

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

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 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

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): Neurodegenerative Diseases

Supervisor(s): Dr. R J Rylett

Keywords: neurodegeneration, iPSCs, stem cells, neurons, Alzheimer

Vacancies: 2

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

Description: Research is on cellular and molecular events regulating cholinergic neurons and pathology associated with neurodegenerative and Alzheimer disease. Projects use neuronal cultures, induced pluripotent stem cells differentiated to neurons, mouse models, and require a strong background and experience in molecular and cellular biology, confocal microscopy and proteomics. Responsibilities include experimental design, acquisition and analysis of data, manuscript preparation, team work. PhD in biological sciences required with experience in neurobiology, stem cell biology and microscopy

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. Rylett directly: jane.rylett@schulich.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): Neurodegenerative disease, Neuroimaging, Pharmacology, Physiology

Supervisor(s): Dr. Taylor W. Schmitz

Keywords: Alzheimer's disease, Parkinson's disease, neuroimaging, positron emission tomography, magnetic resonance imaging, neurochemistry, biomarkers, neurodegeneration, human, mouse, big data

Vacancies: 2

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

Description: Position 1: A 1-year Canada Institutes of Health Research (CIHR) funded postdoctoral position (renewable to up to 5 years). Applying multimodal imaging, including fMRI and PET, to accelerate the development of biomarkers and clinical treatment strategies for earlier stages of neurodegenerative diseases such as Alzheimer's.
Position 2: A 1-year NSERC funded postdoctoral position (renewable to up to 4 years). Using accelerated fMRI (sampling rate < 500 ms) (sampling rate < 500 ms) to investigate cortico-subcortical connectivity and population coding dynamics in humans and in awake mice.

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. Schmitz directly: tschmitz@uwo.ca

