

About the position:

Position: Postdoctoral researcher for a two year term, with the possibility of extension

Field of Specialization: Spinal cord nociceptive processing; translational pain models

Academic Group: Hildebrand Pain Lab, Department of Neuroscience, Carleton University

Sources of Funds: 2023-2028 CIHR Project Grant, potential future industrial R&D fellowship

Start Date: May 1, 2023 (or earlier/later depending on applicant's availability)

Closing Date: March 30, 2023

The Hildebrand Pain Lab (HildebrandPainLab.com) at Carleton University (and affiliated with the Ottawa Hospital Research Institute) invites applications for a postdoctoral research position investigating spinal mechanisms of nociceptive processing in rodent and human tissue models. This translational project involves combining cutting-edge high density multi-electrode array (MEA) recordings with the Hildebrand lab's unique ability to collect highly viable tissue from human organ donors. Using this powerful combination, the applicant will investigate how molecular and cellular mechanisms of spinal excitability and pain processing are conserved and/or diverge across sex and species. Beyond these physiological questions, the applicant will test how targeting specific molecular players with current and potential future therapeutic compounds impacts excitability in spinal nociceptive circuits of both rodents and humans.

The skills, networks, and mentorship gained through this translational pain project will equip the candidate for potential careers in academic, industrial, and/or healthcare-related fields. Along with direct supervision and mentorship by Dr. Hildebrand, the applicant will be working alongside a neurosurgeon/clinical research scientist collaborator at the Ottawa Hospital, Dr. Eve Tsai (<https://www.ohri.ca/profile/etsai>), with the opportunity to participate in the surgical collection of spinal cord tissue from neurologic determination of death organ donors. Because of the high translational value of these rodent-to-human spinal cord physiology and pharmacology experiments, the applicant will also have the opportunity to work with and be mentored by pharmaceutical researchers that have ongoing collaborative research partnerships with the Hildebrand Pain Lab.

Qualifications:

Candidates must have a Ph.D. in a relevant field, with neuroscience-related research experience including performing electrophysiological, pharmacological, and/or biochemical experiments on *ex vivo* nervous system tissue. Expertise in analysis of large datasets and coding is also an asset. The position is full time, and salary will be commensurate with experience. The postdoc will be considered unionized, as a member of PSAC Local 77000. Information on this bargaining unit can be found here: <https://psac77000.ca/>. Optional extended health and dental benefit plans are available with this position.

The Hildebrand Pain Lab and Carleton University are strongly committed to fostering diversity within their communities as a source of excellence, cultural enrichment, and social strength. We welcome those who would contribute to the further diversification of our team, including, but not limited to: women; visible minorities; First Nations, Inuit and Métis peoples; persons with disabilities; and persons of any sexual orientation or gender identity and expressions. We understand that career paths vary. Legitimate career interruptions will in no way prejudice the assessment process and their impact will be taken into careful consideration.

Application instructions:

Completed applications should be sent as one single PDF document to Dr. Hildebrand (mike.hildebrand@carleton.ca) and should include a cover letter highlighting relevant research experiences and how this position fits with your career goals, as well as a curriculum vitae that includes the names and contact information of three referees familiar with your past work and experiences. Please indicate in your application if you are a Canadian citizen or permanent resident of Canada.

About Carleton University:

The Neuroscience department (<https://carleton.ca/neuroscience/>) is a dynamic and growing academic/research unit at Carleton University that includes a diverse range of research interests, outreach activities, and networking/mentorship opportunities. To learn more about our University and the City of Ottawa, please visit <https://carleton.ca/provost/reports/>.