Andrew D. **Gaudet**

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Publications

Journal Articles

1. Aldrich, J. C., Scheinfeld, A. R., Lee, S. E., Dusenbery, K. J., Mahach, K. M., Van de Veire, B. C., Fonken, L. K., & Gaudet, A. D. (2024). Effects of dim light at night in C57BL/6 j mice on recovery after spinal cord injury. *Experimental Neurology*, *375*, 114725. https://doi.org/10.1016/j.expneurol.2024.114725
2. Lee, S. E., Greenough, E. K., Oancea, P., Scheinfeld, A. R., Douglas, A. M., & Gaudet, A. D. (2023). Sex differences in pain: Spinal cord injury in female and male mice elicits behaviors related to neuropathic pain. *Journal of Neurotrauma*, *40*(9–10), 833–844. https://doi.org/10.1089/neu.2022.0482
3. Chen, R., Routh, B. N., Gaudet, A. D., & Fonken, L. K. (2023). Circadian regulation of the neuroimmune environment across the lifespan: From brain development to aging. *Journal of Biological Rhythms*, *38*(5), 419–446. https://doi.org/10.1177/07487304231178950
4. Chen, R., Routh, B. N., Straetker, J. E., Gibson, C. R., Weitzner, A. S., Bell, K. S., Gaudet, A. D., & Fonken, L. K. (2023). Microglia depletion ameliorates neuroinflammation, anxiety-like behavior, and cognitive deficits in a sex-specific manner in rev-erbα knockout mice. *Brain, Behavior, and Immunity*, *114*, 287–298. https://doi.org/10.1016/j.bbi.2023.08.029
5. Ince, L. M., Darling, J. S., Sanchez, K., Bell, K. S., Melbourne, J. K., Davis, L. K., Nixon, K., Gaudet, A. D., & Fonken, Laura. K. (2023). Sex differences in microglia function in aged rats underlie vulnerability to cognitive decline. *Brain, Behavior, and Immunity*, *114*, 438–452. https://doi.org/10.1016/j.bbi.2023.09.009
6. Lee, S. E., Greenough, E. K., Fonken, L. K., & Gaudet, A. D. (2023). Spinal cord injury in mice amplifies anxiety: A novel light-heat conflict test exposes increased salience of anxiety over heat. *Experimental Neurology*, *364*, 114382. https://doi.org/10.1016/j.expneurol.2023.114382
7. Fonken, L. K., & Gaudet, A. D. (2022). Neuroimmunology of healthy brain aging. *Current Opinion in Neurobiology*, *77*, 102649. https://doi.org/10.1016/j.conb.2022.102649
8. Lee, W., Milewski, T. M., Dwortz, M. F., Young, R. L., Gaudet, A. D., Fonken, L. K., Champagne, F. A., & Curley, J. P. (2022). Distinct immune and transcriptomic profiles in dominant versus subordinate males in mouse social hierarchies. *Brain, Behavior, and Immunity*, *103*, 130–144. https://doi.org/10.1016/j.bbi.2022.04.015
9. Gaudet, A. D., Fonken, L. K., Ayala, M. T., Maier, S. F., & Watkins, L. R. (2021). Aging and miR-155 in mice influence survival and neuropathic pain after spinal cord injury. *Brain, Behavior, and Immunity*, *97*, 365–370. https://doi.org/10.1016/j.bbi.2021.07.003

Preprints

1. Lee, S. E., Greenough, E. K., Fonken, L. K., & Gaudet, A. D. (2023). *Spinal cord injury in mice amplifies anxiety: A novel light-heat conflict test exposes increased salience of anxiety over heat*. https://doi.org/10.1101/2023.01.13.523970
2. Aldrich, J. C., Scheinfeld, A. R., Lee, S. E., Dusenbery, K. J., Mahach, K. M., Van de Veire, B. C., Fonken, L. K., & Gaudet, A. D. (2023). *Effects of dim light at night in C57BL/6J mice on recovery after spinal cord injury*. https://doi.org/10.1101/2023.09.15.557980
3. Lee, S. E., Greenough, E. K., Oancea, P., Scheinfeld, A. R., Douglas, A. M., & Gaudet, A. D. (2022). *Sex differences in pain: Spinal cord injury in female and male mice elicits behaviors related to neuropathic pain*. https://doi.org/10.1101/2022.10.18.512805
4. Lee, S. E., Park, S.-H., Aldrich, J. C., Fonken, L. K., & Gaudet, A. D. (2022). *Anxiety-like behaviors in mice unmasked: Revealing sex differences in anxiety using a novel light-heat conflict test*. https://doi.org/10.1101/2022.09.02.506410
5. Lee, W., Milewski, T. M., Dwortz, M. F., Young, R. L., Gaudet, A. D., Fonken, L. K., Champagne, F. A., & Curley, J. P. (2021). *Distinct inflammatory and transcriptomic profiles in dominant versus subordinate males in mouse social hierarchies*. https://doi.org/10.1101/2021.09.04.458987

Books

Book Chapters

1. Gaudet, A. D., & Greenough, E. K. (2023). Circadian rhythms regulate neuroinflammation after traumatic brain injury and spinal cord injury. In *Biological implications of circadian disruption* (pp. 183–205). Cambridge University Press. https://doi.org/10.1017/9781009057646.009

Professional Presentations

Circadian control of neuroinflammation after spinal cord injury
Winter Conference for Brain Research, Breckenridge, CO *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. *2023*

Targeting neuroinflammation and the circadian system to improve repair after spinal cord injury
Drexel University, Philadelphia, PA *2022*

Targeting neuroinflammation to improve repair after spinal cord injury
MD Anderson Cancer Center and University of Texas at Austin *2022*

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

Spinal cord injury in rodents alters neuroinflammation, affective function, and circadian rhythms
Mission Connect – TIRR Foundation *2021*

Wallerian degeneration: Preclinical insight into peripheral nerve repair
Massachusetts General Hospital, Harvard Medical School *2021*

Conference Abstracts

Effects of circadian disruption via dim light at night in C57BL/6J mice on recovery after spinal cord injury
Mission Connect Annual Meeting *2023*

Spinal cord injury in mice amplifies anxiety: a novel light-heat conflict test exposes increased salience of anxiety over heat
International Symposium on Neural Regeneration *2023*

Spinal cord injury in mice amplifies anxiety: a novel light-heat conflict test exposes increased salience of anxiety over heat
National Neurotrauma Society 2023 Symposium *2023*

Spinal cord injury in mice amplifies anxiety: a novel light-heat conflict test exposes increased salience of anxiety over heat
Mission Connect Annual Meeting *2023*

The phagocytic receptor MerTK is required for typical repair and locomotor recovery after spinal cord injury
National Neurotrauma Society 2023 Symposium *2023*

The phagocytic receptor MerTK is required for typical repair and locomotor recovery after spinal cord injury
Mission Connect Annual Meeting *2023*

The phagocytic receptor MerTK is required for typical repair and locomotor recovery after spinal cord injury
International Symposium on Neural Regeneration *2023*

Revealing anxiety differences between sexes and after neurotrauma using a novel light-heat conflict test
Mission Connect Annual Meeting *2022*

The phagocytic receptor MerTK is required for typical repair and locomotor recovery after spinal cord injury

Mission Connect Annual Meeting *2022*

A novel heat-light conflict test for mice unmasks latent anxiety behavior in females and after spinal cord injury

Mission Connect Foundation Symposium *2021*

A novel heat-light conflict test for mice unmasks latent anxiety behavior in females and after spinal cord injury

Society for Neuroscience *2021*

Investigating sex differences in mouse neuropathic pain after spinal cord injury

Mission Connect Foundation Symposium *2021*

Honors

Award, Raymond Dickson Centennial Endowed Teaching Fellowship *Austin, US*

The University of Texas at Austin *2022*

Visium Core Lab Grant Program Award *Pleasanton, US*

10X Genomics *2021*

Nominee, Josefina Paredes Endowed Teaching Award *Austin, US*

The University of Texas at Austin *2021*

College Research Fellowship Award *Austin, US*

The University of Texas at Austin *2021*

Funding

Circadian control of neuroinflammation after spinal cord injury *National Institute of Neurological Disorders and Stroke, R01NS131806*

Funding: $444,737 *2023 - 2028*

Disrupted Circadian Regulation of Cell Migration at CNS-Immune Interfaces in Aging and Alzheimer's Disease *National Institutes of Health, R01-AG078758*

Funding: *2022 - 2027*

Targeting phagocytic-neuroimmune pathways to enhance recovery after spinal cord injury *Mission Connect, a program of the TIRR Foundation, 022-101*

Funding: *2022 - 2024*

Targeting DLK to improve neuroprotection and recovery after spinal cord injury *University of Texas MD Anderson Cancer Center,*

Funding: *2022 - 2023*

Nasal-Based Microbe Neuromodulator Delivery *U.S. Department of Defense,*

Funding: *2021 - 2022*

Inhibiting microRNA-155 in mice to improve SCI repair *Wings for Life, 139*

Funding: *2016 - 2021*

Service

Journal of Neurotrauma *San Francisco, US*

Editorial Board Member *2023 - present*

International Online Spinal Cord Injury Seminars (I-OSCIRS) *Lexington, US*

Chair *2022 - present*

Dell Medical School Laboratory Tour and Workshop, Institute for Neuroscience (INS) *Austin, US*
Bootcamp for incoming graduate students, UT-Austin
Facilitator *2021 - present*

International Online Spinal Cord Injury Seminars (I-OSCIRS) *Lexington, US*
Chair, Programming Committee *2021 - present*

IDEAS Committee, Psychology, UT-Austin *Austin, US*
Member *2020 - present*

In Conversations panelist discussion for graduate students. "Achieving work-life balance to enhance wellbeing." Psychology, UT-Austin *Austin, US*
Facilitator *2022 - 2022*

In Conversations panelist discussion for graduate students. "Navigating graduate school: Peaks and potholes on the path to success," Psychology, UT-Austin *Austin, US*
Facilitator *2022 - 2022*

Executive Committee, Psychology, UT-Austin *Austin, US*
Member *2021 - 2022*

In Conversations panelist discussion for graduate students. "Productivity," Psychology, UT-Austin *Austin, US*
Facilitator *2021 - 2021*

Navigating the Mentor-Trainee Relationship Session, Graduate Student Bootcamp, Psychology, UT-Austin *Austin, US*
Panelist *2020 - 2021*

International Online Spinal Cord Injury Seminars (I-OSCIRS) *Lexington, US*
Chair, Trainee and Foundations Committee *2020 - 2021*

Mentoring and Teaching

Mentoring

Sojeong Lee
Undergraduate Research Supervisor *2023 - present*

Victoria Nemchek
Dissertation Committee Member *2023 - present*

Candace Li
Undergraduate Research Supervisor *2023 - present*

Alma Perez
Undergraduate Research Supervisor *2023 - present*

Brandy Routh
Dissertation Committee Member *2022 - present*

Ashley Scheinfeld
Dissertation Supervisor *2022 - present*

L. Kate Davis
Dissertation Committee Member *2021 - present*

Liwen (Kevin) Zhou
Dissertation Committee Member *2021 - present*

Sydney Lee
Dissertation Supervisor *2020 - present*

Sam Bazzi
Dissertation Committee Member *2019 - present*

Shreya Kumar

Undergraduate Research Supervisor *2020 - 2023*

Ruizhuo (Rachel) Chen

Dissertation Committee Member *2020 - 2023*

Kevin Sanchez

Dissertation Committee Member *2020 - 2023*

Paul Oancea

Undergraduate Research Supervisor *2019 - 2023*

Kathryn Mahach

Dissertation Supervisor *2021 - 2022*

Ashley Scheinfeld

Undergraduate Research Supervisor *2020 - 2022*

Qusay Hussein

UTEAM mentor - mentorship program for people from underprivileged backgrounds *2018 - 2022*

Teaching

Biopsychology

Instructor *2024 - 2024*

Biological Clocks and Behavior - Fall 2023

Instructor *2023 - 2023*

Biological Clocks and Behavior - Spring 2023

Instructor *2023 - 2023*

Neuroinflammation in Health and Pathology

Instructor *2022 - 2022*

Biological Clocks and Behavior

Instructor *2021 - 2021*

Current Topics in Behavioral Neuroscience

Instructor *2021 - 2021*