LINDSEYLAB Laboratory of Neural Stem Cell Plasticity & Regeneration



Dr. Lindsey completed his PhD at the University of Toronto where he developed methods to study adult neural stem cell plasticity in the zebrafish brain. He then completed his first postdoctoral fellowship at the Australian Regenerative Medicine Institute focusing on the potential of active and quiescent neural stem cell populations for brain regeneration. During his second postdoctoral position at the University of Ottawa, Brain and Mind Research Institute, he studied the cellular and molecular mechanisms regulating spinal cord regeneration. Most recently, Dr. Lindsey joined the Department of Human Anatomy and Cell Science at the University of Manitoba as an Assistant Professor, where he is establishing a Zebrafish Facility for neural stem cell research.

Dr. Lindsey is currently recruiting 2 graduate students (MSc or PhD level) to join his team for FALL 2019. Students with an interest in fundamental neural stem cell biology or CNS repair are encouraged to apply. Interested candidates should email Dr. Lindsey directly at <u>benjamin.lindsey@umanitoba.ca</u>, and include a brief statement of their research interests, CV, and a copy of their recent transcript. *The Faculty of Graduate Studies deadline for September entry is June 1.*

Current Project Themes:

- Molecular and cellular regulation of brain and spinal cord regeneration
- The role of adult neurogenesis in behaviour and sensory learning & memory
- > 3-dimensional modelling of neural stem cell niche development

Techniques: The LINDSEYLAB uses a combination of advanced cellular imaging methods (fluorescence confocal, live *in vivo* imaging, correlative EM, tissue clearing and 3-D imaging), and molecular techniques (transgenics, immunohistochemistry, *in situ* hybridization, RNA-sequencing) to understand context-dependent changes in neural stem cell behaviour from early brain development until senescence in the zebrafish model.

The LINDSEYLAB offers high quality research training and mentorship in a supportive and collaborative learning environment. For more information visit:

http://umanitoba.ca/faculties/health_sciences/medicine/units/anatomy/haresearch.html



