

Rebecca D. Burwell, Ph.D.
Department of Cognitive, Linguistic, and Psychological Sciences
Curriculum Vitae 2018

Name and Position:

Rebecca D. Burwell, Ph.D.
Albert D. Mead Professor of Cognitive, Linguistic, and Psychological Sciences
Department of Cognitive, Linguistic, and Psychological Sciences
Department of Neuroscience (secondary)
<http://www.brown.edu/Research/BurwellLab/>

Education:

Ph.D., The University of North Carolina at Chapel Hill, 1992
Experimental and Biological Psychology Program
Thesis title: The Effects of Aging on Brain Dopamine Systems and Behavior
M.A., The University of North Carolina at Chapel Hill, 1989
Clinical Psychology Program
Thesis title: The Relationship Between Age-related Deficits in Spatial Learning
and Diurnal Rhythms
B.A., Southern Methodist University, 1974

Professional Appointments:

Endowed Chair: Albert D. Mead Professor of Cognitive, Linguistic, and Psychological sciences, 2017-present

Professor of Cognitive, Linguistic, and Psychological sciences (secondary appointment in Neuroscience), Brown University, 2011-present

Professor of Psychology (secondary appointment in Neuroscience), Brown University, 2006-present

Associate Professor of Neuroscience (secondary appointment), Brown University, 2003-2006

Associate Professor of Psychology, Brown University, 2002-2006

Assistant Professor of Psychology, Brown University, 1996-2002

Postdoctoral Fellow and Lecturer, Center for Behavioral Neuroscience, The State University of New York at Stony Brook, 1993-1996

Postdoctoral Research Associate, Laboratory for Neuronal Structure and Function, The Salk Institute for Biological Studies, 1992-1993

Completed Research:

Chapters in books

Gallagher, M., Nagahara, A., & Burwell, R. (1995). Cognition and hippocampal systems in

aging: Animal models. In J. L. McGaugh, N. Weinberger, & G. Lynch (Eds.), *Brain and Memory: Modulation and Mediation of Neuroplasticity* (0 ed., pp. 103-126). New York: Oxford University Press.

Burwell, R. D., Suzuki, W. A., Insausti, R., & Amaral, D. G. (1996). Some observations on the perirhinal and parahippocampal cortices in the rat, monkey, and human brains. In T. Ono (Ed.), *Perception, Memory, and Emotion: Frontier in Neuroscience*. New York: Elsevier.

Burwell, R. D., Bucci, D. J., Wiig, K. A., Saddoris, M. P., & Sanborn, M. R. (2002). Experimental lesions of the parahippocampal region in rats. In M. P. Witter & F. G. Wouterlood (Eds.), *The Parahippocampal Region, Organization and Role in Cognitive Functions*. London: Oxford University Press.

Burwell, R. D., Menno, M. P. (2002). Basic anatomy of the parahippocampal region in monkeys and rats. In M. P. Witter & F. G. Wouterlood (Eds.), *The Parahippocampal Region, Organization and Role in Cognitive Functions*. London: Oxford University Press.

Burwell, R. D. (2002). Perirhinal cortex and associated cortical areas. In Byrne, J.H., *Learning and Memory: Macmillan Psychology Reference Series*. 2nd Edition, Farmington Hills: Macmillan Psychology Reference Series.

Burwell, R. D., & Agster, K. L. (2008). Anatomy of the hippocampus and the declarative memory system. In H. E. Eichenbaum (Ed.), *Memory Systems* (Vol. 3, pp. 47-66) of J.H. Byrne (Ed.), *Learning and Memory: A Comprehensive Reference*. Oxford: Elsevier.

Burwell, R. D., & Agster, K. L. (2008). Anatomy of the hippocampus and the declarative memory system. In J. H. Byrne (Ed.), *Concise Learning and Memory: The Editor's Selection* (pp. 189-208). London: Academic Press.

Ho, J.W. & Burwell, R. D. (2014). Perirhinal and postrhinal functional inputs to the hippocampus. In Knierim, J.J. & Derdikman, D. (Ed.), *Space, Time & Memory in the Hippocampal Formation*. New York: Springer Publishing Company.

Scaplen, K.M., Agster, K. L., & Burwell, R. D. (2017). Anatomy of the hippocampus and the declarative memory system. In H. E. Eichenbaum (Ed.), *Systems and Neuroscience* (Vol. 3) of J.H. Byrne (Ed.), *Learning and Memory: A Comprehensive Reference*, 2nd Edition. Oxford: Elsevier.

Poeta, D.I. & Burwell, R.D. (2019). Parahippocampal Cortex. In J. Vonk (Ed.) & T.K. Shackelford (Ed.). *Encyclopedia of Animal Cognition and Behavior*. Springer International Publishing.

Refereed journal articles

Gallagher, M., & Burwell, R. D. (1989). Relationship of age-related decline across several behavioral domains. *Neurobiology of Aging*, 10, 691-708.

Gallagher, M., Burwell, R. D., Kodsi, M. H., McKinney, M., Southerland, S., Vella-Roundtree, L., & Lewis, M. H. (1990). Markers for biogenic amines in the aged rat brain: Relationship to decline in spatial learning ability. *Neurobiology of Aging*, 11, 506-514.

- Burwell, R. D., Whealin, J., & Gallagher, M. (1992). Effects of Aging on the Circadian Pattern of Water Intake in Rats. *Behavioral and Neural Biology*, 58, 196-203.
- Burwell, R. D., & Gallagher, M. (1993). A Longitudinal Study of Reaction Time Performance in Long-Evans Rats. *Neurobiology of Aging*, 14, 57-64.
- Duley, J. F., Wilkins, J. W., Hamby, S. L., Hopkins, D. G., Burwell, R. D., & Barry, N. S. (1993). Explicit scoring criteria for the Rey-Osterreith and the Taylor complex figures. *The Clinical Neuropsychologist*, 7(1), 29-38.
- Gallagher, M., Burwell, R., & Burchinal, M. (1993). Severity of spatial learning impairment in aging: Development of a learning index for performance in the Morris water maze. *Behavioral Neuroscience*, 107(4), 618-626.
- Whealin, J. M., Burwell, R. D., & Gallagher, M. (1993). The effects of aging on diurnal water intake and melatonin binding in the suprachiasmatic nucleus. *Neuroscience Letters*, 154, 149-152.
- Burwell, R. D., Lawler, C. P., & Gallagher, M. (1995). Mesostriatal dopamine markers in aged Long-Evans rats with sensorimotor impairment. *Neurobiology of Aging*, 16(2), 175-186.
- Burwell, R. D., Witter, M. P., & Amaral, D. G. (1995). The perirhinal and postrhinal cortices of the rat: A review of the neuroanatomical literature and comparison with findings from the monkey brain. *Hippocampus*, 5, 390-408.
- Chen, H.-C., & Burwell, R. D. (1996). An anterograde tract-tracing study of the perirhinal and postrhinal cortical projections to the thalamus in the rat brain. *J. Undergraduate Res.*, 3(1), 47-68.
- Rapp PR, Burwell RD, West MJ (1996) Individual differences in aging: implications for stereological studies of neuron loss. *Neurobiol Aging* 17:495-496; discussion 500.
- Burwell, R. D., & Amaral, D. G. (1998). The perirhinal and postrhinal cortices of the rat: Interconnectivity and connections with the entorhinal cortex. *Journal of Comparative Neurology*, 391(3), 293-321.
- Burwell, R. D., & Amaral, D. G. (1998). Cortical afferents of the perirhinal, postrhinal, and entorhinal cortices. *Journal of Comparative Neurology*, 398(2), 179-205.
- Burwell, R. D., Shapiro, M. S., O'Malley, M. T., & Eichenbaum, H. (1998). Positional firing properties of perirhinal cortex neurons. *NeuroReport*, 9, 3013-3018.
- Wiig, K. A., & Burwell, R. D. (1998). Memory impairment on a delayed-non-matching-to-position task following lesions of the perirhinal cortex in the rat. *Behavioral Neuroscience*, 112(4), 828-838.
- Burwell, R. D. (2000). The parahippocampal region: Corticocortical connectivity. *Annals of the New York Academy of Sciences*, 911, 25-42.
- Bucci, D. J., Phillips, R.G., & Burwell, R. D. Contributions of postrhinal and perirhinal cortex to contextual information processing. *Behavioral Neuroscience*, 25, 882-894.

- Burwell, R. D. (2001). The perirhinal and postrhinal cortices of the rat: Borders and cytoarchitecture. *J Comp Neurol*, 437(17-41).
- Bucci, D. J., Sadoris, M. P., & Burwell, R. D. (2002). Contextual fear discrimination is impaired by damage to postrhinal or perirhinal cortex. *Behavioral Neuroscience*, 116(3), 479–488.
- Rapp, P. R., Deroche, P. S., Mao, Y., & Burwell, R. D. (2002). Neuron number in the parahippocampal region is preserved in aged rats with spatial learning deficits. *Cereb Cortex*, 12(11) 1171-1179.
- Burwell, R.D. & Hafeman, D. (2003). Positional firing properties of postrhinal neurons in the rat. *Neuroscience* 119(2), 577-588.
- Burwell, R. D., Sadoris, M. P., Bucci, D. J., & Wiig, K.A. (2004). Corticohippocampal Contributions to Spatial and Contextual Learning, *Journal of Neuroscience*. 24:3826-36.
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- Burwell, R. D., Bucci, D. J., Sanborn, M. R., & Jutras, M. J. (2004). Postrhinal and perirhinal contributions to remote memory for context. *J Neurosci*, 24(49), 11023-11028.
- Long, M. A., Jutras, M. J., Connors, B. W., & Burwell, R. D. (2005). Electrical synapses coordinate activity in the suprachiasmatic nucleus. *Nat Neurosci*, 8(1), 61-66.
- Theroux, S., Pereira, M., Casten, K.S., Burwell, R.D., Yeung, K.C., Sedivy, J.M., and Klysik, J. (2007). Raf kinase inhibitory protein knockout mice: Expression in the brain and olfaction deficit. *Brain Research Bulletin*. 71(6):559-67.
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- Furtak, S.C., Cho, C.E., Kerr, K.M., Barredo, J.L., Alleyne, J.E., Patterson, Y.R. & Burwell, R.D. (2009). The Floor Projection Maze: A novel behavioral apparatus for presenting visual stimuli to rodents, *Journal of Neuroscience Methods*, 181(1):82-8. PMID: PMC2883467.
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- Beaudin, S.A., Singh, T., Agster, K.L., and Burwell, R.D. (2013). Borders and Comparative Cytoarchitecture of the Perirhinal and Postrhinal Cortices in an F1 Hybrid Mouse. *Cerebral cortex.* 23(2):460-76.
- Agster, K.L. and Burwell, R. D. (2013) Hippocampal afferents and efferents of the perirhinal, postrhinal, and entorhinal cortices, *Behavioural Brain Research.* Published online, 2013 Oct 1;254:50-64.
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- Scaplen K.M., Gulati A.A., Heimer-McGinn V.L., Burwell R.D. (2014) Objects and landmarks: Hippocampal place cells respond differently to manipulations of visual cues depending on size, perspective, and experience. *Hippocampus.* 2014 Nov; 24(11):1287-99. PMID: PMC5615844.
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Ho, J. W., Poeta, D. L., Jacobson, T. K., Zolnik, T. A., Neske, G. T., Connors, B. W., & Burwell, R. D. (2015). Bidirectional Modulation of Recognition Memory. *J Neurosci*, 35(39), 13323-13335. PMID: PMC4588607

Tomás Pereira, I., Agster, K.L., and Burwell, R. D. (2016). Subcortical connections of the perirhinal, postrhinal, and entorhinal cortices. I. Afferents. *Hippocampus*. 2016 Sep;26(9):1189-212. doi: 10.1002/hipo.22603. PMID: PMC5070464.

Agster, KL, Tomás Pereira, I., Sadoris, M.P., and Burwell, R. D. (2016). Subcortical connections of the perirhinal, postrhinal, and entorhinal cortices. II. Efferents. *Hippocampus*. 2016 Sep;26(9):1213-30. doi: 10.1002/hipo.22600. PMID: PMC5070461.

Yang, F-C, Jacobson T.K., Burwell R.D. (2017) Posterior parietal cells signal stimulus onset, spatial locations, and behavioral outcome during performance on a visuospatial attention task. *Hippocampus*. 2017 27(3):263-273. doi: 10.1002/hipo.22691. PMID: PMC5644026

Heimer-McGinn VR, Poeta DL, Aghi K, Udawatta M, & Burwell RD. (2017) Disconnection of the perirhinal and postrhinal cortices impairs recognition of objects in context but not contextual fear conditioning. *The Journal of Neuroscience*, 37(18):4819–4829. doi: 10.1523/JNEUROSCI.0254-17.2017. PMID: PMC5426571.

Scaplen KM, Ramesh RN, Nadvar N, Ahmed OJ, Burwell RD. (2017) Inactivation of the lateral entorhinal area increases the influence of visual cues on hippocampal place cell activity." *Frontiers in Systems Neuroscience* 11 (2017): 40. doi: 10.3389/fnsys.2017.00040. PMID: PMC5447019.

Hwang, E., Willis, B.S., Burwell, R.D. (2018) Prefrontal connections of the perirhinal and postrhinal cortices in the rat. *Behav. Brain Res.* 354:8-21. doi: 10.1016/j.bbr.2017.07.032. PMID: PMC6087504.

Bounds, H.A., Poeta, D.L. Klinge, P.M., Burwell, R.D. Paw-Print Analysis of Contrast-Enhanced Recordings (PrAnCER): A low-cost, open-access automated gait analysis system for assessing motor deficits, *Journal of Visual Experimentation*, in press.

Yang, F-C, Dokovna, L.B., Burwell R.D. Functional differentiation of dorsal and ventral posterior parietal cortex of the rat: Implications for controlled and stimulus driven attention, *Cerebral Cortex*, under revision.

Non-refereed journal articles

Rapp, P. R., Burwell, R. D., & West, M. J. (1996). Individual differences in aging: Implications for stereological studies of neuron loss. *Neurobiology of Aging*, 17, 495-496.

Burwell, R. D., & Eichenbaum, H. (1999). What's new in animal models of amnesia. *Behavioral and Brain Sciences*, 22, 446-448.

Burwell, R. D., & Furtak, S. C. (2008). Recognition memory: can you teach an old dogma new tricks? *Neuron*, 59(4), 523-525. PMID: PMC3109738.

Burwell RD. (2015). Editorial: The neural bases of cognition and behavior. *Behav. Neurosci.* 2015 Feb;129(1):1.

Baxter MG, Burwell RD. Promoting transparency and reproducibility in Behavioral Neuroscience: Publishing replications, registered reports, and null results. *Behav. Neurosci.* 2017 Aug;131(4):275-276.

Burwell RD and Templer VL. (2017). *Jamai vu* all over again. *Nature Neurosci.* 20(9):1194-1196. doi: 10.1038/nn.4625.

Book reviews

Burwell, R.D. (1996) Review of Kruger, L., Saporta, S., & Swanson, L. W. (1995). *The Quarterly Review of Biology*, 71(3), 440.

Abstracts and conference proceedings

Burwell, R.D. and Gallagher, M. (1988) The relationship of age-related deficits across several behavioral domains. *Society for Neuroscience Abstracts*, 14(1), 391.

Miller, P.R., Kodsi, M.H., Sutherland, S., Burwell, R.D., Lewis, M.H. and Gallagher, M. (1989) Biogenic amines in the aged rat brain: Relationship to behavior. *Society for Neuroscience Abstracts*, 15(1), 262.

Burwell, R.D. Thai, L., Stenvers, K. and Gallagher, M. (1990) Effects of aging on the mesostriatal dopamine system: A behavioral and neurobiological study. *Society for Neuroscience Abstracts*, 16(1), 840.

Burwell, R.D. Whealin, J. and Gallagher, M. (1991) Effects of aging on the mesostriatal dopamine system: Focus on the striatum. *Society for Neuroscience Abstracts*, 17(1), 368.

Wortman, I.A., Rice, D.C., Burwell, R.D., Lawler, C.P., Watts, V.J., Matthis, C.A., Lewis, M.H., and Mailman, R.B. (1991) Quantitative autoradiography of iodinated dopamine ligands: Potential pitfalls in the use of iodinated benzamides. *Society for Neuroscience Abstracts*, 17(1), 819.

Burwell, R.D. (1991) Aging effects on brain dopamine systems and behavior: Behavioral studies. *Proceedings: The 99th Annual Convention of the American Psychological Association*.

Burwell, R.D. (1992). Age-related slowing of reaction time correlates with lateralization of striatal patch area. *Fourth Annual Convention of the American Psychological Society*.

Burwell, R.D., Burchinal, M. and Gallagher, M. (1992) Severity of spatial learning impairment in aging assessed by the development of a learning index. *Society for Neuroscience Abstracts*, 18(2), 1481.

Burwell, R.D. and Amaral, D.G. (1993) A PHA-L study of projections from perirhinal cortex in the rat. *Society for Neuroscience Abstracts*, 19(1), 853.

Burwell, R.D., Caballero, M., Witter, M.P., and Amaral, D.G. (1994) A PHA-L study of perirhinal projections to the thalamus in the rat. *Society for Neuroscience Abstracts*, 20(2), 1415.

Burwell, R.D. and Amaral, D.G. (1995) The issue of parahippocampal cortex in the rat. *Society for Neuroscience Abstracts*, 21(2), 1494.

Burwell, R.D. and Amaral, D.G. (1996) Perirhinal and postrhinal connections with the rat entorhinal cortex, *Society for Neuroscience Abstracts*, 22(2), 503.

Burwell, R. D., & Eichenbaum, H. (1997). Perirhinal cortex neurons do not exhibit spatial firing patterns. *Society for Neuroscience Abstracts*, 23(1), 1599.

Wiig, K.A., M.F. Bear, and R.D. Burwell. (1997) Comparable memory impairment following electrolytic and neurotoxic lesions of the perirhinal cortex. *Soc. Neurosci. Abst.* 23: 1599.

Burwell, R. D., & Phillips, R. G. (1998). Lesions of the postrhinal cortex disrupt conditioning to the training context but not to an explicit auditory cue. *Soc. Neurosci. Absts.* 24(2), 1904.

Bucci, D. J., & Burwell, R. D. (1999). Pretraining and posttraining lesions of the rat perirhinal or postrhinal cortex produce deficits in contextual fear conditioning. *Society for Neuroscience Abstracts*, 25(1), 92.

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Rapp, P.R., Deroche, P., & Burwell, R.D. (2000). Preserved neuron number in the entorhinal, perirhinal and postrhinal cortices of behaviorally characterized aged rats. *Society for Neuroscience Abstracts*, 26(1).

Saddoris, M., Bucci, D. J., & Burwell, R. D. (2000). Effects of postrhinal/medial entorhinal cortex versus perirhinal/lateral entorhinal cortex lesions on contextual fear discrimination. *Society for Neuroscience Abstracts*, 26(1).

Burwell, R.D. & Hafeman, D. (2000). Positional firing properties of postrhinal neurons in the rat. *Society for Neuroscience Abstracts*, 26(1).

Bucci, D. J., & Burwell, R. D. (2001). Specific deficits in attentional orienting following lesions of the postrhinal cortex. *Soc. Neurosci. Abst.*, 27.

Burwell, R. D., Bucci, D. J., Wiig, K. A., Saddoris, M. P., & Bear, M. F. (2001). Neurotoxic lesions of the rat parahippocampal region do not impair performance in the Morris watermaze task. *Soc. Neurosci. Abst.*, 27.

Hu, S. J., Letourneau, A. R., & Burwell, R. D. (2001). Postrhinal contribution to hippocampal place fields. *Soc. Neurosci. Abst.*, 27.

Sanborn, M. R., Bucci, D. J., & Burwell, R. D. (2001). Postrhinal and perirhinal cortex are involved in the long-term processing of contextual information. *Soc. Neurosci. Abst.*, 27.

Beaudin, S.A. & Burwell, R. D. (2002) Comprehensive cytoarchitectonic analysis of the cortical regions surrounding the hippocampus in the B6129PF1/J hybrid mouse. *Soc. Neurosci. Abst.*, 28.

Hu, S. J., & Burwell, R. D. (2002) Differential effects of entorhinal cortex and subiculum inactivation on hippocampal place fields. *Soc. Neurosci. Abst.*, 28.

Pflaster, A.E. & Burwell, R. D. (2002) A new visuospatial pre-cueing task in rodents: similarities to the "Posner" task. *Soc. Neurosci. Abst.*, 28.

Burwell, R. D. & Davies E. J. (2003). The effects of perirhinal damage on a feature positive and feature negative discrimination task *Soc. Neurosci. Abst.*, 29.

Agster, K. M., & Burwell, R. D. (2004). Rats sustaining perirhinal, postrhinal, or posterior parietal lesions display unique patterns of deficits in an attentional set-shifting task. Society for Neuroscience Abstracts, 30.

Burwell, R. D., Lester-Coll, N.H. & Jutras, M.J. (2004). The effects of combined perirhinal and postrhinal damage on a serial feature positive and feature negative discrimination task. *Soc. Neurosci. Abst.*, 30.

Long, M. A., Jutras, M. J., Burwell, R. D & Connors, B. W. (2004). Electrical synapses coordinate activity in the suprachiasmatic nucleus *Soc. Neurosci. Abst.*, 30.

Agster, K.L., Brown, S.F. , and Burwell, R.D. (2005). Subcortical efferents of the entorhinal, perirhinal, and postrhinal cortices of the rat. Program No. 182.13. 2005 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience.

Brown, S.F., Agster, K.L., and Burwell, R.D. (2005). Subcortical afferents of the perirhinal, postrhinal, and entorhinal cortices of the rat. Program No. 182.14. 2005 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience.

Beck, R.D. and Burwell, R.D. (2005). Connectivity between postrhinal and perirhinal cortices: important in contextual memory? Program No. 647.15. 2005 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience.

Agster, K.L., and Burwell, R.D. (2006). Contributions of perirhinal and postrhinal cortex to attentional processing. 2006 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience.

Burwell, R.D., and Agster, K.L (2006). Hippocampal connections of the entorhinal, perirhinal, and postrhinal cortices of the rat. 2006 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience.

Barredo, J. L. Badre, D. , and R. D. Burwell. A novel task-shifting paradigm for rats to be used for the comparative analysis of executive function in rodents and humans. Program No. 90.18. 2008 Neuroscience Meeting Planner. Washington, DC: Society for Neuroscience, 2008.

Kerr, K. M. and R. D. Burwell. The role of the postrhinal cortex in navigation: Comparisons with the dorsal hippocampus and the medial entorhinal area. Program No. 90.17. 2008 Neuroscience Meeting Planner. Washington, DC: Society for Neuroscience, 2008.

Furtak, S. C. and R. D. Burwell. Neuronal activity in postrhinal cortex during performance on

a novel visual discrimination task. Program No. 90.16. 2008 Neuroscience Meeting Planner. Washington, DC: Society for Neuroscience, 2008.

Kerr, K. M. and R. D. Burwell. Single unit recording in rodent hippocampus and cortex using TBSI wireless technology. Chicago, IL: Society for Neuroscience Satellite Meeting, 2009.

Wang, J., Zhang, J., Borton, D., Laiwalla, F., Van Wagenen, R., Nurmikko, A.V., Burwell, R.D., Connors, B.W. Integrated device for focal optical stimulation and spatiotemporal electrical recording of neural activity for in vivo application. Program No. 485.8. 2009 Neuroscience Meeting Planner. Chicago, IL: Society for Neuroscience, 2009.

Furtak, S. C. and R. D. Burwell. Neural correlates of objects and places in rodent postrhinal cortex during a visual object discrimination task. Program No. 477.14. 2009 Neuroscience Meeting Planner. Chicago, IL: Society for Neuroscience, 2009.

Furtak, S. C. and R. D. Burwell. Neural correlates of objects and places in rodent postrhinal cortex during a visual object discrimination task. Burlington, VT: Pavlovian Society Meeting, 2009.

Wang, J., Borton, D.A., Burwell, R.D., & Nurmikko, A.V. An optoelectronic hybrid device for in vivo stimulation and recording of optogenetically targeted neural microcircuits in freely moving rodents. Program No. 106.14. 2010 Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience, 2010.

Furtak, S.C. & Burwell, R.D. Parahippocampal contributions to a visual biconditional discrimination task. Program No. 806.26. 2010 Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience, 2010.

Kerr, K.M. & Burwell, R.D. Control of dorsal hippocampal place cells by bearing cues placed on the wall of an exploratory maze vs bearing cues placed on the floor. Program No. 806.27. 2010 Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience, 2010.

Wang, J., Borton, D. A., Zhang, J., Burwell, R. D., & Nurmikko, A. V. (2010, August). A neurophotonic device for stimulation and recording of neural microcircuits. In Engineering in Medicine and Biology Society (EMBC), 2010 Annual International Conference of the IEEE (pp. 2935-2938). IEEE. 2010.

A. S. Andrade, K. Bath, R. Burwell, S. Denome, D. Lipscombe. Exon-replacement in the mouse *Cacna1b* gene reveals CNS involvement of N-type calcium channel splicing. Program No. 43.11. 2011 Neuroscience Meeting Planner. Washington, DC: Society for Neuroscience, 2011.

Burwell, R.D., Ahmed, O.J., & Furtak, S.C. Theta modulation in postrhinal cortex during performance on a visual discrimination task. Program No. 407.01. 2011 Neuroscience Meeting Planner. Washington, DC: Society for Neuroscience, 2011.

Ho, J.W., Neske, G.T. & Burwell, R.D. A novel Go/NoGo task to assess neuronal correlates of visual recognition, short term memory and decision making in the rat. Program No. 407.02. 2011 Neuroscience Meeting Planner. Washington, DC: Society for Neuroscience, 2011.

Yang, F.-C. & Burwell, R.D. Neuronal correlates in the posterior parietal cortex during performance on a visuospatial attention task. Program No. 407.03. 2011 Neuroscience Meeting Planner. Washington, DC: Society for Neuroscience, 2011.

Kent, B.W. & Burwell, R.D. Single-unit recording in the postrhinal cortex during an object-in-context discrimination task. Program No. 407.04. 2011 Neuroscience Meeting Planner. Washington, DC: Society for Neuroscience, 2011.

Burwell, R.D., Ho, J.W., Aldern, C.P., & Liu, A.R. Program No. 104.23. 2012. Neuronal activity in perirhinal and prefrontal cortices during visual discrimination in a Go/No-Go task. Neuroscience Meeting Planner. New Orleans, LA: Society for Neuroscience, 2012.

Ho, J. W., Poeta, D. L., Zolnik, D. L., Jacobson, T. K., Neske, G. T., Connors, B. W., Burwell, R. D. Presentation Title: Control of novelty exploration in rats by optogenetic modulation of perirhinal cortex. Program No. 104.24. 2012 Neuroscience Meeting Planner. New Orleans, LA: Society for Neuroscience, 2012.

Yang, F.-C., Jacobson, T. & Burwell, R.D. Program No. 104.25. 2012. Neuronal correlates in the posterior parietal cortex during performance on a visuospatial attention task. Neuroscience Meeting Planner. New Orleans, LA: Society for Neuroscience, 2012.

Kent, B.W. & Burwell, R.D. Program No. 104.26. 2012. Single units in the postrhinal cortex signal changes in context. Neuroscience Meeting Planner. New Orleans, LA: Society for Neuroscience, 2012.

Singh, T., Patrick, S.L., Sugden, A.U., Burwell, R.D. & Connors, B.W. Program No. 104.27. 2012. An exceptionally sparse network of parvalbumin-expressing inhibitory interneurons in the ventral postrhinal cortex. Neuroscience Meeting Planner. New Orleans, LA: Society for Neuroscience, 2012.

Kerr, K.M., Ramesh, R.N. & Burwell, R.D. Program No. 104.28. 2012. Inactivation of the lateral entorhinal cortex alters hippocampal processing of two dimensional objects. Neuroscience Meeting Planner. New Orleans, LA: Society for Neuroscience, 2012.

Sugden, A. U., Patrick, S. L., Anand, A., Burwell, R. D., Connors, B. W., Ventral postrhinal cortex: A strong inhibitory network in the absence of parvalbumin-expressing interneurons. 235.06. 2013 Neuroscience Meeting Planner. San Diego, CA, Society for Neuroscience, 2013.

Yang, F.-C., Jacobson, T. K., Burwell, R. D., Local field potential oscillations in rat posterior parietal cortex during performance on a visuospatial attention task. 669.1. 2013 Neuroscience Meeting Planner. San Diego, CA, Society for Neuroscience, 2013.

Burwell, R. D., J Jacobson, T. K., Poeta, D. L., Tomas Pereira, I., Yang, F.-C., Kent, B. W., Brain circuitry underlying the representation of context. 661.15. 2013 Neuroscience Meeting Planner. San Diego, CA, Society for Neuroscience, 2013.

Kent, B. W., Jacobson, T. K., Burwell, R. D. Local field potentials in the postrhinal cortex. 669.12. 2013 Neuroscience Meeting Planner. San Diego, CA, Society for Neuroscience, 2013.

Jacobson, T. K., Burwell, R. D. Optogenetic modulation of the postrhinal cortex during performance on a visuospatial attention task. 176.04 2014 Neuroscience Meeting Planner. Washington, DC, Society for Neuroscience, 2014.

Heimer-McGinn, V., Poeta, D.L. Burwell, R. D. Perirhinal contributions to postrhinal representations of context. 176.06 2014 Neuroscience Meeting Planner. Washington, DC, Society for Neuroscience, 2014.

Yang, F.-C., Jacobson, T.K., Burwell, R.D. Neuronal correlates in rat posterior parietal cortex and lateral posterior thalamic nucleus during performance on a visuospatial attention task. 176.05 2014 Neuroscience Meeting Planner. Washington, DC, Society for Neuroscience, 2014.

Tomas Pereira, I., Burwell, R.D. Neuronal activity in the perirhinal and postrhinal cortex during performance on a contextual spontaneous object recognition task. 176.07 2014 Neuroscience Meeting Planner. Washington, DC, Society for Neuroscience, 2014.

Sugden, A.U., Patrick, S.L., Burwell, R.D., Connors, B.W. Robust inhibition and gamma oscillations in a cortical area that lacks parvalbumin-expressing inhibitory interneurons. 215.01 2014 Neuroscience Meeting Planner. Washington, DC, Society for Neuroscience, 2014.

Yang, F. C., Burwell, R. D. Neuronal correlates in rat posterior parietal cortex and the lateral posterior thalamic nucleus during performance on a visuospatial attention task. 724.14 2015 Neuroscience Meeting Planner. Chicago, IL, Society for Neuroscience, 2015.

Heimer-McGinn, V.R., Poeta, D.L., Burwell R.D. Disconnection of the perirhinal and postrhinal cortices impairs recognition of objects-in-context. 724.15 2015 Neuroscience Meeting Planner. Chicago, IL, Society for Neuroscience, 2015.

Hwang, E., Willis, B.S., Burwell, R.D. Prefrontal connections of the perirhinal and postrhinal cortices in the rat. 724.13 2015 Neuroscience Meeting Planner. Chicago, IL, Society for Neuroscience, 2015.

Jacobson, T. K., Phillips, J.R., Burwell, R. D. Contextual dependency of conditioning and extinction in approach and avoidance behaviors. 724.16 2015 Neuroscience Meeting Planner. Chicago, IL, Society for Neuroscience, 2015.

Yang, F. C., Burwell, R. D. Neuronal correlates in rat posterior parietal cortex and the lateral posterior thalamic nucleus during performance on a visuospatial attention task. 1P329 JNS Meeting Planner, Kobe, Japan, The 38th Neuroscience Secretariat, July 28, 2015.

Jacobson, T.K., Phillips, J.R., Burwell, R.D. Acquisition and extinction of avoidance behaviors: The role of context. Program No. 75.23. Neuroscience Meeting Planner. San Diego, CA, Society for Neuroscience, 2016.

Heimer-McGinn, V.R., Kent, B.W., Burwell, R.D. Representations of context in the postrhinal cortex. Program No. 84.03. Neuroscience Meeting Planner. San Diego, CA, Society for Neuroscience, 2016.

Estela, V.J., Burwell, R.D. Emergence of object-location conjunctive coding in the postrhinal cortex and hippocampus. Program No. 84.04. Neuroscience Meeting Planner. San Diego, CA, Society for Neuroscience, 2016.

Yang, F.-C., Burwell, R.D., Inactivation of the lateral posterior thalamic nucleus on neuronal correlates in rat posterior parietal cortex during performance on a visuospatial attention task. Program No. 84.05. Neuroscience Meeting Planner. San Diego, CA, Society for Neuroscience, 2016.

Hwang, E., Yang, F.-C., Burwell, R.D., The role of the rodent retrosplenial cortex in context-guided behavior. Program No. 84.06. Neuroscience Meeting Planner. San Diego, CA, Society for Neuroscience, 2016.

Poeta, D.L., Bounds, H.A., Klinge, P.M., Burwell, R.D. Cognitive deficits in a rodent model of normal pressure hydrocephalus. Program No. 601.12. Neuroscience Meeting Planner. San Diego, CA, Society for Neuroscience, 2016.

Estela, V.J., Farovik, A., Burwell, R.D. Object-location conjunctive coding in the parahippocampal network. Program No. 435.03. Neuroscience Meeting Planner. Washington, DC, Society for Neuroscience, 2017.

Hwang, E., Yang, F.-C., Jacobson, T.K., Burwell, R.D., Neuronal activity in the retrosplenial cortex of rats performing a visuospatial attention task. Program No. 425.02. Neuroscience Meeting Planner. Washington DC, Society for Neuroscience, 2017.

Poeta, D.L., Bounds, H.A., Klinge, P.M., Burwell, R.D. Age-related changes in cognition in an animal model of hydrocephalus. Program No. 667.1. Neuroscience Meeting Planner. Washington DC, Society for Neuroscience, 2017.

Invited addresses

Neuroanatomy of the Hippocampal System and Related Cortical Regions. Invited address at Johns Hopkins University Department of Psychology, July 1997.

Interactions Between Memory and Attention. Invited to organize symposium for the Winter Conference on Learning and Memory, Park City, UT, January 13, 1998.

Functions of Parallel Pathways in the Hippocampal System. Spring Hippocampal Meeting, Grand Cayman, April 24, 1998.

Information Processing in Parahippocampal Cortical Regions. Washington State University Psychology Department, Pullman, WA, May 1, 1998.

The Organization of Entorhinal, Perirhinal, and Parahippocampal Cortex in Rats, Monkeys, and Humans. Tenth Annual Convention of the American Psychological Society, Washington, D.C., May 23, 1998.

Parallel Corticohippocampal Pathways in the Rat. Mount Sinai School of Medicine, Neurobiology of Aging Laboratories, New York, NY, July 23, 1998.

Memory-related Brain Regions in the Mouse. Cold Spring Harbor Course in Mouse Behavior, Cold Spring Harbor, New York, NY, December 8, 1998.

Connectivity within the Parahippocampal Region, A New York Academy of Sciences Conference on The Parahippocampal Region: Basic Science and Clinical Implications. Baltimore, MD, September 23-26, 1999.

Hippocampus Club Monthly Colloquium. *Topographic Patterns in the Intrinsic Pathways of the Hippocampus*, Boston University, November 16, 1999.

Perirhinal and Postrhinal Contributions to Contextual Learning, University of Connecticut at Storrs, March 16, 2000.

Places and Spaces: Cortical Contributions to Memory. Brown University, The Michael S. Goodman 1974 Memorial Lectures, February 20, 2002.

Places and Spaces: Cortical Contributions to Memory. UMASS-Boston, Biology Department Seminar Series. March 1, 2002.

Parahippocampal Contributions to Memory, Rutgers University, Neuroscience Seminar Series, March 4, 2002.

Parahippocampal Regions: Bridging Memory and Attention. Norwegian University of Science and Technology, Trondheim, Norway, Department of Neuroscience, June 2, 2003.

Corticohippocampal Structure and Function. University of Oslo, Norway, Center for Molecular Biology & Neuroscience and the Department of Anatomy, June 4, 2003.

Rodent models of learning and memory: Dissociating cortical and hippocampal function, Mayo Clinic, Alzheimer's Disease Research Colloquium, Jacksonville, FL, September 19, 2003.

Corticohippocampal contributions to Spatial and Contextual Learning. Brown University NSGP Proseminar. April 12, 2004.

Animal models of Learning and Memory, Duke University Medical School SIGN (Student Interest Group In Neuroscience), Durham, NC, May 10, 2004.

Configural And Contextual Learning in the Parahippocampal Region, Yale University Behavioral Neuroscience Seminar Series, October 12, 2004.

Perirhinal Contributions to Contextual and Configural Learning, Winter Conference on the Neurobiology of Learning and Memory, Park City Utah, January 7, 2005.

Perirhinal Contributions to Contextual and Configural Learning, Winter Conference on the Neural Plasticity, Guadeloupe, French Antilles February 19-26, 2005.

Functional Neuroanatomy of the Parahippocampal Region, Arizona University, Cognitive and Neural Systems Program, March 10, 2005.

Configural and Contextual Learning in the Parahippocampal Region, Johns Hopkins

University Psychology Department Seminar Series, April 13, 2005.

Parahippocampal Contributions to Attention, John B. Pierce Laboratory and the Yale School of Medicine, September 13, 2005.

What Does the Parahippocampal Region Do? Laboratoire NAMC CNRS, Université Paris Sud, Orsay, France, October 13, 2005.

Functional Neuroanatomy of the Hippocampal System in the Rat. Center for Memory and Brain Speaker Series, Boston University Center for Learning and Memory, December 5, 2005.

Corticohippocampal Circuits: Structure and Function. Neuroscience Seminar Series, Princeton University. March 23, 2006.

The Organization of the Hippocampal Connections with the Perirhinal, Postrhinal, and Entorhinal Cortices of the Rat. Workshop on the Interactions between the Hippocampus and other Medial Temporal Lobe Structures, University College London, May 10-12, 2006.

Organization of the Hippocampal Output to the Parahippocampal cortices. Federation of European Neuroscience Societies, Forum 2006 Symposium: The parahippocampal cortex as an interface between hippocampus and neocortex. Vienna, Austria, July 10, 2006.

Dual cortical systems bring information to the dentate gyrus (hippocampus) forming the basis of the medial and lateral perforant paths, Workshop on Learning and Memory: Information Flow into Hippocampal Memory Stores, Marine Biology Laboratory, Woods Hole, August 3-4, 2006

Co-organized the Winter Conference on the Neurobiology of Learning and Memory, 2007. Park City, Utah, January 4-7, 2007. <http://www.psych.utah.edu/wintconf/>

Context: What is it? Where is it? And how is it represented in the brain? Co-organized session in the Winter Conference on the Neurobiology of Learning and Memory, 2007. Park City, Utah, January 4-7, 2007.

The Neural Bases of Memory and Attention, Tougaloo College, Presentation to undergraduates interested in biomedical research, November 16, 2007.

Visuospatial Information Processing in the Rat, Psychology Colloquium Series, Brown University, December 5, 2007.

Visual discrimination learning in rats: Parsing objects, scenes, and contexts, Neuroscience In House Seminar Series, Brown University, January 28, 2008.

The Role of the Hippocampal System in Perception, Attention, and Memory, NSGP Recruitment Weekend, by invitation of the graduate students, February, 2008.

Visual Information Processing in the Parahippocampal Region, University of Arizona, Cognitive and Neural Systems Program, May 18, 2008.

Video games for rats: A new method for studying visuospatial information processing in

rodents, University of Cambridge, Behavioral Neuroscience Seminars, June 2, 2008.

Visual Information Processing in the Parahippocampal Region, NSGP Retreat, by invitation of the graduate students, August 26, 2008.

Understanding visual information processing in the parahippocampal region, Boston University, Center for Memory and Brain, December 12, 2008.

Attention and Memory in the Hippocampal System, Galenea Corporation, Cambridge, MA, January 19, 2009.

Attention: the stuff that memory is made of, Neuroscience In House Seminar Series, Brown University, February 3, 2009.

Visual and spatial information processing in the parahippocampal region, NSGP Recruitment Weekend, by invitation of the graduate students, February 27, 2009.

Objects, Landmarks, and the Postrhinal Cortex, University of Arizona, Evelyn F. McKnight Brain Institute University of Arizona, April 17, 2009.

Video games for rats: Understanding information processing in the parahippocampal region, Brown University CLS Seminar Series, November 16, 2009.

Two-Choice Discrimination in rats: Or, rats are smarter than you think, Neuroscience In House Seminar Series, Brown University, February 23, 2010.

Using the Floor Projection Maze: CinePlex Video Capture, Position Tracking, and Behavioral Analysis, Plexon Technical Workshop and Training, March 23-25, 2010.

In Vivo Optogenetics and Visuospatial Attention, DARPA REPAIR Program Kick-Off Meeting, New Orleans, LA, April 25-27, 2010

What does the retrosplenial cortex do? Invited commentator, Boston University, Center for Memory and Brain, December 8, 2010.

"Optorodent" Research at Brown, DARPA REPAIR Meeting, Miami, FL, March 31-April 1, 2011.

Optogenetics and Behavior: Studies in rats DARPA NEST Meeting, Washington, DC, November 16-17, 2011.

Co-organized the Dave Olton Data Blitz Session at the Winter Conference on the Neurobiology of Learning and Memory, 2012. Park City, Utah, January 4-7, 2012.

Integration of spatial and non-spatial information in the parahippocampal region, Mt. Sinai School of Medicine, New York, NY, March 13, 2012.

Optogenetic Modulation of Spontaneous Exploration of Novelty, Functional Architecture of Memory Conference, Ruhr University, Bochum, GER, May 23-25, 2012.

What does the Parahippocampal Cortex Do? Center for Memory and Brain, Boston University, September 10, 2012.

Bidirectional Modulation of Recognition Memory. Department of Psychology, Dartmouth University, October 23, 2012.

Explorations in the Neural Bases of Memory. Keynote speaker, Scholarship Sewanee Undergraduate Research Day, Sewanee: The University of the South, April 26, 2013.

The Hippocampus Differentiates between Landmarks and Objects. Spring Hippocampal Research Conference Taormina Sicily Italy 2013. Taormina, Sicily, 9-14 June, 2013.

Object and Context Representations in Parahippocampal structures, 2nd Functional Architecture of Memory Conference, Ruhr University, Bochum, GER, May 21-23, 2014.

Optogenetic Modulation of Recognition Memory, American Psychological Association 2014 Convention, Aug. 7-10, 2014 in Washington, D.C.

Explorations in the Neural Bases of Memory. Keynote speaker, 4th Annual Women in Learning Luncheon and the APA convention. Washington, DC, August 8, 2014.

Bidirectional Modulation of Recognition Memory. Behavioral Neuroscience Seminar Series, University of Delaware, October 13, 2014.

Perirhinal-postrhinal Interactions in the Representation of Context. Spring Hippocampal Research Conference Taormina Sicily Italy 2015. Taormina, Sicily, 7-11 June, 2015.

Conjunctive coding in the postrhinal cortex. Memory Disorders Research Society Meeting, Cambridge University, 8-11 Sept, 2015.

An animal model to understand and treat normal pressure hydrocephalus, BIBS Bench to Bedside Seminar on Disorders of the Cerebrospinal Fluid, April 10, 2016.

Context and the extinction of fear associations, BIBS Bench to Bedside Seminar on Obsessive Compulsive Disorder (with Dr. Steven Rasmussen), April 28, 2016.

Cognition in CSF Disorders. Chiari & Syringomyelia Foundation Think Tank Meeting, Chicago, IL, April 30, 2016.

Perirhinal and postrhinal interactions in the representation of context, 3rd Functional Architecture of Memory Conference, Leibniz Institute for Neurobiology, Magdeburg, GER, May 25-27, 2016.

A rodent model of normal pressure hydrocephalus, private meeting with donor prior to the Symposium on Disorders of the Cerebrospinal Fluid, Rhode Island Hospital, June 24, 2016.

Brain oscillations and the assessment of cognitive function, Symposium on Disorders of the Cerebrospinal Fluid, Rhode Island Hospital, June 25, 2016.

Circuit analysis of parahippocampal function. NYU Conference on Frontiers in the Science of Memory. Florence, Italy, June 27-30, 2016.

Circuit analysis of posterior parietal function. Krasnow Institute Seminar Series. George

Mason University. Fairfax, VA, November 21, 2016.

Co-organized the 41st Winter Conference on the Neurobiology of Learning and Memory, 2016. Park City, Utah, January 5-8, 2017.

Organized the David Olton Data Blitz Session at the 41st Winter Conference on the Neurobiology of Learning and Memory, 2016. Park City, Utah, January 5, 2017.

Investigating the Neural Bases of Memory, Keynote speaker for the annual SfN Chapter Conference in at the University of Florida. Invited by graduate students, March 17, 2017

Invited panelist for a professional development session open to scientists at all career stages of their careers. Annual SfN Chapter Conference in at the University of Florida. Invited by graduate students, March 17, 2017

Study in cognition in a diseased animal model”, 2nd Annual CSF Disorders Symposium at the Warren Alpert Medical School of Brown University on “Chiari and Cognition”. June, 2017.

Investigating the Neural Correlates of Memory in Behaving Animals, Warren Alpert Medical School of Brown University, Department of Neurology Grand Rounds, Sept. 20, 2017.

Context and Memory. Session on Tribute to Howard Eichenbaum. Memory Disorders Research Society Meeting, Northwestern University, Sept 15, 2017. *Declined.*

Objects and locations: The neural circuitry of spatial context, a symposium that will recognize and honor the scientific contributions of the late Dr. Howard Eichenbaum, Boston University, March 23, 2018.

Objects and locations: The neural circuitry of spatial context. West Virginia University, Neuroscience Institute, Morgantown, WV, April 4, 2018.

Perirhinal and postrhinal interactions and representations of context, symposium entitled “Rethinking content-based parcellation of the medial temporal lobe.” 2018 International Conference on Learning and Memory in April 2018, UC Irvine. (unable to attend for personal reasons, so postdoc delivered talk)

Objects, Contexts, and the Medial Temporal Lobe, Pavlovian Society annual meeting, The University of Iowa, Iowa City, October 4-6, 2018.

The neural bases of spatial context: Beyond the hippocampus. Brown NSGP-GPP Graduate Program Retreat, MBL, Woods Hole, MA. Invited by graduate students. October 17, 2018.

The neural bases of spatial context: Beyond the hippocampus. Leaton Lecture in Behavioral Neuroscience at Dartmouth College for Academic Year 2018-19.

“Perirhinal and postrhinal interactions and representations of context” as a part of in symposium entitled *“Rethinking content-based parcellation of the medial temporal lobe.”* Winter Conference On Neuroplasticity, February 9-16, 2019 – Moorea, French Polynesia

Professional memberships

American Psychological Association, since 1988, elected Fellow in 2013
 American Association for the Advancement of Science, since 1997, elected Fellow in 2015
 Association for Psychological Science, since 1988, elected Fellow in 2013
 Sigma Xi, The Scientific Research Society, since 1996
 Society for Neuroscience, since 1988
 Brown Institute for Brain Sciences, since 1998
 Brown Center for Vision Research, since 2012
 Women in Learning, since 2014
 Memory Disorders Research Society, elected 2015

Research Grants:

NIMH 1R01MH108729-01 Burwell (PI) 12/15/2015-12/14/2020
 Circuit analysis of corticohippocampal interactions in memory
 The goal of this grant is to understand how MTL structures interact to represent and use object and context information in the service of cognition and behavior. Multisite electrophysiology and optogenetic manipulation in behaving rodents will be used to examine how the PER, POR and HC interact to represent contexts and objects, laying the ground work for understanding how context is represented in the brain and how such representations are used to guide cognition and behavior.

NSF IOS-1656488 Burwell (PI) 05/01/2017-4/30/2021
 Circuit analysis of recognition memory
 We recently published evidence for a new function for temporal coding such that the specific frequency of synchronous neuronal activity in the perirhinal cortex transmits specific information about the novelty and familiarity of individual items. The implication is that these signals are used to guide appropriate exploratory behaviors. The goal of this grant is to elucidate the circuits and mechanisms underlying temporal coding in the perirhinal cortex.

P20GM103430 Burwell (mentor, Co-PI) 05/01/2017-4/30/2019
 RI-INBRE Program Collaborative Proposal.
 Functional differentiation of the posterior parietal cortex
 Co-PIs: R.D. Burwell and V.L. Templer (Providence College).
 Recent evidence suggests the primate dorsal posterior parietal cortex (PPC) is involved in top-down attention whereas, the ventral/caudal PPC is involved in bottom-up attention. The primate and rat PPC are likely largely conserved across species and recent work suggests this extends to functional differentiation. The goal of this grant is to further understand functional differentiation in the PPC using a rodent model of the primate brain.

Brown Institute for Brain Science Burwell (Co-PI) 07/01/2015-6/30/2020
 Disorders of the cerebrospinal fluid
 Cerebrospinal fluid (CSF) disorders, such as normal pressure hydrocephalus (NPH), impact memory and other cognitive processes. Evidence suggests that the hippocampus and parahippocampal region are impacted in this disorder. In collaboration with Dr. Petra Klinge, we have developed the kaolin model of NPH. Our goal is to use the model to understand and treat associated cognitive deficits associated with NPH. Co-PIs: Petra Klinge, Christopher Moore, and Maria Lehtinen.

Brown Institute for Brain Science Burwell (Co-PI) 03/01/2018-02/28/2018
 NPNI New Frontiers Pilot Grant

Learning not to avoid: a translational approach with implications for anxiety disorders.

This proposal seeks to bridge the gap between psychiatry and neuroscience to investigate whether prefrontal suppression during extinction of avoidance-based behaviors can enhance generalization of such extinction to novel contexts. The goal is to develop new approaches for understanding and treating pathological behavior in anxiety- and fear-based disorders, including obsessive-compulsive disorder, posttraumatic stress disorder. Co-PI: Mascha van't Wout-Frank

Completed grants

NIMH BSTART Award (R03MH057268): The Contribution of the Perirhinal Cortex to Configural Learning, 1997-98, PI: Burwell.

NSF Career Award (IBN 9875792): Cognitive Functions of the Postrhinal Cortex (02/98-02/06), PI: Burwell.

NIMH (5R01MH060284), Corticohippocampal Systems and Function in the Mouse (05/00-04/07), PI: Burwell.

NSF Award (IOS 0522220) Cognitive Functions of the Postrhinal Cortex, 2005-2010.

DARPA REPAIR Phase I: Brain Reorganization and Plasticity to Accelerate Injury Recovery (N66001-10-C-2010): Multi-scale and Multi-modal Models Enabled by Next Generation Neurotechnology, 04/2010-03/2012, Stanford PI: Krishna Shenoy, Brown PI: Arto Nurmikko, Co-PI: Burwell.

NSF EFRI Award (EFRI 0937848) Dynamic Sensing and Actuating of Sensory and Motor Neural Microcircuits, 2009-2013 (NCE until 09/2014), PI: Arto Nurmikko, Co-PI: Burwell.

DARPA REPAIR Phase II: Brain Reorganization and Plasticity to Accelerate Injury Recovery (N66001-10-C-2010): Multi-scale and Multi-modal Models Enabled by Next Generation Neurotechnology, 09/2012-08/2014, no cost extension until 03/2015, PI: Krishna Shenoy (Stanford University), Brown Subcontract PI: Arto Nurmikko, Brown Subcontract Co-PI: Burwell.

NSF Award (IOS 1146334) Cognitive Functions of the Postrhinal Cortex, 2012-2017, PI: Burwell.

Service:

Department

Interdepartmental Advisory Committee, 2000-2001

Interdepartmental Curriculum Committee, 2000-present

Faculty search committee, 2001-2002

Affirmative Action Representative, two faculty search committees 2002-2003

Honors Program committee, 1997-2000

Colloquium committee, 2000-2001

Whalen Award Committee, 1997-2001

Library Representative, 2000-2007

Computer committee, 1999- 2002
 Ad hoc committee to examine the merits of joint Psychiatry/Psychology appointments, 2003-2004.
 NSGP Journal Club sponsor, 2001-2003
 Psychology Director of Graduate Studies, January 2004-2005, 2006-2008
 NSGP Admissions Committee for 2007 Admissions
 Cognitive Neuroscience Search Committee, 2006-2007
 Human Neuroscience Search Committee, 2006-2007
 Organized Matlab courses for Neuroscience, CLS, and Psychology students, January 22-23, 2007.
 Human Memory Search Committee, 2007-2008
 CLiPS Graduate Education Committee, 2008
 Human Memory Search Committee, 2008-2009
 Neuroscience Graduate Program Seminar (NSGP) Seminar Series Committee, 2001-present
 CLiPS Governance Committee, 2009
 Promotion committee, Academic year 2009-2010
 Promotion committee, Chair, Academic year 2010-2011
 Graduate Diversity Recruitment Coordinator for CLPS and NSGP, 2009-2012.
 CLPS Strategic Planning Committee, 2011-present
 Social Psychology Search Committee, 2014-2015, affirmative action representative
 Neuroscience Graduate Program (NSGP) Admissions Committee, 2015
 Chair of promotion committee for Michael Frank, 2015-2016
 Acting Departmental DIAP leader, Fall 2017
 Neuroscience Graduate Program (NSGP) Admissions Committee, 2018-2019
 Neuroscience Graduate Program (NSGP) Seminar Committee, 2018-2019
 Chair of promotion committee for David Badre, 2018-2019
 Departmental DIAP leader, Fall 2018-Present

University

College Curriculum Council, 1999-2002
 Faculty Fellow Program, 1997-1999
 Freshman Orientation: Skin Deep facilitator, 2000
 Focus group on advising for University Committee on Advising, 1999
 Neuroscience Mentoring Program, 1998-2001
 Independent Concentration Committee, 1999-2005
 OVPR Seed Grant Committee, Spring 2009
 ADVANCE Faculty Mentoring Program, 2009-2011.
 OVPR Strategic Planning Committee: Recommendations to Support the Conduct of Research Committee, 2009-2010
 ACF Faculty User's Committee, 2007-present
 First Readings Advisor, 2010, 2011, 2012
 Freshman Advisor, 1997-2003, 2011-2012
 Sophomore Advisor, 1998-1999, 2012-2013
 Research Environment Risk Assessment Committee, 07/2008-present.
 Brown-Tougaloo Programs Campus Advisory Committee, 2006-present
 Academic Priorities Committee, member 2006-2009, Vice Chair, 2008-2009
 IACUC Committee, 2007-present, Chair since July 2008
 Brown Mentoring Program, Mentor for Kristie J. Koski, Assistant Professor, Department of Chemistry, 2013-2014

Academic Priorities Committee, member 2012-2015, Vice Chair, 2014-2015
Grievance Committee, alternate, 9/1/2015-6/30/18 (alternate serves when anyone on committee is in conflict)
Trainer on the T32 grant "Training Program for Interactionist Cognitive Neuroscience" submitted to the NIMH.
Animal Care Governance Committee (OVPR Office), member

Professional

NIH IFCN7 Grant Review Panel – temporary member, June 2002.
NIH IFCN5 Grant Review Panel – temporary member, March 2003.
NIH Neurobiology of Learning and Memory Study Section, Center for Scientific Review (LAM, formerly IFCN7), permanent member, 07/2003-06/2007.
NIH ZRG1-IFCN-B-04M Study Section, Center for Scientific Review, temporary member, 2007.
NSF Science of Learning Centers, ad hoc site review panel, 01/2004.
ZNS1 SRB-M Special Emphasis Panel/Scientific Review Group, July 2008.
American Psychological Association, Selection Committee for the Young Investigator Award in Cognitive Neuroscience, Chair, 2008
Texas A&M University and Texas A&M Health Science Center, Faculty of Neuroscience, External Review Committee, 2008.
External Advisory Committee for an NIMH Silvio Conte Center on Cognitive and Physiological Studies of Episodic Memory. Boston University, 2008-13.
National Science Foundation, grant reviewer, 1999-present.
Alzheimer Association Research Grants Program, reviewer, 2005-2009.
NIMH, Special Emphasis Panel, Comparative Interdisciplinary Studies of Cerebral Cortical Development, Center for Scientific Review, February 2009.
NIMH RFA 09-080 Grant Review Panel – temporary member, March 2009
NIH ZRG1 F02A Grant Review Panel – temporary member, May 2010
IAR Reviewer Invitation for
NIH ZRG1 IFCN-L (02) Member Conflict panel, temporary member, October 2010
Biotechnology and Biological Sciences Research Council (BBSRC), UK's leading funding agency, ad hoc reviewer, ongoing.
NSF Site Visitor, Review of the Center of Excellence for Learning in Education, Science and Technology (CELEST), Boston, MA, 2011.
NSF Site Visitor, Review of the Center of Excellence for Learning in Education, Science and Technology (CELEST), Boston, MA, 2012.
Reviewing Editor, Hippocampus, 2003-present.
Reviewing Editor, Frontiers in Neuroanatomy, 2007-present.
Consulting Editor, Behavioral Neuroscience, 2009-2014.
COBRE Junior Faculty Mentor: Amy Griffin, Ph.D. University of Delaware. Mentor for Griffin as a part of COBRE: Delaware Center for Neuroscience Research, 2012- 2014
NSF Review Panel: Neural CAREER Full Proposal Panel Fall FY14, October 2013
Incoming Editor-in-Chief, Behavioral Neuroscience, starting January 1, 2014-December 31, 2014 (my editorial team began handling all new submissions)
Editor-in-Chief, Behavioral Neuroscience, starting January 1, 2015-December 31, 2020
American Psychological Association Council of Editors, 2014-2020
NIGMS Special Emphasis Panel ZGM1 PPBC-4, November 2015
INBRE Junior Faculty Mentor: Victoria Templar, Ph.D. Department of Psychology, Providence College, 2015-present
Professional Development Symposium, panelist. Annual SfN Chapter Conference in at the

University of Florida. Invited by graduate students, March 17, 2017
Advisory Board. NIH P01 Project "Development and Neurobiology of Categorization." PI: Vladimir Sloutsky (The Ohio State University), Co-PIs: Edward Wasserman and John Freeman (University of Iowa) and Bradley Love (University College-London), 2018-present.
External Advisory Committee and member of administrative core for the Centers of Biomedical Research Excellence (COBRE) Phase I grant awarded to the Department of Psychological Sciences at Kansas State University, 2017-2022.
COBRE Junior Faculty Mentor: Oriel FeldmanHall, 2017-present
Barnard College Program in Neuroscience External Review Committee, October 2018.
COBRE Junior Faculty Mentor: Mascha van't Wout-Frank, 2017-present

Community

Undergraduate Research and Creative Activities Program, Mentor, 1993-1996
Minorities Highschool Student Research Apprenticeship Program, Mentor, 1995
High School Student Short Course, Society for Neuroscience Annual Meetings, Mentor, 1996
NIH USGP (Undergraduate Scholarship Program for Individuals from Disadvantaged Backgrounds) Mentor, 2001-2003
Brown Tougaloo Brain Behavior Summer Research Program, one or two students per summer, 2006-2008
Leadership Alliance Trainer, Summer 2008
Supervised senior project field work of North Kingston high school student, Matt Gowell, February, 2010.
BP-ENDURE (Blueprint Program for Enhancing Neuroscience Diversity through Undergraduate Research Education Experiences) Trainer, Summer 2011
Supervised summer research rotation of high school student, Skye Kevelson, from Science Research Program at Choate Rosemary Hall in Wallingford, CT, Summer 2011.
Gave two research/recruitment talks at Dillard University and Xavier University in New Orleans, two historically black universities, October 2012.
Center for Vision Research 5th Anniversary Celebration — art+science PERCEPTION, participant.
Hosted student from Dillard University, a historically black university in New Orleans, LA, Summer 2013.
Hosted student from Xavier University, a historically black university in New Orleans, LA, Summer 2014.
Hosted student from Tougaloo College, a historically black college in Jackson, MS, Summer 2015.

Academic Honors:

National Merit Scholarship, 1971-1974
University Scholarship, SMU, 1973-1974
James R. Kenan Fellowship, UNC, 08/87-05/88
NSF Predoctoral Fellowship, 06/88-05/91
APA Division 20 Student Research Award, 1991
NIH Predoctoral Fellowship, 06/91-08/92
NIMH Postdoctoral Fellowship, 12/92-11/94
McDonnell-Pew Fellowship to Cold Spring Harbor Biology of Memory Course, Summer 1993
NIMH Postdoctoral Fellowship, 03/95-02/96

Salomon Award: The Postrhinal Cortex and Context Conditioning, 1997-1999
 NSF Career Development Award: Cognitive Functions of the Postrhinal Cortex, 1999-2003
 Karen T. Romer Prize for Undergraduate Advising, 2011
 Keynote speaker, Scholarship Sewanee Undergraduate Research Day, Sewanee: The University of the South, 2013.
 Elected Fellow of the American Psychological Association, 2013
 Elected Fellow of the Association for Psychological Science, 2013
 Keynote Speaker, Women in Learning Luncheon, APA Annual Conference, 2014.
 Women in Learning, Certificate of Appreciation, August 8, 2014.
 Selected Editor-in-Chief, *Behavioral Neuroscience*, a journal of the American Psychological Association, January 2015-December 2020.
 Elected Fellow of American Association for the Advancement of Science (AAAS), 2015.
 Elected member of the Memory Disorders Research Society, 2015.
 Special Guest, SfN-Sponsored Social: Hippocampus Social, Society for Neuroscience Annual Meeting, November 14, 2016.
 Keynote Speaker, Annual SfN Chapter Conference, University of Florida, March 17, 2017.
 Albert D. Mead Professor of Cognitive, Linguistic, and Psychological sciences, Brown University, 2017-present.
 Member of the F1000 Faculty at the invitation of Catherine Dulac and Trevor W Robbins, who run the Behavioral Neuroscience Section, February 2018-present
 Dartmouth College Leaton Lecturer in Behavioral Neuroscience for academic year 2018-19

Teaching:

Classroom

Spring 2005	Principles of Behavioral Neuroscience, 40 Neuroscience Independent Studies directed, 2 Neuroscience Graduate Students, Primary advisor, 1
Fall 2005	Sabbatical Neuroscience Honors Theses directed, 1 Psychology independent research, 1 Neuroscience Graduate Students, Primary advisor, 1
Spring 2006	Sabbatical Independent Studies directed, 2 Honors theses directed, 1 Neuroscience Graduate Students, Primary advisor, 2
Summer 2006	Tougaloo Summer Research Program Fellows, 2 UTRA Team, Fragile X Project, 3 Neuroscience Graduate Students, Primary advisor, 2
Fall 2006	Neuroscience Independent Studies Students, 1 Neuroscience Honors Students, 1 Neuroscience Graduate Students, Primary advisor, 2
Spring 2007	Principles of Behavioral Neuroscience, 55 Techniques in Physiological Psychology, Laboratory course, 18 Neuroscience Honors theses directed, 1

Neuroscience Independent Studies Students, 2
Neuroscience Graduate Students, Primary advisor, 2

Summer 2007 Tougaloo Summer Research Program Fellows, 2
UTRA Research Fellow, 1
Neuroscience Graduate Students, Primary advisor, 2

Fall 2007 Neuroscience Honors Students, 2
Neuroscience Graduate Students, Primary advisor, 2

Spring 2008 Principles of Behavioral Neuroscience, 25
Techniques in Physiological Psychology, Laboratory course, 14
Neuroscience Honors theses directed, 2
Neuroscience Graduate Students, Primary advisor, 2
Neuroscience Independent Studies Students, 1

Summer 2008 Tougaloo Summer Research Program Fellow, 1
Leadership Alliance Summer Fellow, 1
UTRA Research Fellow, 1
Neuroscience Graduate Students, Primary advisor, 2

Fall 2008 Neuroscience Independent Studies Students, 2
Psychology Independent Studies Students, 1
Neuroscience Graduate Students, Primary advisor, 2

Spring 2009 Techniques in Physiological Psychology, Laboratory course, 11
Neuroscience Independent Studies Students, 2
Psychology Independent Studies Students, 1
Neuroscience Graduate Students, Primary advisor, 2

Summer 2009 UTRA Research Fellow, 1
NSF Research Fellow, 1
PLMY Research Fellow, 1

Fall 2009 Neuroscience Independent Studies Students, 2
Neuroscience Honors Students, 1
Neuroscience Graduate Students, Primary advisor, 1
Neuroscience Rotation Students, 2

Spring 2010 Genes and Behavior, 15
Neuroscience Undergraduate Independent Studies Students, 3
Neuroscience Honors Student, 1
Neuroscience Graduate Student, Primary advisor, 1

Summer 2010 UTRA Research Fellow, 1
NSF Research Fellows, 2

Fall 2010 Neuroscience Independent Studies Students, 3
Neuroscience Honors Students, 1
Psychology Graduate Students, Primary advisor, 2
Neuroscience Graduate Students, Primary advisor, 1

Spring 2011 Neuroscience Undergraduate Independent Studies Students, 3
Neuroscience Honors Students, 2
Psychology Graduate Students, Primary advisor, 2
Neuroscience Graduate Students, Primary advisor, 1
Neuroscience Graduate Student, Rotation advisor, 1

Summer 2011 UTRA Research Fellow, 1
NSF Research Fellows, 1
BP-ENDURE Rotation Student, 1
High School Rotation Student, 1

Fall 2011 Neuroscience Independent Studies Students, 2
Neuroscience Honors Students, 2
Psychology Graduate Students, Primary advisor, 2
Neuroscience Graduate Students, Primary advisor, 1

Spring 2012 CLPS1193 Laboratory in Genes and Behavior, 12
CLPS1970 Directed Reading, 1
CLPS1980 Directed Research, 2
CLPS2096 Directed Graduate Research, 2
NEUR1970 Undergrad Independent Study, 3
Neuroscience Honors Students, 2
Neuroscience Graduate Students, 1

Summer 2012 UTRA Research Fellow, 1
NSF Research Fellows, 2

Fall 2012 NEUR1970 Undergrad Independent Study, 3
CLPS2091 Grad First Year Project Research, 1
CLPS2096 Directed Graduate Research, 2
Neuroscience Honors Students, 1
Neuroscience Graduate Students, 1

Spring 2013 CLPS1193 Laboratory in Genes and Behavior, 10
CLPS1150 Memory and the Brain, 10
CLPS2092 Grad First Year Project Research, 1
CLPS2096 Directed Graduate Research, 3
NEUR1970 Undergrad Independent Study, 2

Summer 2013 UTRA Research Fellows, 2
NSF Undergraduate Research Fellows, 1
Dillard University Undergraduate Research Fellow, 1

Fall 2013 CLPS1150 Memory and the Brain, 9
NEUR1970 Undergrad Independent Study, 3
CLPS2096 Directed Graduate Research, 2
Neuroscience Honors Students, 1
Neuroscience Graduate Students, Rotation, 1

Spring 2014 CLPS1400 The Neural Bases of Cognition, 11
 CLPS2096 Directed Graduate Research, 3
 NEUR1970 Undergrad Independent Study, 2
 Neuroscience Graduate Students, Rotation, 2

Summer 2014 UTRA Research Fellows, 1
 NSF Undergraduate Research Fellows, 1
 Xavier University Undergraduate Research Fellow, 1

Fall 2014 CLPS1150 Memory and the Brain, 34
 CLPS2091 Grad First Year Proj Research, 1
 CLPS2096 Directed Graduate Research, 3
 Neuroscience Honors Students, 1

Summer 2015 UTRA Research Fellows, 1
 Tougaloo College Undergraduate Research Fellow, 1

Spring 2015 CLPS1400 The Neural Bases of Cognition, 20 (capped at 10)
 CLPS2096 Directed Graduate Research, 4
 CLPS2092 Grad First Year Proj Research, 1
 CLPS1970 Undergrad Independent Study, 1
 NEUR1970 Undergrad Independent Study, 1
 Neuroscience Graduate Students, Rotation, 1

Fall 2015 CLPS1150 Memory and the Brain, 48 (capped at 48)
 CLPS1980 Directed Research, 1
 CLPS2096 Directed Graduate Research, 1
 NEUR1970 Undergrad Independent Study, 1
 NEUR2980 Graduate Independent Study, 1
 Neuroscience Honors Students, 2

Spring 2016 CLPS1400 The Neural Bases of Cognition, 20 (capped at 20)
 CLPS2096 Directed Graduate Research, 2
 CLPS1980 Directed Undergraduate Research, 1
 NEUR2980 Graduate Independent Study, 1
 NEUR1970 Undergrad Independent Study, 2
 BIOL 1190 Synaptic Transmission and Plasticity
 Guest lecturer: Emotional Memory

Fall 2016 (Sabbatical)
 CLPS2096 Directed Graduate Research, 1
 NEUR1970 Independent Study, 1
 NEUR2980 Graduate Independent Study, 2

Spring 2017 (Sabbatical)
 CLPS2096 Directed Graduate Research, 1
 NEUR1970 Undergrad Independent Study, 1
 NEUR2980 Graduate Independent Study, 1
 BIOL 1190 Synaptic Transmission and Plasticity
 Guest lecturer: Emotional Memory

- Fall 2017 CLPS1150 Memory and the Brain, 35
 CLPS2096 Directed Graduate Research, 1
 NEUR1970 Undergrad Independent Study, 1
 NEUR2980 Graduate Independent Study, 1
 CLPS 2001 Core Concepts in Cognitive & Psychological Sciences I
 Guest Lecturer: Seminar on corticohippocampal interactions in memory
- Spring 2018 CLPS1400 The Neural Bases of Cognition, 12
 CLPS2096 Directed Graduate Research, 1
 NEUR1970 Undergrad Independent Study, 2
 NEUR2980 Graduate Independent Study, 1
 BIOL 1190 Synaptic Transmission and Plasticity
 Guest lecturer: Emotional Memory
- Fall 2018 CLPS2091 Graduate First Year Project Research, 1
 CLPS2096 Directed Graduate Research, 3
 NEUR1970 Undergrad Independent Study, 1
 CLPS 2001 Core Concepts in Cognitive & Psychological Sciences I
 Guest Lecturer: Seminar on corticohippocampal interactions in memory
 NEUR1930Z Cells andCircuits
 Guest Lecturer, Functional neuroanatomy: Historical background on
 challenges and methods
Note: Used grant funds to buy out of one course

Student Advising (since 2005)

Undergraduates Advised

- Sanford Brown, Brown Neuroscience undergraduate independent study student and summer research student, 2003-2005
- Ashley Bear, Brown Neuroscience undergraduate independent study student, 2004-2005
- Mike Ferguson, Brown Neuroscience undergraduate independent study student, UTRA student, Summer 2004-2005.
- Sean Rumschik, Brown Neuroscience undergraduate independent study student, Fall 2004-Spring 2006, Neuroscience Honors student.
- Lynn Mubita, Brown Neuroscience undergraduate lab member, Independent Study Student, Fall 2004-2007,
- Kimberly Casten, Brown Neuroscience undergraduate lab member, Fall 2004- Spring 2008, UTRA student in Summers 2006 and 2007, Neuroscience Honors Student graduated May 2008
- Christine Cho, Brown Neuroscience undergraduate lab member, Fall 2005-Spring 2008, UTRA student in Summer 2006, Neuroscience Honors Student, graduated May 2008
- Francesca Santiago, Brown Neuroscience undergraduate lab member, 2007-2008
- Talha Anwar, Brown Neuroscience undergraduate lab member, 2007-2008
- Akash Kumar, Brown Neuroscience, Independent study advisor, lab member since Spring 2006, UTRA student in Summer, 2008, Fall 2008 and Spring 2009
- Adrienne Umali, Brown Neuroscience undergraduate lab member, Fall 2007-present
- Samantha Scudder, Brown Neuroscience undergraduate, Summer UTRA 2008, lab member, honors student, 2008-2010
- Arune Gulati, Brown Neuroscience undergraduate lab member, Fall 2007-2011, winner of the James McIlwain Neuroscience Award
- Elizabeth Phillips, Brown Neuroscience undergraduate, Summer UTRA 2008, lab member,

honors student 2008-2011

Catherine Wilson, Brown Neuroscience undergraduate, lab member, honors student 2009-2012

Rohan Ramesh, Brown Neuroscience undergraduate, lab member, honors student 2009-2012,
winner of Neuroscience Department Prize

James Stomber, Brown Neuroscience undergraduate, lab member, 2012-2013

Clay Aldern, Brown Neuroscience undergraduate, lab member, honors student, 2011-2013,
awarded Rhodes scholarship

Ananya Anand, Brown Neuroscience undergraduate, lab member, honors student, 2012-2013

Amanda Liu, Brown Neuroscience undergraduate, lab member, 2010-2014

Vishesh Jain, Brown Neuroscience undergraduate, lab member, 2013-2014

Krishan Aghi, Brown Neuroscience and Applied Math undergraduate, lab member and honors
student, 2012-2015

Liane Cho, Brown Neuroscience undergraduate, lab member, 2015

Janet Wanjiku, Brown CLPS undergraduate, lab member, 2015

Jackie Phillips, Cognitive Neuroscience undergraduate, honors student, 2014-2016

Meghan Gonsalves, Brown Neuroscience undergraduate, lab member, 2014-2015

Methma Udawatta, Brown Neuroscience undergraduate, lab member and honors student, 2014-
2016

Sasha Lieblen, Brown Neuroscience undergraduate, lab member, 2015-2016

Ben Shanahan, Brown Neuroscience undergraduate, lab member, 2014-present

Kevin Li, Brown Neuroscience undergraduate, lab member, 2015-present

Hayley Bounds, Brown Neuroscience undergraduate, lab member and honors student, 2015-
2017, winner Whalen Award and the Neuroscience Donoghue Prize

Amrita (Maya) Singh, Contemplative studies undergraduate, 2016-present

Will McNelis, Brown Neuroscience undergraduate, 2017-present

Ishan Sahoo, Brown Neuroscience undergraduate, 2017-present

Summer research advising of minority and underrepresented individuals (All Years)

Marshala Lee, Tougaloo College, Jackson, MS, *funded by NSF Award to Burwell*, summer
research rotation, 2006

Erica McInnis, Tougaloo College, Jackson, MS, *funded by NSF Award to Burwell*, summer
research rotation, 2006

Janelle Alleyne, Tougaloo College, Jackson, MS, *funded by NSF Award to Burwell*, summer
research rotation, 2007

Yolanda Patterson, Tougaloo College, Jackson, MS, *funded by NSF Award to Burwell*, summer
research rotation, 2007

Marla Washington, Tougaloo College, Jackson, MS, *funded by NSF Award to Burwell*, summer
research rotation, 2008

Sofia Beas, UT El Paso, *Leadership Alliance Student*, summer research rotation, 2008

Saima Machlovi, Hunter College, New York, *BP-ENDURE Student*, summer research rotation,
2011

Frank Kuoadio, Dillard University, New Orleans LA, *funded by NSF Award to Burwell*, summer
research rotation, 2013

Kwame Jackson, Xavier University, New Orleans LA, *funded by NSF Award to Burwell*, summer
research rotation, 2014

Amanda Dortch, Tougaloo College, *funded by NSF Award to Burwell*, summer research
rotation, 2015

Alejandra Patino, NYU, *funded by BP-Endure*, summer research rotation, 2018.

Carmilya Jackson, Tougaloo College, *funded by NSF Award to Burwell*, summer research
rotation, 2018.

Graduate Student Primary Advising

Anna Pflaster Beaudin, Psychology Graduate Program Masters student, 2001-2003. Currently at Assistant Professor at UC-Merced.

Kara Agster Saddoris, Neuroscience Graduate Program graduate student, 2001-2007, Currently a Senior Research Associate in Psychology and Neuroscience and the University of Colorado, Boulder.

Lisa Dokovna, Psychology Graduate Program, Masters student, 2012-2013, Currently a Ph.D. student in the University of Southern California Department of Cell and Neurobiology

Kristen Kerr Scaplen, Neuroscience Graduate Program, Ph.D. student, 2006-2013. Currently a postdoc with Karla Kaun at Brown University.

Devon Poeta, Biotechnology Masters student, 2013-2015. Currently a Research Associate in CLPS at Brown University.

Bailey Willis, Biotechnology Masters student, 2014-2015. Currently a Global Studies Associate at Genentech.

Brendon Kent, Psychology Graduate Program, Ph.D. student, 2010-2015. Currently a Consultant in the DC area.

Fang-Chi Yang, Psychology Graduate Program, Ph.D. student, advisor, 2010-2016

Eunkyung Hwang, Psychology Graduate Program, Ph.D. student, 2014-present.

Valerie Estela, Neuroscience Graduate Program, Ph.D. student, 2015-present

Alexia Ioannou, Biomedical Engineering, MS. student, 2017-present

Taylor Wise, Psychology Graduate Program, graduate student, advisor, 2018-present

Julia Zaltsman, Neuroscience Graduate Program, graduate student, co-advisor, 2018-present

Graduate Student Committees, Rotations, and Secondary Advising

Paulo Guilhardi, Brown Psychology graduate student, dissertation committee, 2003-2005

Steven Taubenfeld, MD-PhD/NSGP graduate student, dissertation committee, 2003-2006

Jonathan Whitlock, NSGP graduate student, dissertation committee, 2001-2006

Thomas Templin, Brown Psychology graduate student, dissertation committee, 2002-2006

Jennifer Gench, Neuroscience graduate student, first year advisory committee, 2006

Carolyn Graybiel, Neuroscience graduate student, first year advisory committee, 2006

Lynelle Corellini, Psychology graduate student, first year project committee, 2006

Charles King, Psychology graduate student, first year project committee, 2006

Jay Liu, Psychology graduate student, first year project committee, 2006

Nellwyn Hagan, Neuroscience Graduate Program, rotation student, Fall 2006

Cole Graydon, Neuroscience Graduate Program, rotation student, Fall 2006

Shau-Ming Wei, Psychology Graduate Program, first year project advisor, 2006-2007

Kristen Kerr, Neuroscience Graduate Program, rotation student, Fall 2006

Shau-Ming Wei, Neuroscience graduate student, prelim committee, 2007-2008

Emily Stackpole, Neuroscience graduate student, first year advisory committee, 2008-2009

Omar Ahmed, Neuroscience Graduate Program, dissertation committee, 2006-2009

Sarah Burke, Arizona Psychology graduate student, dissertation committee, 2005-2009

Jon Ericson, CogSci Graduate Program, graduate student, first year project committee, 2007-2008, lab rotation advisor, Fall 2008, prelim committee, 2009.

Jennifer Barredo, Neuroscience Graduate Program, graduate student, advisor, 2007-2009, prelim committee, 2009, dissertation committee, 2014

James Niemeyer, Neuroscience Graduate Program, rotation student, Fall 2009

Jackie Hynes, Neuroscience Graduate Program, rotation student, Fall 2009

David Valenzuela, Neuroscience Graduate Program, prelim committee, 2009, dissertation committee, 2010-2011.

Geoffrey Chew, MPPB Graduate Program, prelim committee, 2006-2010

Erika Alexander, Psychology Graduate Program, graduate student, first year project committee, 2008-2009; prelim committee, 2010-2011
 Garrett Neske, Neuroscience Graduate Program, rotation student, Fall 2011
 Carolyn Graybiel, Neuroscience GPP grad student, prelim/dissertation committee, 2007-2011
 David Freestone, Psychology Graduate Program, prelim/dissertation committee, 2009-2012.
 Jing Yang, Physics Graduate Program, dissertation committee, 2010-2012
 Liz Chasril, CogSci Graduate Program, dissertation.prelim committee, 2008-2012
 Katie Kalafut, Psychology graduate student, prelim/dissertation committees, 2011-2014
 Jason Scimeca, Cognitive Science graduate student, prelim committee, 2012-2013
 Jon Ericson, Cognitive Science graduate student, FYP/prelim/dissertation committees, 2008-2013
 Jon Rueckemann, Psychology graduate student, Boston University, dissertation committee, 2010-2013
 Shau-Ming Wei, Neuroscience Graduate Program, prelim/dissertation committees 2009-2013
 Jennifer Barredo, Neuroscience Graduate Program, prelim/dissertation committees 2009-2013
 Reyna Carter, Neuroscience graduate student, prelim/dissertation committees, 2010-2013
 Lauren Dobsen, Neuroscience Graduate Program, rotation student, Spring and Summer 2009; prelim and dissertation committees, 2010-2015
 Scott Herrick, Neuroscience Graduate Program, prelim/dissertation committees, 2010-2015
 Gabriela Manzano, Neuroscience Graduate Program, prelim/dissertation committees, 2015-present, advisor: Kevin Bath
 Nicole DeAngeli, Dartmouth Graduate Program in Psychological and Brain Sciences, 2017-present, advisor: David Bucci
 Kathleen Huntzicker, Neuroscience – NIH Partnership Graduate Program, prelim/dissertation committees, 2018-present, advisor: Heather Cameron
 Simon Daste, College de France (Paris), 2018-present, advisor: Alex Fleischmann

Postdoctoral Students Advised

David Bucci, Brown, postdoctoral student, 1998-2001
 Stephane Beaudin, Brown, postdoctoral student, 2002-2003
 Ray Beck, Brown, postdoctoral student, 2004-2005
 Sharon Furtak, Brown, postdoctoral student, 02/2007-2010
 Adria Martig, Brown, postdoctoral student, 07/2010-03/2011
 Jonathan Ho, Brown, postdoctoral student, 04/2010-11/2013
 Kristen Kerr, Brown, postdoctoral student, 09/2013-02/2014
 Inês Tomás Pereira, Brown, postdoctoral student, 05/2013-09/2016
 Tara Jacobson, Brown, postdoctoral student, 04/2010-present
 Victorial Heimer-McGinn, Brown, postdoctoral student, 09/2013-2017
 Anja Farovik, Brown, postdoctoral student, 05/2016-present
 Sean Trettel, Brown, postdoctoral student, 02/2018-present

Date: March 17, 2019