)