

Graduate Student Positions in Behavioural & Systems Neuroscience (Botterill Laboratory - University of Saskatchewan - CANADA)

The Botterill laboratory is currently recruiting highly motivated graduate students (MSc or PhD) in the fields of Behavioural & Systems Neuroscience. Our laboratory is located in the Department of Anatomy, Physiology, and Pharmacology (College of Medicine) at the University of Saskatchewan (Saskatoon, Saskatchewan, Canada).

Research Questions: A major goal of our laboratory is to study the cells and circuits that contribute to learning, memory, and affective behaviors. We are currently studying how hippocampal mossy cells support learning, memory, spatial exploration, novelty, and affective behaviors. We are also studying the role of hippocampal mossy cells in mouse models of autism spectrum disorder. Lastly, we are currently using Targeted Recombination in Active Populations (TRAP2) mice to study engram cells that support learning and memory. Successful applicants will also have opportunities to collaborate with members of the Botterill laboratory on projects focused on the neurobiological mechanisms of temporal lobe epilepsy.

Our projects use a variety of behavioural and systems neuroscience techniques, including mouse stereotaxic surgery, adeno-associated viral vectors, rodent behavioural testing (optogenetics, DREADDs or fiber photometry), immunofluorescence staining of brain tissue, microscopy, and slice electrophysiology.

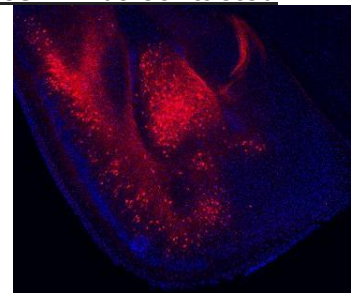
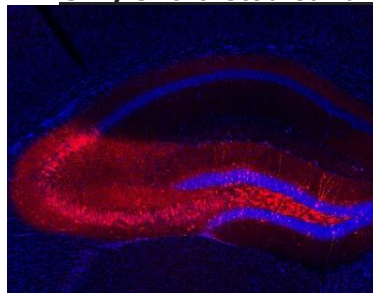
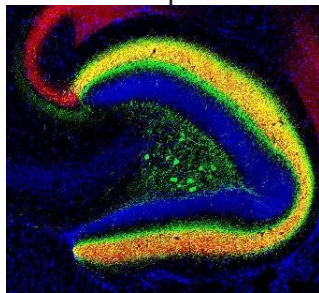
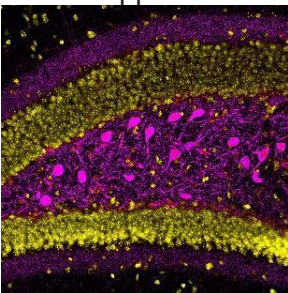
Qualifications and Experience

- Background in neuroscience, physiology, biology, or relevant fields.
- Relevant hands-on laboratory experience. Ideal candidates will demonstrate proficiency in rodent behavioural testing, optogenetics, fiber photometry, stereotaxic surgery, electrophysiology, fluorescence microscopy, and/or genotyping transgenic mice.
- Experience with programming software such as MatLab or Python is considered an asset.
- Strong problem-solving and project management skills with motivation to learn new techniques.
- Excellent communication skills and ability to write drafts of manuscripts for peer-reviewed publication.

Apply: Interested applicants should contact Dr. Justin Botterill (j.botterill@usask.ca) with:

- A cover letter describing your research interests and goals
- An up-to-date curriculum vitae with at least 2 references
- A copy of your unofficial transcripts.

Review of applications will continue until positions are filled. **Only shortlisted candidates will be contacted.**



Additional information:

Publications: https://scholar.google.ca/citations?hl=en&user=VL_1ODIAAAAJ

Laboratory Website: <https://research-groups.usask.ca/botterillneurolab/index.php>

Department Website: <https://grad.usask.ca/programs/anatomy-physiology-pharmacology.php>



UNIVERSITY OF SASKATCHEWAN
College of Medicine
MEDICINE.USASK.CA