

## 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):** Cell, Stem Cell and Cancer; Inflammation & Cancer

**Supervisor(s):** Dr. Samuel Asfaha

**Keywords:** Stem cells, inflammation, colities and cancer

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**Vacancies:** 2

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

**Description:** The Asfaha lab's primary interest is in gastrointestinal stem cells and their role in tissue regeneration and cancer. The lab has been strongly focused on distinguishing amongst the role of various epithelial stem cells in gut healing. We previously demonstrated that cytokeratin 19 (K19) marks a radio-resistant intestinal stem cell population distinct from classical Lgr5+ stem cells. We also discovered a subset of Dclk1+ cells are long-lived and serve as a cellular origin for colon cancer. Thus, our lab is now focused on how does in inflammation (i.e. colitis) leads to cancer.

**To Apply:** Applicants must independently apply to the Anatomy & Cell Biology 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. Asfaha directly: [sasfaha2@uwo.ca](mailto:sasfaha2@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

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**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](mailto:vprado@uwo.ca)

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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. Brian Corneil

**Keywords:** Brain; systems neuroscience; movement; brain stimulation; animal model

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**Vacancies:** 3

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

**Description:** Opportunities are available for new graduate students (MSc or PhD) or PDFs with an interest in systems neuroscience. Trainees will work on two CIHR funded projects. One project investigates the neurophysiology of rapid visually-guided actions, building on a stream of research detailing the profile of upper limb muscle recruitment. The other project investigates a new non-invasive form of brain stimulation, temporal interference stimulation. Both projects involve recording and/or manipulating neural activity in cortical and subcortical areas. See <https://www.corneil-lab.com> for more details.

**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. Corneil directly: [bcorneil@uwo.ca](mailto:bcorneil@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. Janine Hutson and Dr. Facundo Garcia-Bournissen

**Keywords:** Pregnancy, pharmacology, toxicology, teratogen, maternal fetal medicine

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**Vacancies:** 1

**MSc/PhD or Postdoc Available?:** MSc (2 year duration)

**Description:** We utilize an ex vivo placental perfusion model to study drug transfer across the placenta. This leads to determining the potential pharmacokinetics of a medication in pregnancy. This basic science program runs alongside clinical counseling on the safety of medication in pregnancy. Please see our website for further information. <https://www.schulich.uwo.ca/hutson-garcia-bournissen-lab/>.

**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. Hutson directly: [janine.hutson@lhsc.on.ca](mailto:janine.hutson@lhsc.on.ca)