Stephen D. Glasgow

Address: Department of Biological Sciences
Centre for Neuroscience
Brock University
1812 Sir Isaac Brock Way
St. Catharines, Ontario L2S 3A1

Citizenship: Canadian

Languages: English, French

Education:

2006-2011 **Doctor of Philosophy, Psychology,** *Concordia University, Montreal, Canada.*
Thesis: "Cholinergic modulation of the superficial layers of the parasubiculum."
Advisor: Dr. C. Andrew Chapman

2004-2006 **Master of Arts, Psychology,** *Concordia University, Montreal, Canada.*
Thesis: "Mechanisms mediating local generation of theta-frequency EEG activity in the superficial layers of the parasubiculum."
Advisor: Dr. C. Andrew Chapman

1998-2003 **Bachelor of Arts, Psychology,** *University of Calgary, Calgary, Canada.*
Project: "Role of reticularis pontis oralis in hippocampal theta activity."
Advisor: Dr. Brian H. Bland

Professional Experience:

2021- present **Assistant Professor, Biological Sciences**, *Brock University, St. Catharines, Canada.*

2020-2021 **Scientist, Neurasic Therapeutics**, *Montreal, Canada.*

2016-2021 **Research Associate**, **Neurology and Neurosurgery,** *Montreal Neurological Institute, McGill University, Montreal, Canada.* Advisors: Drs. Timothy Kennedy and Edward Ruthazer

2013-2016 **Post-doctoral research fellow, Neurology and Neurosurgery,** *Montreal Neurological Institute, McGill University, Montreal, Canada.* Advisors: Drs. Timothy Kennedy and Edward Ruthazer

2011-2013 **Post-doctoral research fellow, Psychiatry,** *Douglas Mental Health University Institute, McGill University, Montreal, Canada*. Advisor: Dr. Antoine Adamantidis

Major awards, distinctions, and scholarships:

2014-16 **Canadian Institute for Health Research** Fellowship
2014-15 **Fonds de Recherche en Québec - Santé** Bourse postdoctorale
2012-14 **Fonds de Recherche en Québec - Santé** Bourse postdoctorale
2011 **Canadian Psychological Association,** Outstanding Doctoral Thesis Award
2010 **Graduate Studies** Doctoral Thesis Award
2008-10 **Natural Sciences and Engineering Research Council** Postgraduate Scholarship
2008 **Fonds Québec Recherche Nature et Technologies** Bourse de doctorat
2007 **Canadian Psychological Association,** Outstanding Master's Thesis Award
2005-10 **Faculty of Arts and Sciences,** Travel scholarship
2003 **Natural Sciences and Engineering Research Council,** NSERC-USRA

Professional affiliations:

2007- Canadian Association for Neuroscience
2004- Society for Neuroscience

2004-06 Canadian Society for Brain, Behavior, and Cognitive Science

Research:

Google Scholar link – http://scholar.google.ca/citations?user=YRlJn1sAAAAJ&hl=en
Total number of citations, as of September 1 2022: 1403

Submitted manuscripts

1. **Glasgow, S. D.,** Wong, E. W., Beamish, I. V., Lancon, K., Gibon, J., Séguéla, P., Ruthazer, E. S., & Kennedy, T. E. Acetylcholine synergizes with netrin-1 to drive persistent firing in the entorhinal cortex. Posted to *BioRxiv*, in revision at *Cell Reports*. https://doi.org/10.1101/2020.07.08.194274.

Peer-reviewed publications

1. Clement, J. P., Al-Alwan, L., **Glasgow, S. D.**, Stolow, A., Ding, Y., Quevedo Melo, T., Khayachi, A., Liu, Y., Hellmund, M., Haag, R., Milnerwood, A., Grutter, P., & Kennedy, T. E. Dendritic polyglycerol amine: An enhanced substrate to support long-term neural cell culture. ASN Neuro. 14 (1) 1-17.

2. **Glasgow, S. D.**, Ruthazer, E. S., & Kennedy, T. E. (2021) Guiding synaptic plasticity: novel roles for netrin-1 in synaptic plasticity and memory formation in the adult brain. Journal of Physiology. 599 (2) 493-505.

3. **Glasgow, S. D.**, Wong, E. W., Thompson-Steckel, G., Séguéla, P., Ruthazer, E. S., & Kennedy, T. E. (2020) Pre- and post-synaptic roles for DCC in memory consolidation in the adult mouse hippocampus. Molecular Brain. 13 (56) 1-20.

4. **Glasgow, S. D.**, McPhedrain, R., Madranges, J. F., Kennedy, T. E., & Ruthazer, E. S. (2019) Approaches and limitations in the investigation of synaptic transmission and plasticity. Frontiers in Synaptic Neuroscience. 11 (20) 1-16.

5. Wong, E. W.*, **Glasgow, S. D.***, Trigiani, L. J., Chitsaz, D., Rymar, V., Sadikot, A., Ruthazer, E. S., Hamel, E., & Kennedy, T. E. (2019) Spatial memory formation requires netrin-1 expression by neurons in the adult mammalian brain. Learning and Memory. 26 (3), 77-83.
   * *indicates equal contribution / co-first author.*

6. **Glasgow, S. D.**, Labrecque, S., Beamish, I. V., Aufmkolk, S., Gibon, J., Han, D., Harris, S. N., Wiseman, P. W., McKinney, R. A., Séguéla, P., De Koninck, P., Ruthazer, E. S., & Kennedy, T. E. (2018) Activity-dependent netrin-1 secretion drives synaptic insertion of GluA1-containing AMPA receptors in the hippocampus. Cell Reports. 25 (1), 168-182.e6

7. Boyce, R., **Glasgow, S. D.**, Williams, S., & Adamantidis, A. R. (2016) Causal evidence for the role of REM sleep theta rhythm in contextual memory consolidation. Science. 352 (6287), 812-816.
8. Munz, M., Gobert, D., Higenell, V., Van Horn, M. R., **Glasgow S. D.**, Schohl, A., & Ruthazer, E. S. (2014) Using two-photon intravital imaging to study developmental plasticity of neural circuits. Microscopy and Microanalysis. 20 (S3), 1342-1343.

9. Goldman, J., Ashour, M., Magdesian, M., Tritsch, N., Christofi, N., Chemali, R., Stern, Y., Thompson-Steckel, G., Harris, S., Gris, P., **Glasgow, S. D.**, Grutter, P., Bouchard, J-F., Ruthazer, E. S., Stellwagen, D., & Kennedy, T. E. (2013) Netrin-1 promotes excitatory synaptogenesis between cortical neurons by initiating synapse assembly. Journal of Neuroscience. 33 (44), 17278-89.

10. Jego, S., **Glasgow, S. D.**, Gutierrez-Herrara, C., Ekstrand, M., Reed, S. J., Boyce, R., Friedman, J., Burdakov, D., & Adamantidis, A. R. (2013). Optogenetic identification of a rapid-eye movement (REM) sleep modulatory circuit in the hypothalamus. Nature Neuroscience. 16 (11): 1637-43.

11. Horn, K. E., **Glasgow, S. D.**, Gobert, D., Bull, S. J., Luk, T., Girgis, J., Tremblay, M. E., McEachern, D., Bouchard, J. F., Haber, M., Hamel, E., Krimpenfort, P., Murai, K. K., Berns, A., Doucet, G., Chapman, C. A., Ruthazer, E. S., Kennedy, T. E. (2013). DCC expression by neurons regulates synaptic plasticity in the adult brain. Cell Reports. 3: 173-185.

12. **Glasgow, S. D.**, & Chapman, C. A. (2013). Muscarinic depolarization of layer II neurons of the parasubiculum.. PLoS One. 8 (3): 1-14.

13. **Glasgow, S. D.**, Glovaci, I., Karpowicz, L., & Chapman, C. A. (2012). Cholinergic suppression of excitatory synaptic transmission in layers II/III of the parasubiculum. Neuroscience. 201 (1) 1-11.

14. **Glasgow, S. D.**, & Chapman, C. A. (2008). Conductances mediating intrinsic theta-frequency membrane potential oscillations in layer II parasubicular neurons. Journal of Neurophysiology. 100 (5): 2746-56.

15. Kourrich, S., **Glasgow, S. D.**, Caruana, D. A., & Chapman, C. A. (2008). Postsynaptic signals mediating induction of long-term synaptic depression in the entorhinal cortex. Neural Plasticity. 2008:840374.

16. **Glasgow, S. D.**, & Chapman, C. A. (2007). Local generation of theta-frequency EEG activity in the parasubiculum. Journal of Neurophysiology. 97 (6): 3868-3879.

17. Bland, B.H. DeClerck, S., Jackson, J., **Glasgow, S. D.**, and Oddie, S.D. (2007) Septohippocampal properties of N-Methyl-D-Aspartate–induced theta-band oscillation and synchrony. Synapse. 61 (3): 185-197.

Book chapters

1. **Glasgow, S. D.**, Gutierrez Herrera, C., & Adamantidis, A. R. (2017) Behavioral phenotyping using optogenetic technology. In *Neuro-Phenome: Cutting-edge Approaches and Technologies in Neurobehavioral Genetics* (V. Tucci, Ed.). Oxford: Wiley-Blackwell.

Invited Seminar presentations

1. Graduate Math and Sciences Students Seminar, Brock University, St. Catharines, Ontario. March 2022.
2. Biological Sciences Faculty Search. Brock University, St. Catharines, Ontario. June 2021.
3. University of Victoria, Seminar series. Victoria, British Columbia. December 2020.
4. Department of Psychology, Neuroscience, and Behaviour, McMaster University. Hamilton, Ontario. February 2020.
5. Conférence du Centre de recherche CERVO (Université Laval), Quebec, Quebec. September 2019.
6. CHU-Sainte Justine (Université de Montréal), Montreal, Québec. May 2019.
7. Canadian Association for Neuroscience, Toronto, Ontario. May 2019.
8. Department of Pharmacology & Therapeutics, McGill University, Montreal, Quebec. May 2019.
9. Canadian Neurophotonics Platform workshop. Vancouver, British Columbia. May 2018.
10. Atlantic Veterinary College, University of Prince Edward Island. Charlottetown, PEI. September 2017.
11. GRC Dendrites: Molecules, Structure, and Function. Barga, Italy. March 2017.
12. GRS Dendrites. Barga, Italy. March 2017.
13. Circuits and Cognition lecture series. Montreal, Quebec. November 2016.
14. Molecular Neuroscience Group. Montreal, Quebec. November 2016.
15. Excitatory-Inhibitory Signaling Balance as Therapeutic Target in Epilepsy. Montreal, Quebec. August 2016.
16. Neurophotonics, Canadian Association for Neuroscience meeting. Toronto, Ontario. May 2016.
17. NSERC CREATE NeuroEngineering. Montreal, Quebec. March 2016.
18. Department of Psychology, Bishop's University. Lennoxville, Quebec. February 2016.
19. All-Optical McGill seminar series. McGill University. Montréal, Quebec. November 2011.
20. Department of Psychology, Concordia University. Montreal, Quebec. April 2011.
21. Department of Psychology, University of Alberta. Edmonton, Alberta. May 2010.

Complete CV available upon request.