

Education

PhD	Psychology - Neuroscience, University of Wisconsin-Milwaukee Advisor: Christine Larson, PhD <i>Dissertation: The Brain in Context: Effects of Neighborhood Socioeconomic Disadvantage on Functional and Structural Connectivity of the Cingulate Gyrus in Trauma-Exposed Adults</i>	Present
MS	Psychology - Neuroscience, University of Wisconsin-Milwaukee <i>Thesis: Shaped by the environment: the influence of childhood trauma exposure, individual socioeconomic position, and neighborhood disadvantage on brain morphology</i>	2020
BA	Albion College, Albion, MI Major: Psychological Sciences, Minor: Cellular and Molecular Biology Minor Concentration: Neuroscience <i>Cum Laude</i>	2016

Employment

University of Wisconsin-Milwaukee, Milwaukee, WI <u>Graduate Student Researcher</u> (under the direction of Dr. Christine Larson)	Present
<ul style="list-style-type: none">• Design and implement neuroimaging experiments using functional magnetic imaging (fMRI) to investigate brain characteristics in the aftermath of a traumatic injury.• Utilize univariate, multivariate, machine learning, and multilevel statistical approaches to analyze cross-sectional, multi-modal, and longitudinal datasets.• Program behavioral tasks in E-Prime and preprocess/analyze MRI data with the following programs: AFNI, SPM (MATLAB-based), Freesurfer and CONN, PRONTO.	
APOPO vzw, Morogoro, Tanzania. <u>U.S. Technical Advisor</u> (under the direction of Dr. Cynthia Fast)	2019 - 2021
<ul style="list-style-type: none">• Develop scientific outreach programming for APOPO's Zoo Program (partnered with American Zoological Association-accredited zoos).• Create animal behavior/training material for zoo staff biologists.• Provide on-the-ground support to zoo staff working with ambassador animals.	
<u>Research Technician</u>	2017 - 2019
<ul style="list-style-type: none">• Developed training protocols to enhance the training and operations of APOPO's scent detection program (APOPO train African giant pouched rats to detect landmines in post-conflict zones and tuberculosis in human sputum samples).• Participated in the proposal, design, execution, and analysis of 5 research studies.• Managed a team of 8 APOPO research trainers and 3 laboratory staff.• Assisted with identifying funding opportunities and writing grant proposals.	
Duke University, Center for Child and Family Policy, Durham, NC <u>Research Aide</u> (under the direction of Dr. Ken Dodge)	2016 - 2017
<ul style="list-style-type: none">• Collected data for two intervention-based longitudinal studies.• Conducted interviews with participants in person or over the phone, using multiple data instruments, including: Adult Behavioral Checklist, Child Behavior Checklist, Tobacco, Alcohol, and Drugs III, and SACA (Mental Health Services Utilization).• Coordinated and facilitated over 200 interviews with participants using Qualtrics and Docusign software.	

Honors + Support

2021-22	Early Career Policy Ambassador Fellow, Society for Neuroscience
2020	Team Science Grant, MCW Clinical and Translational Science Institute, \$250
2020	Early Graduate Researcher Award, American Psychological Association, \$1,000
2020-21	START Mentored TL1 Predoctoral Trainee (NRSA), National Institutes of Health
2020-21	Department Diversity Committee Fellow, University of Wisconsin-Milwaukee (UWM)
2020-21	Distinguished Graduate Student Fellowship, UWM, declined
2020-21	Young Scientist, Annual Lindau Nobel Laureate Meeting
2020	Behavioral Management Fund Travel Award*, ABMA, \$1,000
2019	Psychology Summer Graduate Research Fellowship, UWM, \$4,000

Publications

8. Weis, C.N.*, [Webb, E.K.*](#), Huggins, A.A, Kallenbach, M., Miskovich, T.A., Fitzgerald, J.M, Bennett, K.P, Krukowski, J.L, deRoon-Cassini, T., & Larson, C.L. (2021). Stability of hippocampal subfield volumes after trauma and relationship to development of PTSD symptoms. *Neuroimage*. (*co-first authors).
7. Weis, C.N, [Webb, E.K.](#), Damiano, S., Larson, C.L., & deRoon-Cassini, T. (2021). Scoring the Life Events Checklist: comparison of three scoring methods. *Psychological Trauma: Theory, Research, Practice, and Policy*.
6. Bird, C.*, [Webb, E.K.*](#), Schramm, A., Torres, L., Larson, C., & deRoon-Cassini, T. (2021). Racial discrimination is associated with acute post-traumatic stress symptoms and predicts future PTSD symptom severity in trauma-exposed Black American adults. *Journal of Traumatic Stress*. (*co-first authors).
5. [Webb, E.K.](#), Weis, C., Huggins, A., Parisi, E., Bennett, K., Miskovich, T., Hanson, J., deRoon-Cassini, & Larson, C. (2021). Neighborhood disadvantage is associated with stable deficits in neurocognitive functioning in traumatically-injured adults. *Health and Place*, 67, 102493.
4. Fried, A.*, Dunphy, C.*, Silverman, M.*, [Webb, E.K.*](#) (2020). Emerging issues in the responsible conduct of psychological science. *Translational Issues in Psychological Sciences*, 6(3), 191-195. (* co-first authors).
3. [Webb, E.K.*](#), Huggins, A.*, Belleau, E., Taubitz, L., Hanson, J., deRoon-Cassini, T., & Larson, C. (2020). Altered resting-state functional connectivity of periaqueductal gray prospectively predicts posttraumatic stress symptoms. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*, 5(9), 891-900. (* co-first authors).
2. [Webb, E. K.](#), Saccardo, C. C., Poling, A., Cox, C., & Fast, C. D. (2020). Rapidly training African giant pouched rats (*Cricetomys ansorgei*) with multiple targets for scent detection. *Behavioural Processes*, 174, 104085.
1. Lewon, M., [Webb, E.K.](#), Brotheridge, S.M., Cox, C., & Fast, C. (2019). Behavioral skills training in scent detection research: interactions between trainer and animal behavior. *Journal of Applied Behavior Analysis*, 52(3). DOI: 10.1002/jaba.566.

IN REVISION, UNDER REVIEW, IN PROGRESS

Weis, C.N., Huggins, A., Miskovich, T., Fitzgerald, J., Bennet, K., Krukowski, J., [Webb, E.K.](#), deRoon-Cassini, & Larson, C. (*under review*). Acute white matter integrity post-trauma predicts chronic PTSD symptoms.

[Webb, E.K.*](#), Weis, C.*, Huggins, A., Bennett, K., Parisi, E., Kallenbach, M., Hanson, J., deRoos-Cassini, & Larson, C. (*under review*). Neural Impact of Neighborhood Disadvantage in Traumatically-Injured Adults. (**co-first authors*).

Fitzgerald, J.M.*, [Webb, E.K.*](#), Weis, C., Huggins, A., Bennett, K., Parisi, E., Kallenbach, M., Krukowski, J., deRoos-Cassini, & Larson, C. (*under review*). Hippocampus resting-state functional connectivity forecasts individual PTSD symptoms: A data-driven approach. (**co-first authors*).

Weis, C.N., [Webb, E.K.](#), deRoos-Cassini, T., & Larson, C.L. (*under review*). Potential consequences of emotional trauma on TBI recovery. Invited Review at Biological Psychiatry. (**co-first authors*).

[Webb, E.K.](#), and Etter, J.A. (*in progress*). The “Unusable” Data Label: Identifying Guises of Scientific Oppression in Psychological Data.

[Webb, E.K.](#), Weis, C., Huggins, A., Bennett, K., Parisi, E., Krukowski, J., deRoos-Cassini, & Larson, C. (*in progress*). Resting-State Connectivity of Bed Nucleus of the Stria Terminalis Predicts Future PTSD symptoms in Traumatically-injured Adults.

Meetings + Conferences

KEYNOTE LECTURES

[Webb, E.K.](#) *Saving lives one sniff at a time! African giant pouched rats as humanitarian biosensors.* Invited Keynote Address at the Animal Behavior Management Alliance annual conference, Portland, OR, April 2019.

INVITED TALKS

4. [Webb, E.K.](#) *Training African pouched rats to save lives.* Invited talk at Milwaukee County Zoo, Milwaukee, WI, August 2019.

3. [Webb, E.K.](#) *Training African pouched rats to save lives: from pup to hero.* Invited talk at Point Defiance Zoo and Aquarium, Tacoma, WA, July 2019.

2. [Webb, E.K.](#) *Training African pouched rats to save lives: from pup to hero.* Public educational lecture at Point Defiance Zoo and Aquarium, Tacoma, WA, July 2019.

1. [Webb, E.K.](#) *Training African pouched rats to save lives: from pup to hero.* Invited talk at Oregon Zoo, Portland, OR, April 2019.

ORAL PRESENTATIONS

5. [Webb, E.K.](#), Weis, C., Bennett, K., Huggins, A., Parisi, E., Miskovich, T., Kallenbach, M., Krukowski, J., Fitzgerald, J., deRoos-Cassini, T., & Larson, C. (2021). Neural Impact of Neighborhood Disadvantage in Traumatically-Injured Adults: A Multi-Modal Investigation. *76th annual meeting of the Society of Biological Psychiatry, virtual.*

4. [Webb, E.K.](#), Schneider, M., Lewon, M., Kuipers, D., Cox, C., & Fast, C.D. (2020). *Training the trainer: how behavioral skills training helped African pouched rats sniff out smuggled wildlife.* Animal Behavior Management Alliance annual conference, Amsterdam, Netherlands.†

3. Fast, C., Andrews, R., [Webb, K.](#), Brotheridge, S., Kuipers, D., & Cox, C. (2018). *Olfactory discrimination with a humanitarian purpose: African giant pouched rats as detectors of landmines and tuberculosis.* Talk presented by [Webb, E.K.](#) at the International Conference on Comparative Cognition, Melbourne Beach, FL.

2. Fast, C.D., Ellis, H., [Webb, E.K.](#), Lewon, M., Brotheridge, S., & Cox, C. (2017). *Investigating peak shift in an olfactory discrimination: Lessons for animal scent detection.* Keynote presented by Fast at the Pavlovian Society Annual Meeting, Philadelphia, PA.

1. Fast, C., [Sears, E.K.](#), Marnewick, K., & Pires, A. (2017). *Rating on wildlife crime: Using African giant pouched rats *Cricetomys ansorgei* to detect wildlife contraband in shipping ports*. Talk presented by Marnewick at the Southern African Management Association Conference, Western Cape, South Africa.

INVITED PANELS

Fitzgerald, J.M., Ragozzino, M., & [Webb, E.K.](#) (2020). *Cross-species collaborations to advance translational neuroscience*. Pavlovian Society Meeting.

POSTER PRESENTATIONS

15. [Webb, E.K.](#), Weis, C., Bennett, K., Huggins, A., Parisi, E., Miskovich, T., Kallenbach, M., Krukowski, J., Fitzgerald, J., deRoos-Cassini, T., & Larson, C. (2021). *Neural Impact of Neighborhood Disadvantage in Traumatically-Injured Adults: A Multi-Modal Investigation*. Association for Clinical and Translational Sciences virtual meeting.

14. Huggins, A. A., Fitzgerald, J., Weis, C. N., Hanson, J., [Webb, E.K.](#), Bennett, K. P., Parisi, E. A., deRoos-Cassini, T. A., & Larson, C. L. (2021). *Neural activation during fear extinction acutely post-trauma predicts chronic PTSD severity*. 76th annual meeting of the Society of Biological Psychiatry, virtual.

13. Weis, C.N*, [Webb, E.K.*](#), Huggins, A.A, Kallenbach, M., Miskovich, T.A., Fitzgerald, J.M, Bennett, K.P, Krukowski, J.L, deRoos-Cassini, T., & Larson, C.L. (2021). *Stability of hippocampal subfield volumes after trauma and relationship to development of PTSD symptoms*. Society for Neuroscience Global Connectome Meeting.

12. Kallenbach, M., [Webb, E.K.](#), deRoos-Cassini, T. & Larson, C.L. (2020). *General self-efficacy as a mediator to gender differences in the development of posttraumatic stress disorder*. International Society for Traumatic Stress Studies. +

11. Skrober, A.L.**, [Webb, E.K.](#), & Larson, C.L. (2020). *Life stressors predict PTSD symptoms following a traumatic injury*. University of Wisconsin-Milwaukee Undergraduate Research Symposium, Milwaukee, WI. + (** undergraduate mentee).

10. [Webb, E.K.](#), Weis, C., Huggins, A., Hanson., Sellnow, K., deRoos-Cassini, T., & Larson, C. (May 2020). *Neighborhood disadvantage is associated with smaller amygdala volume and altered amygdala functional activity*. Society of Biological Psychiatry Annual Meeting, New York, NY.+

9. Fitzgerald, J.M., Huggins, A.A., Weis, C., Hanson, J., Bennett, K., Parisi, E., [Webb, E.K.](#), Larson, C., & deRoos-Cassini, T. *Differences in Endocannabinoids Relates to Intact Fear Learning After Traumatic Injury*. Society of Biological Psychiatry Annual Meeting, New York, NY.+

8. Weis, C., Huggins, A., Fitzgerald, J., Miskovich, T., Bennett, K., Parisi, E., [Webb, E.K.](#), deRoos-Cassini, T., & Larson, C. (2020). *Data-driven approach to dynamic resting state functional connectivity in individuals at-risk for PTSD development*. Organization of Human Brain Mapping Meeting, Montreal, CA.+

7. [Webb, E.K.](#), Cutright, E., Schneider, M., Mwampashi, R., Cox, C., & Fast, C.D. (2019). *Training African giant pouched rats as biosensors: New humanitarian applications*. Pavlovian Society, Vancouver, BC, Canada.

6. [Webb, E.K.](#), Huggins, A., Belleau, E., Taubitz, L., Hanson, J., deRoos-Cassini, T., & Larson, C. (2019). *Periaqueductal gray resting state functional connectivity prospectively predicts PTSD symptom severity*. 74th Society of Biological Psychiatry Annual Meeting, Chicago, IL.

5. Brotheridge, S., Ellis, H., [Webb, E.K.](#), Fast, C.D., & Cox, C. (2018). *Discrimination training and odorant concentration influence scent detection performance of *Cricetomys ansorgei**. International Conference on Comparative Cognition, Melbourne, FL.
4. [Webb, E.K.](#), Saccardo C., Fast, C., & Cox, C. (2018). *Broadening the life-saving repertoire of African giant pouched rats: rapid re-training and maintenance of multiple odor discriminations*. International Conference on Comparative Cognition, Melbourne, FL.
3. [Webb, E.K.](#), Kuipers, D., Marnewick, K., Fast, C., & Cox, C. (2018). *Rating on illegal trade: using African giant pouched rats (*Cricetomys ansorgei*) to detect contraband wildlife products*. International Conference on Comparative Cognition, Melbourne, FL.
2. Lewon, M., [Webb, E.K.](#), Brotheridge, S., & Fast, C.D. (2018). *Behavioral skills training for trainers of scent detection *Cricetomys* rats in research setting: interactions between trainer, rat, and observer behavior*. Nevada Association for Behavioral Analysis Annual Conference, Reno, NV.
1. Johnson, B.A., [Sears, E.K.](#), & Wilson, W.J. (2016). *Behavioral comparison of two methods of drug administration in the earthworm*. Society for Neuroscience annual meeting, San Diego, CA.

Teaching

University of Wisconsin-Milwaukee
Graduate Teaching Assistant

Psychological Statistics, 2018-2019
Cognitive Neuroscience, 2020
Neuropsychology, 2020

Editorial Work

2019-20 Associate Editor: *Translational Issues in Psychological Science: Research Ethics*
Ad-Hoc Reviewer: *Translational Issues in Psychological Science*

Service + Media Coverage

2020-21 Psychology Department Diversity Committee, Fellow
2020-21 Cognition, Learning, Attention, and Memory Society, Officer
2019 APOPO's Ambassadors to America
<https://www.apopo.org/en/latest/2019/07/APOPOs-Ambassadors-to-America>
2019 'Hero rats' go on display at Tacoma zoo. Their relatives are still saving lives.
<http://www.tinyurl.com/y6eszh6x>
2018 These giant rats save lives and may soon stop poachers. *Top of the Mind* w/ Julie Rose [BYU Radio]
2018 Saving lives one sniff at a time: Albion alumnae train 'herorats'. [Online, Mar 26].
2014-16 Psi Chi Albion College Chapter President

Awards + Achievements

2020 Finalist, 3 Minute Thesis Competition, University of Wisconsin-Milwaukee
2019 Honorable Mention, International Neuroethics Society Essay Contest
2016 Peter T. Mitchell Lux Fiat Award, Albion College (honors outstanding graduating seniors for leadership and service)
2012-16 Webster Scholarship, Albion College (recognizes strong academic performance)
2014 1st Place, Gildart Creative Writing Prize, Albion College

Additional Training

2020 Network Analyses in R, International Society for Traumatic Stress Studies
2019 University of Michigan's Summer Training Course in fMRI (supported by the NIH)

Scientific Memberships

Society for Neuroscience (SfN)

Society of Biological Psychiatry (SOBP)

Pavlovian Society

American Psychological Association (APA)

International Society of Traumatic Stress Studies (ISTSS)

Wisconsin Psychological Association (WPA)

Women in Learning (WiL)

International Neuroethics Society (INS)