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Vassar College
 Department of Psychological Science
 Program in Neuroscience & Behavior
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EDUCATION

PhD, Psychology George Mason University, Fairfax VA	2005 - 2009
MA, Psychology George Mason University, Fairfax VA	2003 - 2005
BS, Psychology The University of Oregon, Eugene OR	1995 - 1999

POSITIONS

Assistant Professor Vassar College Department of Psychological Science Program in Neuroscience and Behavior	2015-present
Postdoctoral Fellow National Institutes of Health National Institute on Alcohol Abuse and Alcoholism Laboratory of Behavioral and Genomic Neuroscience	2013-2015
Postdoctoral Fellow Walter Reed National Military Medical Center Uniformed Services University of the Health Sciences F. Edward Hébert School of Medicine Department of Psychiatry Center for the Study of Traumatic Stress	2009-2013
Adjunct Professor The Institute for Psychological Sciences Clinical Psychology	2010-2013
Adjunct Professor George Mason University Department of Psychology	2010
Research Assistant Oregon Health Sciences University Department of Behavioral Neuroscience	2000-2003

ARTICLES

Google Scholar profile: cumulative citations = 808, *h*-index = 18

1. Piantadosi PT, Lieberman AG, Pickens CL, **Bergstrom HC**, and Holmes A (2018). A novel multichoice touchscreen paradigm for assessing cognitive flexibility in mice. *Learning & Memory*. 26(1):24-30 PMID: 30559117 **Cover Illustration and featured article**
2. Prager EM, Chambers KE, Plotkin JL, McArthur DL, Bandrowski AE, Bansal N, Martone ME, **Bergstrom HC**, Bernalov A, Graf C (2018). Improving transparency and scientific rigor in academic publishing. *The Journal of Neuroscience Research*. In press. PMID: 30506706 Note: This article was co-published in the journals *Brain & Behavior* and *Cancer Reports*.
3. Jacques A, Wright A, Chaaya N, Overell A, **Bergstrom HC**, McDonald C, Battle AR, Johnson LR (2018). Functional neuronal topography: A statistical approach to micro-mapping neuronal location. *Frontiers in Neuronal Circuits*. 12: 84. PMID: 30386215
4. Pollack GA, Bezek JL, Lee SH, Scarlata MJ, Weingast LT, **Bergstrom HC** (2018). Cued fear memory generalization increases over time. *Learning & Memory*. 25(7): 298-308. **Cover Illustration and featured article**
5. **Bergstrom HC**, Lipkin AM, Lieberman AG, Pinard CR, Gunduz-Cinar O, Brockway ET, Taylor WW, Nonaka M, Bukalo O, Wills TA, Rubio FJ, Li X, Pickens CL, Winder DG, Holmes A (2018). Dorsolateral striatum engagement interferes with early discrimination learning. *Cell Reports*. 23(8):2264-2272
6. Jury N, Pollack G, Ward M, Bezek J, Ng A, Pinard C, **Bergstrom H**, Holmes A (2017). Chronic ethanol during adolescence impacts corticolimbic dendritic spines and behavior. *Alcoholism: Clinical and Experimental Therapeutics*. 41(7):1298-1308 PMID: 28614590
7. Ehlinger DG, Burke JC, McDonald CG, Smith RF, **Bergstrom HC** (2017). Nicotine-induced and D1-receptor dependent dendritic remodeling in a subset of dorsolateral striatum medium spiny neurons. *Neuroscience*. 356: 242-254 PMID: 28576726
8. **Bergstrom HC** and Pinard CR (2017). Corticolimbic Circuits in Learning, Memory, and Disease. *The Journal of Neuroscience Research*. 95(3): 795-796 PMID: 28094866. **Cover Illustration**
9. **Bergstrom HC** (2016). The Neurocircuitry of Remote Cued Fear Memory. *Neuroscience & Biobehavioral Reviews*. 71: 409-417 PMID: 27693699
10. Ehlinger DG, **Bergstrom HC**, Burke JC, Fernandez GF, McDonald CG, Smith RF (2016). Adolescent nicotine-induced dendrite remodeling in the nucleus accumbens is rapid, persistent, and D1-dopamine receptor dependent. *Brain Structure and Function*. 221(1): 133-145 PMID: 25257604
11. Romano Bergstrom JC, Olmsted-Hawala E, **Bergstrom HC** (2016). Older adults fail to see the periphery during a Website search task. *Universal Access in the Information Society*. 15(2): 261-270. DOI: 10.1007/s10209-014-0382-z
12. **Bergstrom HC**, Darvesh AS, Berger SP (2015). Inducible nitric oxide inhibitors block NMDA antagonist-stimulated motoric behaviors and cortical glutamate efflux. *Frontiers in Pharmacology*. 6; 292. PMID: 26696891

13. Castro-Gomes V, **Bergstrom HC**, McGuire JL, Parker CC, Coyner J, Landeira-Fernandez, Ursano RJ, Palmer AA, Johnson LR (2016). Lateral amygdala dendritic morphology and spine patterning in a fear memory resistant and susceptible mouse line. *Neurobiology of Learning and Memory*. 127:64-71 PMID: 26642919.
14. Prager EM, **Bergstrom HC**, Wynn GH, Braga MF (2016). The basolateral amygdala γ -aminobutyric acidergic system in Health and Disease. *The Journal of Neuroscience Research*. 94(6): 548-67 PMID: 26586374
15. Smith RF, McDonald CG, **Bergstrom HC**, Ehlinger D, Brielmaier JM (2015) Adolescent nicotine induces persisting changes in development of neural connectivity. *Neuroscience & Biobehavioral Reviews*. 55: 432-443. PMID:26048001
16. Fitzgerald PJ, Pinard C, Camp MC, Feyder M, Sah A, **Bergstrom HC**, Graybeal C, Liu Y, Grant S, Singewald N, Xu W, Holmes A (2015). Durable fear memories require PSD-95. *Molecular Psychiatry*. 20(7): 901-912. PMID: 25510511. **Cover Illustration and featured article**
17. **Bergstrom HC** & Johnson LR (2014) An organization of visual and auditory fear conditioning in the lateral amygdala. *Neurobiology of Learning and Memory*. 116: 1-13 PMID: 25076183.
18. McGuire JM, **Bergstrom HC**, Parker CC, Le T, Morgan M, Tang H, Selwyn RG, Silva AC, Choi K, Ursano RJ, Palmer AA, Johnson LR (2013). Traits of fear resistance and susceptibility in an advanced intercross line. *European Journal of Neuroscience*. 38 (9): 3314-3324 PMID: 23968228
19. **Bergstrom HC**, McDonald CG, Dey S, Tang H, Selwyn RG, Johnson LR (2013). The structure of Pavlovian fear conditioning in the amygdala. *Brain Structure and Function*. 218 (6): 1569-1589 PMID: 23179863
20. **Bergstrom HC**, McDonald CG, Dey S, Fernandez GM, Johnson LR (2013). Neurons activated during fear memory consolidation and reconsolidation are mapped to a common and new topography in the lateral amygdala. *Brain Topography*. 26(3): 468-78 PMID: 23322210
21. Ehlinger DG, **Bergstrom HC**, McDonald CG, Smith RF (2012). Nicotine-induced dendritic remodeling in the insular cortex. *Neuroscience Letters*. 516 (1): 89-93 PMID: 22487730
22. Prager EM, **Bergstrom HC**, Grunberg NE, Johnson LR (2011). The importance of reporting housing and husbandry in rat research. *Frontiers in Behavioral Neuroscience*, 5: 38 PMID: 21847375
23. **Bergstrom HC**, McDonald CG, Johnson LR (2011). Pavlovian fear conditioning activates a common pattern of neurons in the lateral amygdala of individual brains. *PLoS ONE*. 6(1): e15698 PMID: 21264324
24. Prager EM, Brielmaier J, **Bergstrom HC**, McGuire J, Johnson LR (2010). Localization of mineralocorticoid receptors at Mammalian synapses. *PLoS ONE*. 5(12): e14344. PMID: 21179518
25. **Bergstrom HC**, Smith RF, Mollinedo NS, McDonald CG (2010). Chronic nicotine exposure produces lateralized, age-dependent dendritic remodeling in the rodent basolateral amygdala. *Synapse*. 64(10): 754-64 PMID: 20336623
26. Falco AM, **Bergstrom HC**, Bachus SE, Smith RF (2009). Persisting changes in basolateral amygdala mRNAs after chronic ethanol consumption. *Physiology & Behavior*, 96(1): 169-73 PMID: 18938187

27. **Bergstrom HC**, McDonald CG, French HT, Smith RF (2008). Continuous nicotine administration produces selective, age-dependent structural alteration in pyramidal neurons from prelimbic cortex. *Synapse*, 62(1): 31-9 PMID: 17957736
28. McDonald CG, Eppolito AK, Brielmaier JM, Smith LN, **Bergstrom HC**, Lawhead MR, Smith RF (2007). Evidence for elevated nicotine-induced structural plasticity in nucleus accumbens of adolescent rats. *Brain Research*, 1151:211-8 PMID: 17418110
29. Smith LN, McDonald CG, **Bergstrom HC**, Brielmaier JM, Eppolito AK, Falco AM, Smith RF (2006). Long-term changes in fear conditioning and anxiety-like behavior following nicotine exposure in adult versus adolescent rats. *Pharmacology, Biochemistry and Behavior* 85(1):91-97, PMID: 16919320
30. **Bergstrom HC**, McDonald CG, Smith RF (2006). Alcohol exposure during adolescence impairs auditory fear conditioning in adult Long-Evans rats. *Physiology & Behavior* 88(4-5):466-472, PMID: 16753191
31. McDonald CG, Dailey VK, **Bergstrom HC**, Wheeler TL, Eppolito AK, Smith LN, Smith RF (2005). Periadolescent nicotine administration produces enduring changes in dendritic morphology of medium spiny neurons from nucleus accumbens. *Neuroscience Letters* 385: 163-167, PMID: 15955627
32. **Bergstrom HC**, Palmer AA, Wood R, Burkhart-Kasch S, McKinnon CS, Phillips TJ (2003). Reverse selection for differential response to the locomotor stimulant effects of ethanol provides evidence for pleiotropic genetic influence on locomotor response to other drugs of abuse. *Alcoholism: Clinical and Experimental Research* 27(10): 1535-1547, PMID: 14574223
33. Boehm SL III, Piercy MM, **Bergstrom HC**, and Phillips TJ (2002). Ventral tegmental area region governs GABAB receptor modulation of ethanol-stimulated activity in mice. *Neuroscience* 115, 1, 185-200, PMID: 12401333
34. Palmer AA, McKinnon CS, **Bergstrom HC**, Phillips TJ (2002). Locomotor activity responses to ethanol, other alcohols, and GABAA acting compounds in forward and reverse selected FAST and SLOW mouse lines. *Behavioral Neuroscience* 116, 6, 958–967, PMID: 12492294

AWARDS, GRANTS, HONORS

1. 2015, Fellows Award for Research Excellence, National Institutes of Health, Bethesda, MD
“Optogenetic control of dorsostriatal-mediated reward learning”
2. 2008, Sigma Xi Grant-in-Aid of Research, George Mason University, Fairfax VA
3. 2008, College of Humanities and Social Science Doctoral Dissertation Fellowship Award. George Mason University, Fairfax VA
4. 2008, College of Humanities and Social Sciences Fellowship Award. George Mason University, Fairfax VA
5. 2007, Awarded “Outstanding Graduate Student Instructor.” George Mason University, Fairfax VA

TALKS

1. “Chronic Ethanol impairs fear extinction retrieval, intensifies fear memory generalization: a role for the infralimbic cortex” (July 2018) Presented at the International Behavioral Neuroscience Society annual meeting in Boca Raton, FL

2. "The Passage of Time, Alcohol Exposure, and Fear Generalization" (October 2017). Presented at the Neuroscience "Brown Bag" at Boston College, Chestnut Hill MA
3. "Fear memory generalization, extinction performance and alcohol exposure" (February 2017). Presented at the Developmental Exposure Alcohol Research Center (DEARC) colloquium series, University of Binghamton, Binghamton NY
4. "Towards an organization of memory in the brain: from local networks to distributed systems" (June 2016). Delivered the keynote address at the annual Rondout Valley High School Science Research Symposium
5. "Reward learning recruits multiple interacting circuits in the dorsal striatum" (October 2015). Presented at the Psychology Department Lecture Series. Vassar College. Poughkeepsie NY
6. "Differentiating the Contribution of the Dorsolateral and Dorsomedial Striatum to Reward Learning" (June 2015) Presented at the NIAAA Summer Seminar Series. National Institute on Alcohol Abuse and Alcoholism, Rockville, MD
7. "Differentiating the Contribution of the Lateral and Medial Dorsal Striatum to Reward Learning" (January 2015). Presented at the Winter Conference on Learning and Memory. Park City, Utah.
8. "Towards an organization of the memory trace: From local circuits to distributed systems." (December 2014) Presented at Vassar College, Department of Psychology research colloquium.
9. "Optogenetic control of dorsostriatal-mediated reward learning" (September 2014) Presented at the NIH Research Festival symposium entitled "Optogenetic Approaches to Investigating the Brain". National Institutes of Health, Bethesda, MD
10. "Optogenetic control of dorsostriatal-mediated reward learning" (April 2014) Presented at George Mason University Students in Neuroscience "Symposium on Neuroscience." George Mason University, Fairfax, VA.
11. "Towards an organization of the memory trace: From local circuits to distributed systems." (April 2014) Presented at the Cognitive and Behavioral Neuroscience Department "Brown Bag" Seminar Series, George Mason University, Fairfax VA.
12. "Towards an organization of the memory trace: From local circuits to distributed systems." (January 2014) Presented at The University at Albany, State University of New York Department of Psychology research colloquium.
13. "Fear memory updating reorganizes an existing trace in the rat dorsolateral amygdala" (May 2013) Presented at the Postdoctoral Fellows Association Seminar Series, Walter Reed National Military Medical Center, Bethesda MD
14. "The microstructure of Pavlovian fear conditioning in the lateral amygdala" (October 2012) Presented at the Cognitive and Behavioral Neuroscience Department Brown Bag Seminar Series, George Mason University, Fairfax VA
15. "Manganese-enhanced MRI for phenotyping brain-wide activity in a mouse model of fear learning and memory" (October 2012) Presented at the Society for Neuroscience Memory Systems Symposium, "Independence and Interaction of Multiple Memory Systems." New Orleans, LA

16. "Neuron Topography and Fear Memory Formation in the Lateral Amygdala" (March 2010) Presented at the Postdoctoral Fellows Association Seminar Series, Walter Reed National Military Medical Center, Bethesda, MD

TEACHING

UNDERGRADUATE

Vassar College, *Instructor*

Semester	Course	Title
Fall 2015	PSYC 105	Introduction to Psychology
Fall 2015	PSYC/NEUR 241	Principles of Physiological Psychology
Spring 2016	NEUR 201	Models and Systems in Neuroscience
Fall 2016	PSYC 105	Introduction to Psychology
Fall 2016	PSYC/NEUR 241	Principles of Physiological Psychology
Fall 2016	PSYC 397	Senior Empirical Thesis
Spring 2017	NEUR 201	Models and Systems in Neuroscience
Spring 2017	PSYC 398	Senior Empirical Thesis
Fall 2017	<i>Sabbatical</i>	
Spring 2018	NEUR 201	Models and Systems in Neuroscience
Spring 2018	PSYC 105	Introduction to Psychology
Fall 2018	NEUR 201	Models and Systems in Neuroscience
Fall 2018	PSYC 105	Introduction to Psychology

George Mason University, *Instructor*

Semester	Course	Title
Summer 2010	PSYC 372	Physiological Psychology
Spring 2010	PSYC 372	Physiological Psychology

George Mason University, *Graduate Student Instructor*

Semester	Course	Title
Summer 2008	PSYC 372	Physiological Psychology
Fall 2007	PSYC 375	Brain & Behavior I
Summer 2007	PSYC 376	Physiological Psychology
Spring 2007	PSYC 372	Brain & Behavior II
Fall 2006	PSYC 372	Physiological Psychology
Spring 2006	PSYC 372	Physiological Psychology
Fall 2005	PSYC 372	Physiological Psychology

George Mason University, *Invited lectures*

Semester	Course	Title
Fall 2006	PSYC 375	Neurobiology of attention
Fall 2013	NEUR 410	Neuroscience methods

GRADUATE

The Institute for Psychological Sciences, *Instructor*

Semester	Course	Title
Fall 2013	PSYC 822	Biological Basis of Behavior

Fall 2012	PSYC 822	Biological Basis of Behavior
Fall 2011	PSYC 822	Biological Basis of Behavior
Fall 2010	PSYC 822	Biological Basis of Behavior

Walter Reed National Military Medical Center, School of Medicine, *Invited Lecture*

Semester	Course	Title
Fall 2012	NS 0530	Animal Models of Learning and Memory

MENTORSHIP

Name	Current	Position
Meredith Ward	Harvard/Mass General	Research assistant
Shenandoah Wrobel	Dartmouth College	Engineering school
Ivan Soler	Pittsburgh University	Research assistant
Gabrielle Mintz	UC San Francisco	Research assistant
Julian Dishart	UC San Francisco	Research assistant
Abbi Hiller	Weil-Cornell Medical	Research assistant
Ziwen Wang	Columbia University	Research assistant
Gabby Pollack	National Institutes of Health	Research assistant
Savannah Kadigian	Harvard/Mass General	Research assistant
Siqi Fan	Yale University	PhD program, Neuroscience
Leah Weingast	Emory University	Research assistant
Anna Lipkin	UC San Francisco	PhD program, Neuroscience
Dan Ehlinger	University of Wisconsin- River Falls	Assistant Professor, Neuroscience
Gina Fernandez	St. Mary's College	Assistant Professor, Neuroscience
Helen French	Entrée Health, Inc	Senior Copy Editor
Eric Prager	John Wiley and Sons, Inc	Editor-in-Chief

EXECUTIVE EDITOR

The Journal of Neuroscience Research

REVIEW EDITOR

Frontiers in Behavioral Neuroscience

REVIEWER

Neuropharmacology, Frontiers in Behavioral Neuroscience, Frontiers in Integrative Neuroscience, Frontiers in Molecular Neuroscience, PLoS ONE, Brain Structure and Function, International Journal of Developmental Neuroscience, Physiology & Behavior, The Journal of Neuroscience Research, The Neurobiology of Learning and Memory, American Journal of Medical Genetics Part C: Seminars in Medical Genetics, Behavioural Brain Research, Brain Research

GRANT REVIEWER

Reviewed a grant submission for the "Fondation pour la Recherche Médicale" (FRM, www.frm.org), a French private foundation that supports excellence in medical research.

Reviewed a grant submission for a National Sciences and Engineering Grant Research Council of Canada (NSERC) Discovery Grant proposal.

Reviewed a grant for the Fédération pour la Recherche sur le Cerveau (FRC), a French private foundation that supports neuroscience research.

PRESS

“Mini-scope reveals workings of the brain” (2018) Vassar Stories. <https://stories.vassar.edu/2018/180817-mini-scope-reveals-workings-of-the-brain.html>

“The corticolimbic system in health: Implications for learning, memory and disease” (2017) Advanced Science News. <http://www.advancedsciencenews.com/corticolimbic-system-health-disease/>

“Drinking during adolescence can alter brain cell nerve growth” (2017) ScienceDaily. <https://www.sciencedaily.com/releases/2017/06/170614210919.htm>

“Psychologists explain why food memories can feel so powerful” (2017) The Huffington Post http://www.huffingtonpost.com/entry/power-of-food-memories_us_5908b1d7e4b02655f8413610

“Let There Be Light” (2014) NIH Intramural Blog <http://irp.nih.gov/blog/post/2014/11/let-there-be-light>

“Let’s Light Up the Brain” (2014) NIH Catalyst. <http://irp.nih.gov/catalyst/v22i5>

“Learning rewires the brain” (2014) Science News for Students. <https://student.societyforscience.org/article/learning-rewires-brain>

“Stress: The roots of resilience” (2012) Nature news feature. <http://www.nature.com/news/stress-the-roots-of-resilience-1.11570>

“Bethesda Scientists use NeuroLucida to Map Memories in the Brain.” (2012) MBF Biosciences. <http://www.mbfbioscience.com/blog/2011/03/bethesda-scientists-use-neuroLucida-to-map-memories-in-the-brain/>

PROFESSIONAL MEMBERSHIP

- | | |
|-----------------|---|
| 1. 2016-present | New York Academy of Sciences, member |
| 2. 2008-present | Sigma Xi full member |
| 3. 2004-present | Society for Neuroscience (SfN), member |
| 4. 2007-present | International Behavioural Neuroscience Society (IBNS), member |
| 5. 2006-2009 | Research Society on Alcoholism (RSA), student member |