# Andrew D. Gaudet, Ph.D.

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#### **EDUCATION**

Ph.D., Zoology, University of British Columbia, Vancouver, B.C.  Role of galectin-1 in sensory neuron development and peripheral nerve repair;  Advisor: Matt S. Ramer	2010
B.Sc., Cell Biology and Genetics, University of British Columbia, Vancouver, B.C.	2003
First year life sciences, University of Toronto, Toronto, ON	2000
PROFESSIONAL APPOINTMENTS	
Associate Professor, Psychology, The University of Texas at Austin	2024 - present

Assistant Professor, Psychology, The University of Texas at Austin	2018 - 2024
Department of Neurology (by courtesy)	2018 - 2024

2024 - present

Postdoctoral Researcher, Psychology & Neuroscience, University of Colorado Boulder, Boulder, CO Advisor: Linda R. Watkins 2015 - 2018

Postdoctoral Fellow, Neuroscience, Ohio State University, Columbus, OH
Advisor: Phillip G. Popovich

#### **PUBLICATIONS**

## Peer-Reviewed Journal Articles (including Accepted and In-Press)

Department of Neurology (by courtesy)

- 1. Aldrich JC, Scheinfeld AR, Lee SE, Dusenbery KJ, Mahach KM, Van de Veire BC, Fonken LK, **Gaudet AD**. Effects of dim light at night in C57BL6/J mice on recovery after spinal cord injury. *Experimental Neurology.* 2024. 375: 114725. PMID: 38365132
- 2. Ince LM, Darling JS, Sanchez K, Bell KS, Melbourne JK, Davis LK, Nixon K, **Gaudet AD**, Fonken LK. Sex differences in microglia function in aged rats underlie vulnerability to cognitive decline. *Brain, Behavior, and Immunity.* 2023; 114:438-452. PMID: 37709153
- 3. Chen R, Routh BN, Straetker JE, Gibson CR, Weitzner AS, Bell KS, **Gaudet AD**, Fonken LK. Microglia depletion ameliorates neuroinflammation, anxiety-like behavior, and cognitive deficits in a sex-specific manner in Rev-erbα knockout mice. *Brain, Behavior, and Immunity.* 2023; 114:287-298.

- 4. Chen R, Routh BN, **Gaudet AD**, Fonken LK. Circadian regulation of the neuroimmune environment across the lifespan: From brain development to aging. *Journal of Biological Rhythms*. 2023; 7487304231178950. PMID: 37357738
- 5. Lee SE, Greenough EK, Fonken LK, **Gaudet AD**. Spinal cord injury in mice amplifies anxiety: a novel light-heat conflict test exposes increased salience of anxiety over heat. *Experimental Neurology*. 2023; 364:114382. PMID: 36924982
- 6. Lee SE, Greenough EK, Oancea P, Scheinfeld AR, Douglas AM, **Gaudet AD**. Sex differences in pain: Spinal cord injury in female and male mice elicits behaviors related to neuropathic pain. *Journal of Neurotrauma*. 2023; 40(9-10):833-844. PMID: 36719772
- 7. Fonken LK, **Gaudet AD**. Neuroimmunology of healthy brain aging. *Current Opinion in Neurobiology*. 2022; 77:102649. PMID: 36368270
- 8. Lee W, Milewski TM, Dwortz MF, Young RL, **Gaudet AD**, Fonken LK, Champagne FA, Curley JP. Distinct inflammatory and transcriptomic profiles in dominant versus subordinate males in mouse social hierarchies. *Brain, Behavior, and Immunity.* 2022; 103:130-144. PMID: 35447300
- 9. **Gaudet AD**, Fonken LK, Ayala MT, Maier SF, Watkins LR. Aging and miR-155 in mice influence survival and neuropathic pain after spinal cord injury. *Brain, Behavior, and Immunity.* 2021; 97:365-370. PMID: 34284114
- 10. **Gaudet AD**, Fonken LK, Ayala MT, D'Angelo HM, Smith EJ, Bateman EM, Schleicher WE, Maier SF, Watkins LR. Spinal cord injury in rats dysregulates diurnal rhythms of fecal output and liver metabolic indicators. *Journal of Neurotrauma*. 2019; 36(12):1923-1934. PMID: 30501584
- 11. **Gaudet AD**, Fonken LK, Ayala MT, Bateman EM, Schleicher WE, Smith EJ, D'Angelo HM, Maier SF, Watkins LR. Spinal cord injury in rats disrupts the circadian system. *eNeuro*. 2018; 21;5(6). pii: ENEURO.0328-18.2018. PMID: 30627655
  - Covered in press: <u>UT press release</u>; <u>Science Daily</u>; <u>Sleep Review</u>; <u>The Spin magazine</u>
- 12. Fonken LK, Frank MG, **Gaudet AD**, Maier SF. Stress and aging act through common mechanisms to elicit neuroinflammatory priming. *Brain, Behavior, and Immunity*. 2018; 73:133-148. PMID: 30009999
- 13. **Gaudet AD**, Fonken LK. Glial cells shape pathology and repair after spinal cord injury. *Neurotherapeutics*. 2018; 15(3):554-577. PMID: 29728852
- 14. Fonken LK, Frank MG, **Gaudet AD**, D'Angelo HM, Daut RA, Hampson EC, Ayala MT, Watkins LR, Maier SF. Neuroinflammatory priming to stress is differentially regulated in male and female rats. *Brain, Behavior, and Immunity.* 2018; 70:257-267. PMID: 29524458
- 15. Bateman EM, Schleicher WE, Smith EJ, Sweet DR, **Gaudet AD**. Journal Club: MRI reveals acute inflammation in cortical lesions during early MS. *Neurology*. 2018; 90:e724-726. PMID: 29459454
- 16. **Gaudet AD**, Fonken LK, Watkins LR, Nelson RJ, Popovich PG. MicroRNAs: Roles in regulating neuroinflammation. *Neuroscientist.* 2018; 24(3):221-245. PMID: 28737113

- 17. **Gaudet AD**, Ayala MT, Schleicher WE, Smith EJ, Bateman EM, Maier SF, Watkins LR. Exploring acute-to-chronic neuropathic pain in rats after contusion spinal cord injury. *Experimental Neurology*. 2017; 295:46-54. PMID: 28552717
- 18. **Gaudet AD**, Mandrekar-Colucci S, Hall JCE, Sweet DR, Schmitt PJ, Xu X, Guan Z, Mo X, Gueraude-Arellano M, Popovich PG. miR-155 deletion in mice overcomes neuron-intrinsic and extrinsic barriers to spinal cord repair. *Journal of Neuroscience*. 2016; 36(32):8516-8532. PMID: 27511021
- 19. Fonken LK, Kitt MM, **Gaudet AD**, Barrientos RM, Watkins LR, Maier SF. Diminished circadian rhythms in microglia may contribute to age-related neuroinflammatory sensitization. *Neurobiology of Aging.* 2016; 47:102-112. PMID: 27568094
- 20. Jablonski K, **Gaudet AD**, Amici S, Popovich PG, Guerau-de-Arellano M. Control of the macrophage inflammatory transcriptional signature by miR-155. *PLoS ONE.* 2016; 11(7):e0159724. PMID: 27447824
- 21. **Gaudet AD\***, Fonken LK\*, Gushchina LV, Aubrecht TG, Maurya SK, Periasamy M, Nelson RJ, Popovich PG. miR-155 deletion in female mice prevents diet-induced obesity. *Scientific Reports*. 2016;6:22862. PMID: 26953132 \* Contributed equally.
  - *Covered in press:* Ohio State press release; <u>Food Navigator</u>
- 22. Grace PM, **Gaudet AD**, Staikopoulos V, Maier SF, Hutchinson MR, Salvemini D, Watkins LR. Nitroxidative signaling mechanisms in pathological pain. *Trends in Neuroscience*. 2016; 29(12):862-879. PMID: 27842920
- 23. Fonken LK\*, **Gaudet AD**\*, Gaier KR, Nelson RJ, Popovich PG. microRNA-155 deletion reduces anxiety- and depressive-like behaviors in mice. *Psychoneuroendocrinology.* 2015; 63:362-369. PMID: 26555429 \* Contributed equally.
- 24. Carpenter RS, Kigerl KA, Marbourg JM, **Gaudet AD**, Huey D, Niewiesk S, Popovich PG. Traumatic spinal cord injury in mice with human immune systems. *Experimental Neurology*. 2015; 271:432-444. PMID: 26193167
- 25. **Gaudet AD**, Sweet DR, Polinski NK, Guan Z, Popovich PG. Galectin-1 in injured rat spinal cord: Implications for macrophage phagocytosis and neural repair. *Molecular and Cellular Neuroscience*. 2015; 64:84-94. PMID: 25542813
- 26. **Gaudet AD**, Popovich PG. Extracellular matrix regulation of inflammation in the healthy and injured spinal cord. *Experimental Neurology*. 2014; 258C:24-34. PMID: 25017885
- 27. Gensel JC, Kigerl KA, Mandrekar-Colucci SS, **Gaudet AD**, Popovich PG. Achieving CNS axon regeneration by manipulating convergent neuro-immune signaling. *Cell Tissue Res.* 2012; 349(1):201-13. PMID: 22592625
- 28. **Gaudet AD**, Popovich PG, Ramer MS. Wallerian degeneration: Gaining perspective on inflammatory events after peripheral nerve injury. *J Neuroinflammation*. 2011; 8(1):110. PMID: 21878126

- 29. **Gaudet AD**, Ramer LM, Nakonechny J, Cragg JJ, Ramer MS. Small-group learning in an upper-level university biology class enhances academic performance and student attitudes toward group work. *PLoS ONE*. 2010; 5(12):e15821. PMID: 21209910
- 30. **Gaudet AD**, Leung M, Poirier F, Kadoya T, Horie H, Ramer MS. A role for galectin-1 in the immune response to peripheral nerve injury. *Experimental Neurology*. 2009; 220(2): 320-7. PMID: 19766118
- 31. **Gaudet AD**, Ramer LM. Mind the GAP: a role for neurofibromin in restricting axonal plasticity. *J Neurosci.* 2007; 27(21):5533-4. PMID: 17522298
- 32. McGraw J, **Gaudet AD**, Oschipok LW, Kadoya T, Horie H, Steeves JD, Tetzlaff W, Ramer MS. Regulation of neuronal and glial galectin-1 expression by peripheral and central axotomy of rat primary afferent neurons. *Experimental Neurology*. 2005; 195(1):103-14. PMID: 15893752
- 33. McGraw J\*, **Gaudet AD**\*, Oschipok LW, Steeves JD, Poirier F, Tetzlaff W, Ramer MS. Altered primary afferent anatomy and reduced thermal sensitivity in mice lacking galectin-1. *Pain*. 2005; 114(1-2):7-18. PMID: 15733626 \* Contributed equally.
- 34. **Gaudet AD**, Steeves JD, Tetzlaff W, Ramer MS. Expression and functions of galectin-1 in sensory and motoneurons. *Current Drug Targets*. 2005; 6(4):419-25. PMID: 16026260
- 35. **Gaudet AD**, Williams SJ, Hwi LP, Ramer MS. Regulation of TRPV2 by axotomy in sympathetic, but not sensory neurons. *Brain Research*. 2004; 1017(1-2):155-62. PMID: 15261111

# **Preprint Research Articles**

- 36. Aldrich JC, Scheinfeld AR, Lee SE, Mahach KM, Van de Veire BC, Fonken LK, **Gaudet AD**. Effects of circadian disruption via dim light at night in C57BL6/J mice on recovery after spinal cord injury. *bioRxiv* 2023.09.15.557980; doi: https://doi.org/10.1101/2023.09.15.557980
- 37. Lee SE, Greenough EK, Fonken LK, **Gaudet AD**. Spinal cord injury in mice amplifies anxiety: a novel light-heat conflict test exposes increased salience of anxiety over heat. *bioRxiv* 2023.01.13.523970; doi: https://doi.org/10.1101/2023.01.13.523970
- 38. Lee SE, Greenough EK, Oancea P, Scheinfeld AR, Douglas AM, **Gaudet AD**. Sex differences in pain: Spinal cord injury in female and male mice elicits neuropathic pain symptoms. *bioRxiv* 2022.10.18.512805; doi: https://doi.org/10.1101/2022.10.18.512805
- 39. Lee SE, Park S-H, Fonken LK, **Gaudet AD**. Anxiety-like behaviors in mice unmasked: Revealing sex differences in anxiety using a novel light-heat conflict test. *bioRxiv* 2022.09.02.506410; doi: https://doi.org/10.1101/2022.09.02.506410

# **Book Chapters**

40. **Gaudet AD**, Greenough EK. "Circadian Rhythms Regulate Neuroinflammation after Traumatic Brain Injury and Spinal Cord Injury," in *Biological Implications of Circadian Disruption*. Cambridge University Press, 2023. Eds: Fonken LK, Nelson RJ. doi: https://doi.org/10.1017/9781009057646

41. Darling JS, Sanchez K, **Gaudet AD**, Fonken LK. "The Role of Microglia in the Aging Brain: A Focus on Sex Differences," in *Oxford Research Encyclopedia of Neuroscience*. Oxford University Press, 2020.

#### **Published Datasets**

- 42. Lee SE, Greenough EK, Oancea P, Scheinfeld AR, Douglas AM, Aldrich JC, **Gaudet AD** (2023) Female C57BL6/J mice exhibit increased heat hyperalgesia and mechanical allodynia compared to males following a T9 contusion spinal cord injury as measured by Hargreaves and SUDO von Frey testing. *Open Data Commons for Spinal Cord Injury*. ODC-SCI:893 http://dx.doi.org/10.34945/F5SW2F
  - This publicly accessible dataset includes all data from Lee et al., 2023 doi: 10.1089/neu.2022.0482
- 43. Aldrich JC, Scheinfeld AR, Lee SE, Mahach KM, Van de Veire BC, Fonken LK, **Gaudet AD** (2023) C57BL/6J mice exposed to dim light-at-night following a T9 contusion spinal cord injury exhibit modest improvements in locomotor recovery accompanied by increased behaviors related to depression and mechanical neuropathic pain. *Open Data Commons for Spinal Cord Injury*. ODC-SCI:956 <a href="http://dx.doi.org/10.34945/F5N30H">http://dx.doi.org/10.34945/F5N30H</a>
  - This publicly accessible dataset includes all data from Aldrich et al., 2023

## **Other Publications**

- 44. **Gaudet AD**, Fonken LK. "Ten tips for finding an effective mentor." *Naturejobs.* Web. 25 January 2017.
- 45. **Gaudet AD**, Fonken LK. "Scientific presentations: A cheat sheet." *Naturejobs.* Web. 11 January 2017.
- 46. **Gaudet A**. "A grad school survival guide." *Science*. 2015;347(6228):1386. PMID: 25792331
- 47. **Gaudet AD**. "Secrets to thriving in graduate school." *Science Careers*. Science Magazine. Web. 21 January 2015.

#### **GRANT SUPPORT**

Gaudet, A. D. (PI). "Circadian control of neuroinflammation after spinal cord injury." National Institutes of Health (NIH). R01. R01 NS131806-01. 2023-2028.

Gaudet, A. D. (PI). "Targeting DLK to improve neuroprotection and recovery after spinal cord injury." MD Anderson Neurodegeneration Consortium. Seed Funding Grant. 2023-2024.

Fonken, L.K. (PI); Gaudet. A.D. (Co-I). "Disrupted Circadian Regulation of Cell Migration at CNS-Immune Interfaces in Aging and Alzheimer's Disease" National Institutes of Health (NIH). R01. R01-AG078758. 2022-2027.

Gaudet, A. D. (PI). "Targeting phagocytic-neuroimmune pathways to enhance recovery after spinal cord injury." Mission Connect, a Program of the TIRR Foundation. Seed Funding Grant. 2022-2024.

Davies, B. (PI); Gaudet, A.D. (Co-I). "Nasal-Based Microbe Neuromodulator Delivery." Department of Defense. DARPA grant. 2021-2022.

Gaudet, A. D. (PI). "Novel circadian-metabolic strategies for enhancing spinal cord injury repair." TIRR Foundation – John M. O'Quinn Foundation Emergency Funding Research Award. 2020.

Gaudet, A. D. (PI). "Inhibiting miR-155 in mice to improve spinal cord injury repair." Wings for Life Foundation. Project Grant. 2016-2021.

Maier, S. F. (PI); Gaudet, A. D. (contributor). "microRNA-155 is a novel target for ameliorating SCI-induced neuropathic pain and locomotor deficits." Craig H. Neilsen Foundation. Pilot Grant. 2016-2019.

Popovich, P. G. (PI); Gaudet, A. D. (contributor). "miRNA regulation of macrophages after spinal cord injury." National Institutes of Health (NIH). R21. 2012-2014.

Popovich, P. G. (PI); Gaudet, A. D. (contributor). "miRNA regulation of macrophage inflammation after spinal cord injury." International Foundation for Research on Paraplegia (IRP). Basic Research Grant. 2012-2014.

Gaudet, A. D. (PI). "Improving the immune response to spinal cord injury using galectin-1." Canadian Institutes for Health Research (CIHR). Postdoctoral Fellowship. 2011-2014.

Gaudet, A. D. (PI). "Role of galectin-1 in regeneration and repair following nerve injury." Michael Smith Foundation for Health Research & Rick Hansen Man in Motion Fund. Senior Graduate Studentship. 2006-2008.

Gaudet, A. D. (PI). "Galectin-1 as an enhancer of peripheral and central regeneration of primary afferent axons." Natural Sciences and Engineering Research Council of Canada (NSERC). Postgraduate Scholarship, Doctoral. 2004-2007.

MacLean Fraser Memorial Research Award

Awarded to: Andrew Gaudet

Agency: University of British Columbia. Type: Graduate Student Entrance Scholarship. Period: 2003 Selected for excellence in both research and academics during undergraduate years

### **AWARDS AND HONORS**

2022

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2021	Visium Core Lab Grant Program Award, 10x Genomics
2020	The Rising Innovator Award, Transnetyx
2020-2021	College Research Fellowship Award, COLA, University of Texas at Austin
2019	Summer Research Assignment, Graduate School, University of Texas at Austin

Research Reboot Award, University of Texas at Austin

#### **Teaching Awards and Honors**

- 2022 Award, Raymond Dickson Centennial Endowed Teaching Fellowship, University of Texas at Austin
- 2021 Nominee, Josefina Paredes Endowed Teaching Award, University of Texas at Austin
- 2020 Finalist, Josefina Paredes Endowed Teaching Award, University of Texas at Austin
- 2010 Killam Teaching Award Committee Member, University of British Columbia
- 2009 Graduate Teaching Assistant Teaching Award, University of British Columbia

# **Top Poster Awards**

Ohio State University Neuroscience Research Day, Columbus, OH
 Disabilities Health Research Network Conference, Vancouver, BC

# MEDIA COVERAGE, INTERVIEWS, & RELATED OUTREACH

# Media coverage of research

Bridges, Cliff. (2019, June 14). *Questionable timing*. The Spin Magazine. <a href="https://scibc.ca/questionable-timing/">https://scibc.ca/questionable-timing/</a>

Buchel, Mose. (2019, January 2). *Spinal cord injury disrupts the body's daily rhythms.* [Radio broadcast]. National Public Radio: KUT 90.5.

Griess, Rachel. (2018, December 4). *Spinal cord injury could throw off body's internal clock, study shows.* EurekAlert. <a href="https://www.eurekalert.org/news-releases/882157">https://www.eurekalert.org/news-releases/882157</a>

Marshall, Lisa. (2018, December 4). *Spinal injury throws body clocks off schedule.* ScienceDaily. <a href="https://www.sciencedaily.com/releases/2018/12/181204155153.htm">https://www.sciencedaily.com/releases/2018/12/181204155153.htm</a>

Griess, Rachel. (2018, December 4). *Spinal Cord Injury Could Throw Off Circadian Rhythms*. Sleep Review. <a href="https://sleepreviewmag.com/sleep-health/parameters/circadian-rhythms/spinal-cord-injury-throw-off-circadian-rhythms/">https://sleepreviewmag.com/sleep-health/parameters/circadian-rhythms/</a>

Chu, Will (2016, March 24). *Genetic alteration stops obesity onset in mice, study shows.* FoodNavigator. <a href="https://www.foodnavigator.com/Article/2016/03/24/Genetic-alterations-stops-obesity-onset-in-mice-study-shows">https://www.foodnavigator.com/Article/2016/03/24/Genetic-alterations-stops-obesity-onset-in-mice-study-shows</a>

## **Interviews for book research**

An author named Rebecca Fogg contacted and interviewed me several times, due to my relevant expertise in mechanisms of peripheral nerve injury and regeneration. I also provided editorial consultation on the related chapter of the book over the course of a year.

Fogg, R. (2023). Beautiful Trauma. New York, NY: Penguin Random House. 272 pp.

#### **SCHOLARLY PRESENTATIONS**

"Targeting neuroinflammation and the circadian system to improve repair after spinal cord injury." Department of Neurobiology and Anatomy, Drexel University, Philadelphia, PA. September 2022.

"Targeting neuroinflammation to improve repair after spinal cord injury." Neurodegeneration Chalk Talk Series, MD Anderson Cancer Center and University of Texas at Austin. February 2022.

"Wallerian degeneration: Preclinical insight into peripheral nerve repair." Department of Neurosurgery Grand Rounds, Massachusetts General Hospital, Harvard Medical School, Boston, MA. March 2021.

"Spinal cord injury in rodents alters neuroinflammation, affective function, and circadian rhythms." Mission Connect – TIRR Foundation Monthly Seminar Series, Houston, TX. January 2021.

"Spinal cord injury elicits neuroinflammation and circadian-metabolic disruption." Department of Psychology and Neuroscience, Baylor University, Waco, TX. October 2020.

"Spinal cord injury elicits neuroinflammation and circadian-metabolic disruption." Department of Neuroscience, University of Kentucky, Lexington, KY. September 2020.

"Spinal cord injury elicits neuroinflammation, neuropathic pain, and circadian disruption: Implications for repair and recovery." International Online Spinal Cord Injury Seminars (I-OSCIRS). May, 2020 (online). >800 views on YouTube.

"Spinal cord injury elicits neuroinflammation and circadian disruption: Implications for repair and recovery." Immunology Research Interest Group, University of Texas at Austin. Austin, TX. April, 2020 (online).

"Modulating neuroinflammatory dynamics to improve nervous system repair." Department of Psychology, University of Texas at Austin. Austin, TX. September 2017.

"Modulating neuroinflammatory dynamics to improve nervous system repair." Department of Medicine. University of Alberta. Edmonton, AB. May 2017.

"Modulating neuroinflammatory dynamics to improve nervous system repair." Department of Biology. Texas A&M. College Station, TX. March 2017.

"Modulating neuroinflammatory dynamics to improve nervous system repair." Department of Clinical Neurosciences. University of Calgary. Calgary, AB. September 2016.

"Using the immune system to resolve paralysis and pain after spinal cord injury." Postdoctoral Research Symposium. University of Colorado. Boulder, CO. 2016.

Outstanding Postdoc Award Finalist.

"Role of galectin-1 in sensory neuron development and peripheral nerve repair." Division of Neuroscience & Experimental Psychology. University of Manchester. Manchester, UK. January 2007.

"Role of galectin-1 in sensory neuron development and peripheral nerve repair." Department of Neuroscience. Queen Mary University of London. London, UK. January 2007.

# Peer-reviewed conference presentations

"Circadian control of neuroinflammation after spinal cord injury." Winter Conference for Brain Research, Breckenridge, CO. January 2024.

"Neuroimmune regulation of biology and behavior." Keynote Speaker, Annual Society for Neuroscience Winter Symposium, Texas A&M University Institute for Neuroscience, Texas A&M University, College Station, TX. December 2023.

"The circadian system: roles in repair after spinal cord injury." National Neurotrauma Society 2022 Symposium, Atlanta, GA. June 2022.

"Wallerian degeneration: early and late events following complete axotomy." 2020 Reconstructive Neurosurgery Course: Nerve Injury: Histology, Neurophysiology, Imaging and Surgery. Massachusetts General Hospital, Harvard Medical School, Boston, MA. June 2021.

"Novel neuroimmune strategies for improving axon plasticity and spinal cord repair." CNS Neuroregeneration Strategies Symposium. Houston Methodist. Houston, TX. March 2017.

"Effects of spinal cord injury on rat circadian function." Annual Colorado Sleep and Circadian Research Symposium. University of Colorado Boulder. Boulder, CO. June 2016.

"microRNA-155 deletion improves spinal cord repair." International Symposium for Neural Regeneration. Pacific Grove, CA. December 2015.

"microRNA-155 deletion alters inflammation and axon growth: Implications for spinal cord repair." Spinal Research Trust Meeting. London, UK. September 2014.

"Regeneration of peripheral nerves following injury." International Brain Research Organization School of Neuroscience Workshop. University of British Columbia. Vancouver, BC. May 2009.

# **Conference Proceedings (Selected)**

- 1. Scheinfeld AR, Lee SE, Douglas AM, **Gaudet AD** (2023) The phagocytic receptor MerTK is required for typical repair and locomotor recovery after spinal cord injury. (National Neurotrauma Society 2023 Symposium, Austin, TX)
- 2. Lee SE, Greenough EK, Fonken LK, **Gaudet AD** (2022) Exposing anxiety differences between sexes and after spinal cord injury using a novel light-heat conflict test. (National Neurotrauma Society 2023 Symposium, Austin, TX)
- 3. Scheinfeld AR, Lee SE, **Gaudet AD** (2023) The phagocytic receptor MerTK is required for typical repair and locomotor recovery after spinal cord injury. (International Symposium for Neural Regeneration, Skamania, WA)
- 4. Lee SE, Greenough EK, Fonken LK, **Gaudet AD** (2023) Spinal cord injury in mice amplifies anxiety: a novel light-heat conflict test exposes increased salience of anxiety over heat. (International Symposium for Neural Regeneration, Skamania, WA)
- 5. Lee SE, Greenough EK, Fonken LK, **Gaudet AD** (2022) A novel heat-light conflict test for mice reveals amplified anxiety behavior in females and after spinal cord injury. (Mission Connect Foundation Symposium, Houston, TX)
- 6. Scheinfeld AR, Lee SE, Douglas AM, **Gaudet AD** (2022) The phagocytic receptor MerTK is required for typical repair and locomotor recovery after spinal cord injury. (Mission Connect Foundation Symposium, Houston, TX)
- 7. Lee SE, Greenough EK, Fonken LK, **Gaudet AD** (2021) A novel heat-light conflict test for mice unmasks latent anxiety behavior in females and after spinal cord injury. (Mission Connect Foundation Symposium, Houston, TX)
- 8. Greenough EK, Lee SE, **Gaudet AD** (2021) Investigating sex differences in mouse neuropathic pain after spinal cord injury. (Mission Connect Foundation Symposium, Houston, TX)
- 9. Lee SE, Park SH, **Gaudet AD** (2020) The thermal preference test: A novel behavioral assay that incorporates nociceptive and affective components of SCI-elicited neuropathic pain. (International Symposium on Neural Regeneration, Asilomar, CA)
- 10. **Gaudet AD** (2019) Manipulating biological clocks to improve post-SCI metabolic function. (Texas Society for Circadian Biology & Medicine Meeting, College Station, TX)
- 11. **Gaudet AD** (2019) Manipulating biological clocks to improve post-SCI metabolic function. (SCI2020 Meeting, NIH, Washington, D.C.)
- 12. **Gaudet AD**, Ayala MT, Maier SF, Watkins LR (2018) Inhibiting microRNA-155 in mice to improve SCI repair. (Wings for Life Meeting, Salzburg, Austria)

- 13. **Gaudet AD**, Fonken LK, Ayala MT, Bateman EM, Schleicher WE, Smith EJ, D'Angelo HM, Maier SF, Watkins LR (2017) Spinal cord injury in rats perturbs circadian rhythms. (International Symposium on Neural Regeneration, Asilomar, USA)
- 14. **Gaudet AD**, Ayala MT, Fonken LK, Maier SF, Watkins LR (2016) Spinal cord injury in rats disrupts bowel function and daily activity rhythms. (Society for Neuroscience Annual Meeting, San Diego, USA)
- 15. **Gaudet AD**, Schmitt PG, Xu X, Hargrove A, Sweet DR, Guan Z, Guerau-de-Arellano M, Popovich PG (2014) MicroRNA-155 deletion restricts inflammatory signaling in macrophages and enhances axon growth capacity: implications for spinal cord repair. (Spinal Research Trust Meeting, London, UK)
- 16. **Gaudet AD**, Schmitt PG, Hargrove A, Guerau-de-Arellano M, Popovich PG (2013) The inflammatory microRNA miR-155 drives macrophage-mediated neurotoxicity and neurite outgrowth inhibition. (International Symposium on Neural Regeneration, Asilomar, USA)
- 17. **Gaudet AD**, Polinski NK, Sweet DR, Guan Z, Popovich PG (2012) Are galectins good for the injury microenvironment? Spinal cord injury-induced expression of galectin-1 in macrophages and astrocytes. (Society for Neuroscience Annual Meeting, New Orleans, USA)
- 18. **Gaudet AD**, Leon G, Rowen R, Kadoya T, Horie H, Poirier F, Ramer MS (2009) A peripheral perspective: Exploring galectin-1's role in axon regeneration. (International Symposium on Neural Regeneration, Asilomar, USA)
- 19. **Gaudet AD**, Bennett JL, Duncan S, Ramer MS (2008) A peripheral role for galectin-1: implications in the immune response to axotomy. (Society for Neuroscience Annual Meeting, Washington, D.C.)
- 20. **Gaudet AD**, Ramer LM, Cragg JJ, Ramer MS, Nakonechny J (2008) Group learning in developmental neurobiology: relationships between attitudes surrounding group learning and course achievement. (Society for Neuroscience Annual Meeting, Washington, D.C.)
- 21. **Gaudet AD**, Bennett JL, Kadoya T, Horie H, Poirier F, Tetzlaff T, Ramer MS (2007) Galectin-1 facilitates macrophage accumulation in intact and injured peripheral nerves. (International Symposium on Neural Regeneration, Asilomar, USA)
- 22. **Gaudet AD**, Bennett JL, Kadoya T, Horie H, Poirier F, Tetzlaff T, Ramer MS (2007) The role of galectin-1 in macrophage accumulation following peripheral nerve injury. (IBRO World Congress of Neuroscience, Melbourne, Australia)
- 23. **Gaudet AD**, Horie H, Poirier F, Tetzlaff W, Ramer MS (2005) Mice lacking galectin-1 exhibit impaired macrophage responses following peripheral axotomy. (International Symposium on Neural Regeneration, Asilomar, USA)
- 24. **Gaudet AD**, Horie H, Poirier F, Tetzlaff W, Ramer MS (2004) Mice lacking galectin-1 exhibit diminished macrophage invasion of the nervous system following peripheral axotomy. (Poster, Asia-Pacific Symposium on Regeneration, Osaka, Japan)

#### FORMAL MENTORING ACTIVITIES

#### Postdoctoral Fellows Mentored

Not Applicable

### Ph.D. Students Supervised

Samantha Alman, Psychology, 2024-present. (Supervisor). Ashley Scheinfeld, Psychology, 2022-present. (Supervisor). Sydney Lee, Psychology, 2020-2024. (Supervisor).

# **Graduate Students Supervised: Rotations**

Uapingena Kandjoze, Neuroscience, 2024. (Supervisor). Kathryn Mahach, Psychology, 2021. (Supervisor). L. Kate Davis, Neuroscience, 2021. (Supervisor). Kanako Matsumura, Neuroscience, 2019. (Supervisor).

#### **Dissertation/Qualification Exam Committees**

Zorana Opachich, Neuroscience, 2024-present. (Member). Nicole Steiner, Psychology, 2024-present. (Member). Victoria Nemchek, Psychology, 2022-present. (Member). Brandy Routh, Pharmacy, 2022-present. (Member). Liwen (Kevin) Zhou, Neuroscience, 2021-present. (Member). L. Kate Davis, Neuroscience, 2021-present. (Member). Kevin Sanchez, Pharmacy, 2020-2023. (Member). Ruizhuo (Rachel) Chen, Pharmacy, 2020-2023. (Member). Sam Bazzi, Neuroscience, 2019-present. (Member).

# **Undergraduate Honors Theses**

Yegene Lee, Psychology, 2019-2020. (Supervisor).

### **Undergraduate Trainees (Selected)**

Averi Pike, Undergraduate, UT-Austin, 2024-present. (Supervisor).

Sojeong Lee, Undergraduate, UT-Austin, 2023-present. (Supervisor).

Shreya Kumar, Undergraduate, UT-Austin, 2020-2023. (Supervisor).

Ashley Scheinfeld, Undergraduate, UT-Austin, 2020-2022. (Supervisor).

Paul Oancea, Undergraduate, UT-Austin, 2019-2023. (Supervisor).

Sindy Peña, Workstudy Undergraduate Assistant, UT-Austin, 2019-2020. (Supervisor).

Kulsoum Rizvi, Undergraduate, UT-Austin, 2019-2020. (Supervisor).

Sung-Hoon Park, Undergraduate, 2018-2020. (Supervisor).

Lizz Loose, Undergraduate, 2019. (Supervisor).

Monica Ayala, Research Assistant, 2015-2018. (Supervisor).

Heather D'Angelo, Research Assistant, 2017-2018. (Supervisor).

Elana Smith, Undergraduate, 2015-2018. (Supervisor).

Emily Bateman, Undergraduate, 2015-2018. (Supervisor). Completed Honors.

Wolfgang Schleicher, Undergraduate, 2015-2018. (Supervisor). Completed Honors.

David Sweet, Undergraduate, 2012-2014. (Supervisor). Completed Honors.

Philipp Schmitt, Undergraduate, 2013-2014. (Supervisor).

Xinvang Xu, Undergraduate, 2013-2014. (Supervisor).

Nicole Polinski, Undergraduate, 2011. (Supervisor). Completed Honors.

# **Undergraduate Advising**

Mentor, UTEAM, 2018-2022. Mentee: Qusay Hussein

- Qusay is a junior in Psychology at UT, who was severely injured by a suicide bomb in his home country of Iraq. He plans to attend graduate school studying motivational psychology. I assisted Qusay in finding a lab that matched his interests and goals.

#### ADMINISTRATIVE AND PROFESSIONAL SERVICE

# **Departmental Service**

Member, Graduate Advisory Board, Department of Psychology, 2023-present.

Member, Teaching Excellence Committee, Department of Psychology, 2023-present.

Member, Belonging, Engagement, Vision, and Outreach (BEVO) Committee, Department of Psychology, 2024-present.

Member, Executive Committee, Department of Psychology, 2023-2024.

Facilitator, In Conversations panelist discussion for graduate students. "Achieving work-life balance to enhance wellbeing," Department of Psychology, November 2, 2022.

Facilitator, In Conversations panelist discussion for graduate students. "Navigating graduate school: Peaks and potholes on the path to success," Department of Psychology, April 5, 2022.

Member, Executive Committee, Department of Psychology, 2021-2022.

Facilitator, In Conversations panelist discussion for graduate students. "Productivity," Department of Psychology, September 2021.

Panelist, "Navigating the Mentor-Trainee Relationship," Department of Psychology Bootcamp for incoming graduate students, August 19, 2020; August 17, 2021.

Member, Inclusion, Diversity, Equity, & Society (IDEAS) Committee, Department of Psychology, 2020-2023.

Panelist, "The Art of Critiquing," Department of Psychology Bootcamp for incoming graduate students, August 20, 2020.

Creator/leader, Neuroimmunology Journal Club, University of Colorado, 2015-2018.

Creator/leader, Center for Brain and Spinal Cord Repair Trainee Seminar Series (CBSCR TSS), Ohio State University, 2012-2014.

Leader, Journal Club for CBSCR, Ohio State University, 2011-2014.

### **University and Local Service**

Facilitator, Dell Medical School Laboratory Tour and Workshop, Institute for Neuroscience (INS) Bootcamp for incoming graduate students, August 12, 2021.

Facilitator, "How to be a Graduate Student," Institute for Neuroscience (INS) Bootcamp for incoming graduate students, August 12, 2020.

Facilitator, "Finding your Mentor," Institute for Neuroscience (INS) Bootcamp for incoming graduate students, August 13, 2020.

Member, Immunology Research Interest Group, University of Texas at Austin, 2020-present. Member, Spinal Cord Injury Research Interest Group, University of Texas at Austin, 2019-2022.

Mentor and Supervisor, Neuroscience Studies Foundation Internship for female high school students from underprivileged backgrounds, University of Texas at Austin, 2019.

Co-Leader and Member, Chronobiology Journal Club, University of Texas at Austin, 2018-2021.

Member, Neuroimmune Journal Club, University of Texas at Austin, 2019-present.

Member, Neuroscience Education for Urban and Rural Outreach (NEURO), Ohio State University, 2012-2014.

- Community-Based Project Leader to engage elementary school students in science, Vancouver, B.C., 2008-2009.
- Community Learning Initiative Leadership Program (CLILP), University of British Columbia, Vancouver, B.C., 2008-2009.
- Let's Talk Science Partnership Program Member, University of British Columbia, Vancouver, B.C., 2008-2009.
- Big Brother, Big Brothers of Vancouver, Vancouver, B.C., 2003-2010.

#### **Professional Service**

Co-Chair. International Online Spinal Cord Injury Seminars (I-OSCIRS). 2022-present I-OSCIRS is a popular weekly YouTube seminar that is viewed by hundreds of SCI researchers, clinicians, and lay people. I have had a leading role in designing and refining the seminar series. I schedule and organize monthly seminars and moderators.

Chair, Programming Committee. International Online Spinal Cord Injury Seminars (I-OSCIRS). 2021-2022

Leader and Coordinator, Lived Experience Spinal Cord Injury Meetings. 2022-present I coordinate a monthly meeting with two individuals with Lived Experience with spinal cord injury. These volunteers meet with our lab over Zoom to discuss their life with spinal cord injury, our ongoing projects, and newly published studies in the field of SCI.

Member, Diversity, Equity, and Inclusion Taskforce. I-OSCIRS. 2021 Chair, Trainee and Foundations Committee. I-OSCIRS. 2020-2021

#### **Editorial Boards**

Brain, Behavior, and Immunity, Editorial Board member, 2024-present Journal of Neurotrauma, Editorial Board member, 2023-present Frontiers in Neurology, Review Editor, 2020-2023

#### Peer reviewer (*ad hoc* since 2010)

Journals: eLife; Experimental Neurology; Journal of Neurotrauma; Brain, Behavior & Immunity; Scientific Reports; Journal of Neuroscience Research; Cellular and Molecular Life Sciences; Brain Research Bulletin; Oncotarget; others.

Grant Reviewer: Wings for Life Foundation (Austria), annual grant reviews (2017-present).

Grant Reviewer, *ad hoc*: National Institutes of Health, Clinical Neuroplasticity and Neurotransmitters scientific review panel (October 2020, June 2023, June 2024).

Grant Reviewer, *ad hoc*: National Institutes of Health, NST-4 NINDS Postdoctoral F32 Fellowship review panel (February 2024).

Grant Reviewer, *ad hoc*: U.K. Research and Innovation Funding Service grant review (July 2024) Grant Reviewer, *ad hoc*: European Science Foundation Postdoctoral Fellowship grant review (February 2024).

Grant Reviewer, *ad hoc*: Department of Defense Congressionally Directed Medical Research Programs: Preservation and Protection peer review panel for the Spinal Cord Injury Research Program (October 2023).

Grant Reviewer, *ad hoc*: Paralyzed Veterans of America Research Foundation (September 2023). Grant Reviewer: Medical Research Council (UK), grant review (2023)

Grant Reviewer, *ad hoc*: Department of Defense: Peer Reviewed Medical Research Program on the Discovery - Mitochondrial Disease (June 2023).

Grant Reviewer: Veterans Affairs Committee, Spinal Cord Injury Disorders/Pain scientific review panel (twice per year; 2017-2021).

#### **Professional Memberships**

Society for Neuroscience, 2007-present

TIRR Foundation-Mission Connect, 2019-present

Society for Research on Biological Rhythms, 2019-2022

Psychoneuroimmunology Society (PNIRS), 2018-2022

Clinically Applied Rehabilitation Research and Engineering (CARE) Initiative, UT-Austin, 2019-present

#### TEACHING POSITIONS

#### **Current Courses**

"Biological Clocks and Behavior," Department of Psychology, University of Texas at Austin. 2018, Spring 2020, Fall 2020, Fall 2021, Spring 2023, Fall 2023.

- Upper-level undergraduate course focused on how the nervous and endocrine systems synchronize internal biological clocks to the external environment.
- Writing flag course aim to enhance learners' writing skills; collaboration via team-based learning; data interpretation; and critical thinking abilities

"Biopsychology," Department of Psychology, University of Texas at Austin. Spring 2024.

- Upper-level undergraduate course exploring the biological basis of psychology and behavior
- Developing a team-based course that incorporates critical thinking and data interpretation

"Current Topics in Behavioral Neuroscience," Department of Psychology, University of Texas at Austin. Fall 2019, Fall 2021.

- Graduate-level seminar course with diverse expert speakers in the realm of behavioral neuroscience. I enabled engagement of students and trainees through participation in speaker introductions and in question periods.

"Neuroinflammation in Health and Pathology," Department of Psychology, University of Texas at Austin. Spring 2019, Spring 2022.

- Graduate-level seminar course with diverse speakers discussing neuroimmune mechanisms of pathology in pre-clinical and clinical research.

### **Past Teaching Experience**

Instructor, Graduate Professional Development Class, University of Colorado Boulder. 2017. Instructor, Principles of Neuroimmunology Class, MVIMG 750, Ohio State University. 2011, 2013. Instructor, Fourth Year Developmental Neurobiology Course, University of British Columbia. 2008 (twice), 2009, 2010.

Instructor, Third Year Cell Physiology Course, University of British Columbia. 2010.

Teaching Assistant, First Year Human Physiology, University of British Columbia. 2004, 2005, 2007-2009

Teaching Assistant, Third Year Cell Physiology, University of British Columbia. 2003-05.