



Job Title: PhD Student

Position Location: University of Guelph, Guelph, Ontario, onsite

About Us: Our research bridges behavioural neuroscience with molecular biology and systems neuroscience to investigate gene expression networks the molecular and cellular mechanisms within the brain that promote the development of chronic pain and comorbid anxiodepressive states. Areas of research include:

- The intersection of pain and emotion
- Pain induced dysregulation of brain circuits and gene function
- Astrocyte-neuronal coupling in chronic pain
- The effects of chronic pain and stress on overall health and quality of life

About The Role: Dr. Giannina Descalzi is seeking a graduate student who wishes to complete a doctorate degree, and will contribute to research aiming to improve the lives of Canadians living with chronic pain. In this role, you will have the opportunity to participate in and lead studies using a variety of techniques including: in-vivo calcium imaging and optogenetics; behavioural paradigms; molecular biology, including recombinant DNA to engineer constructs for viral mediated gene transfer, and chemo-genetics.

Your Key Responsibilities Will Include:

- Working independently as well as with interdisciplinary teams
- Designing your project with the support of Dr. Descalzi and their multi-disciplinary team of collaborators
- Instruction and support for undergraduate-level students in the lab

What You'll Bring To The Role:

- BSc/MSc in neuroscience or related field. Students in the last year of their degree are encouraged to apply.
- A strong independent thinker with a focus on discovery and problem-solving, and a passion for fundamental exploratory research and boundless curiosity.
- Hands-on experience in one or more of the following:
 - Western Blots, IHC; rodent behavioural testing; rodent stereotaxic surgery
- Excellent analytical, communication, presentation, and organizational skills for conducting research of the highest quality and a keen learner's attitude.

How To Apply: Assessment of applications will begin on **August 1, 2024** and will continue until the position is filled. Interested applicants should submit the following materials (preferably as a single PDF file): (1) a cover letter; (2) a curriculum vitae; (3) transcripts, and (4) the names of 2 referees . Applications should be sent to the attention of:

Giannina Descalzi
Assistant Professor
Department of Biomedical Sciences
University of Guelph
Guelph, ON N1G 2W1
gdescalz@uoguelph.ca

All qualified applicants are encouraged to apply; however, Canadians and permanent residents will be given priority.

The University of Guelph resides on the ancestral lands of the Attawandaron people, and the treaty lands and territory of the Mississaugas of the Credit and we offer our respect to our Anishinaabe, Haudenosaunee and Métis neighbours as we strive to strengthen our relationships with them.

At the University of Guelph, fostering a [culture of inclusion](https://uoguelph.ca/ox2p9) (<https://uoguelph.ca/ox2p9>) is an institutional imperative. The University invites and encourages applications from all qualified individuals, including from groups that are traditionally underrepresented in employment, who may contribute to further diversification of our Institution.

Department of Biomedical Sciences
Ontario Veterinary College
University of Guelph
50 Stone Road East
Guelph, Ontario, Canada N1G 2W1
T 519-824-4120
ovc.uoguelph.ca/biomedical-sciences

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