

# 2018 - 2019 NSP Student Publications

Evan Anderson	Fall 2019	Anderson, ED., Barbey, AK. Moral Reasoning: A Network Neuroscience Perspective. The Cambridge Handbook of Imagination.
Rebecca Androwski	Spring 2019	Thapa, S., Gates, M.K., Reuter-Carlson, U., Androwski, R.J. and Schroeder, N.E., 2019. Convergent evolution of saccade body shapes in nematodes through distinct developmental mechanisms. <i>EvoDevo</i> , 10(1), p.5.
Alexander Asilador	Spring 2019	Georgiy Yudintsev, Alexander Asilador, Macey Coppinger, Kavyakrishna Nair, Masumi Prasad, Daniel A. Llano. (2019) Connectional heterogeneity in the mouse auditory corticocollicular system. <i>bioRxiv</i> 571711; doi: <a href="https://doi.org/10.1101/571711">https://doi.org/10.1101/571711</a>
	Fall 2018	Yudintsev G., Lee C.M., Asilador A. and Llano D.A. (2018) Transcranial imaging of the mouse auditory cortex in the GCaMP6 mouse In <i>Neuromethods: Basic Neurobiology Techniques</i> . Wright N. ed. Springer Publishers. (in press)
Paul Camacho	Spring 2019	Camacho PB, Carbonari R, Shen S, Zadikoff C, Kramer AF, Lopez-Ortiz C. Voluntary Saccade Training Protocol in Persons With Parkinson's Disease and Healthy Adults. <i>Frontiers in aging neuroscience</i> . 2019;11:77. doi: 10.3389/fnagi.2019.00077. PubMed PMID: 31024292; PubMed Central PMCID: PMC6459894
Corinne Cannavale	Spring 2019	Edwards, C.G., Walk, A.M., Cannavale, C.N., Thompson, S.V., Reeser, G.E., Holscher, H.D., & Khan, N.A. (2019). Macular Xanthophylls and Event-Related Brain Potentials among Adults with Overweight and Obesity. <i>Molecular Nutrition and Food Research</i> , 1801059.
	Spring 2019	Cannavale, C.N., Hassevoort, K.M., Edwards, C.G., Thompson, S.V., Erdman, J.W., Holscher, H.D., Burd, N.A., Cohen, N.J., & Khan, N.A. Serum lutein is related to relational memory performance. <i>Nutrients</i> , 11(4), 768.
Edward Clint	Summer 2018	Bryant, G. A. et al. (2018) The Perception of Spontaneous and Volitional Laughter Across 21 Societies, <i>Psychological Science</i> , 29(9), pp. 15151525.
Connor Courtney	Fall 2018	Courtney CD, Christian CA (2018). Subregion-specific impacts of genetic loss of diazepam binding inhibitor on synaptic inhibition in the murine hippocampus. <i>Neuroscience</i> 388:128-138.
	Spring 2019	Ujjainwala AL*, Courtney CD*, Wojnowski NM, Rhodes JS, Christian CA (2019). Differential impacts on multiple forms of spatial and contextual memory in diazepam binding inhibitor knockout mice. <i>Journal of Neuroscience Research</i> . (*Equal contribution)
Carly Drzewiecki	Spring 2019	Willing J, Drzewiecki CM, Sellinger EP, Juraska JM. 2018. Neurogenesis and early postnatal apoptosis in the rat medial prefrontal cortex are altered by perinatal phthalate exposure. Submitted to <i>Developmental Neuroscience</i>
Kelsey Dzwilewski	Summer 2018	Dzwilewski, K.L.C., Aguiar, A., Korrick, S.A., Schantz, S.L. Associations of prenatal exposure to bisphenols with visual recognition memory in 7.5-month-old infants. Poster and talk presented at: <i>Developmental Neurotoxicology Society Annual Meeting</i> ; 2018 June 23-27; Clearwater Beach, FL.
	Fall 2018	Dzwilewski, K.L.C., Yanovskaya, M., Aguiar, A., Calafat, A.M., Ye, X., Korrick, S.A., Schantz, S.L. Associations of prenatal exposure to triclosan and benzophenone-3 with visual recognition memory in 7.5-month-old infants. Poster and talk presented at: <i>2018 Joint Annual Meeting of the International Society for Exposure Science &amp; the International Society for Environmental Epidemiology</i> ; 2018 August 26-30; Ottawa, Canada.
	Spring 2018	Dzwilewski, K.L.C., Yanovskaya, M., Aguiar, A., Calafat, A.M., Ye, X., Korrick, S.A., Schantz, S.L. Associations of prenatal exposure to triclosan and benzophenone-3 with visual recognition memory in 7.5-month-old infants. Talk presented at: <i>University of Illinois at Urbana-Champaign Interdisciplinary Environmental Toxicology Program Seminar Series</i> ; 2018 April 13; Urbana, IL.

## Student Publications, continued

- Fall 2018 Dzwilewski, K.L.C., Yanovskaya, M., Aguiar, A., Calafat, A.M., Ye, X., Korrick, S.A., Schantz, S.L. Associations of prenatal exposure to triclosan and benzophenone-3 with visual recognition memory in 7.5-month-old infants. Poster presented at: University of Illinois at Urbana-Champaign Interdisciplinary Environmental Toxicology Program Open House; 2018 November 9; Urbana, IL.
- Spring 2019 Dzwilewski, K.L.C., Yanovskaya, M., Aguiar, A., Calafat, A.M., Ye, X., Korrick, S.A., Schantz, S.L. Associations of prenatal exposure to triclosan and benzophenone-3 with visual recognition memory in 7.5-month-old infants. Poster presented at: University of Illinois at Urbana-Champaign Neuroscience Program Open House; 2019 February 7; Urbana, Illinois.
- Spring 2019 Dzwilewski, K.L.C., Merced-Nieves, F.M., Aguiar, A., Schantz, S.L. Characterization of performance on an automated visual recognition memory task in 7.5-month-old-infants. Talk to be presented at: University of Illinois at Urbana-Champaign Interdisciplinary Environmental Toxicology Program Seminar Series; 2019 April 5; Urbana, Illinois.
- Spring 2019 Dzwilewski, K.L.C., Merced-Nieves, F.M., Aguiar, A., Schantz, S.L. Characterization of performance on an automated visual recognition memory task in 7.5-month-old-infants. Talk to be presented at: University of Illinois at Urbana-Champaign Neuroscience Program Student Seminar Series; 2019 April 8; Urbana, Illinois.
- Spring 2019 Dzwilewski, K.L.C., Yanovskaya, M., Aguiar, A., Calafat, A.M., Ye, X., Korrick, S.A., Schantz, S.L. Associations of prenatal exposure to triclosan and benzophenone-3 with visual recognition memory in 7.5-month-old infants. Poster to be presented at: University of Illinois at Urbana-Champaign Veterinary Medicine Research Day; 2019 April 24; Urbana, Illinois.
- Summer 2019 Dzwilewski, K.L.C., Merced-Nieves, F.M., Aguiar, A., Schantz, S.L. Characterization of performance on an automated visual recognition memory task in 7.5-month-old-infants. To be presented at: Developmental Neurotoxicology Society Annual Meeting; 2019 June 23-26; Urbana, Illinois.
- Kristen Flatt Spring 2019 Cohen, J. D., Flatt, K. M., Schroeder, N. E., & Sundaram, M. V. (2019). Epithelial Shaping by Diverse Apical Extracellular Matrices Requires the Nidogen Domain Protein DEX-1 in *Caenorhabditis elegans*. *Genetics*, 211(1), 185200.
- Spring 2019 Flatt, K. M., Beshers, C., Unal, C., Cohen, J. D., Sundaram, M. V., & Schroeder, N. E. (2019). Epidermal Remodeling in *Caenorhabditis elegans* Dauers Requires the Nidogen Domain Protein DEX-1. *Genetics*, 211(1), 169183.
- Spring 2019 Hughes, K. J., Rodriguez, A., Flatt, K. M., Ray, S., Schuler, A., Rodemoyer, B., Vidal-Gadea, A. G. (2019). Physical exertion exacerbates decline in the musculature of an animal model of Duchenne muscular dystrophy. *Proceedings of the National Academy of Sciences*, 116(9), 35083517. <https://doi.org/10.1073/PNAS.1811379116>
- Stephen Fleming Spring 2019 S.A. Fleming, A.T. Mudd, J. Hauser, J. Yan, S. Metairon, P. Steiner, S.M. Donovan, R.N. Dilger, Dietary oligofructose alone or in combination with 2fucosyllactose differentially improves recognition memory and alters brain structure and hippocampal mRNA expression, *Scientific reports*. Under review.
- Spring 2019 S.A. Fleming, A.T. Mudd, J. Hauser, J. Yan, S. Metairon, P. Steiner, S.M. Donovan, R.N. Dilger, Human and bovine milk oligosaccharides elicit improved recognition memory concurrent with alterations in regional brain volumes and hippocampal mRNA expression, *Scientific reports*. Under review.
- Rachel Gonzalez Summer 2018 Biehl MJ, Kaylan KB, Thompson RJ, Gonzalez RV, Weis KE, Underhill GH, Raetzman LT., Cellular fate decisions in the developing female anteroventral periventricular nucleus are regulated by canonical Notch signaling. *Dev Biol*. 2018 Oct 1;442(1):87-100. doi: 10.1016/j.ydbio.2018.06.005. Epub 2018 Jun 6.

# Student Publications, continued

Katya Gribkova	Fall 2018	Gribkova, E. D., Ibrahim, B. A., & Llano, D. A. (2018). A novel mutual information estimator to measure spike train correlations in a model thalamocortical network. <i>Journal of neurophysiology</i> , 120(6), 2730.
Katherine Hatcher	Fall 2018	Hatcher K. M. and M. M. Mahoney (2018). Modulation of circadian rhythms through estrogen receptor signaling. <i>European Journal for Neuroscience. Review</i> . doi: 10.1111/ejn.14184 (Epub ahead of print)
Kelly Hewes	Summer 2018	Poster Abstract - <i>Journal of Alzheimer's Disease - Zeaxanthin moderates the relationship between right hemisphere precuneus volume and immediate memory in healthy older adults</i>
Noelle James	Spring 2019	Bukhari, S. A., Saul, M. C., James, N. P., Bensky, M., Stein, L. , Trapp, R., & Bell, A. M. (2019). Neurogenomic insights into paternal care and its relation to territorial aggression. <i>Nature Communication - In Review</i>
Sung-Soo Jang	Summer 2018	Kim IJ, Lee JM, Oh SJ, Yoon MS, Jang SS, Holland RL, Reno ML, Hamad MN, Maeda T, Chung HJ, Chen J, Blanke SR. (2018). <i>Helicobacter pylori infection Modulates Host Cell Metabolism through VacA-Dependent Inhibition of mTOR1</i> . <i>Cell Host Microbe</i> . 2018 May 9;23(5):583-593
	Summer 2018	Shim HG*, Jang SS*, Min JO, Kim YS, Kim HY, Yoon BE, Kim SJ. (2018). <i>TNF-a increases the intrinsic excitability of cerebellar Purkinje cells through elevating glutamate release in Bergmann Glia</i> . <i>Scientific Report</i> . 2018 Aug;8(1):11589.
Mickeal Key	Spring 2019	Key M.N., Zwilling C.E., Talukdar M.T., Barbey A.K., Forthcoming. Essential amino acids, vitamins, and minerals moderate the relationship between the right frontal pole and measures of memory. (Under Review at Molecular Nutrition & Food Research)
Rafay Khan	Spring 2019	Shahsavari, S., Khan, R.A., Husain, F.T. (2019). Imaging tinnitus and its effects on the brain. Under review.
	Summer 2019	Simonetti, P., Raquel, C., Khan, R.A., Vasconcelos, L.G., Gandara, M.R., Lezirovitz, K., de Medeiros, I.R.T., Husain, F.T., Oiticica, J. (2019). <i>Cerebellum and Frontal Cortex Play Pivotal Roles in Tinnitus Improvement After Auditory Rehabilitation</i> . Under review.
Grace Kim	Spring 2019	Kim, G.S., Smith, A., Xu, F., Michopoulos, V., Lori, A., Armstrong, D.L., Aiello, A.E., Koenen, K.C., Galea, S., Wildman, D.E., Uddin, M. (2019). <i>Methylomic profiles reveal sex-specific shifts in leukocyte composition associated with post-traumatic stress disorder</i> . <i>bioRxiv preprint</i> , 10.1101/594127
Colin Lee	Summer 2018	Green, D.J., Huang, R.-C., Sudlow, L., Hatcher, N., Potgieter, K., McCrohan, C., Lee, C., Romanova, E.V., Sweedler, J.V., Gillette, M.L.U., and Gillette, R. <i>cAMP, Ca2+, pH, and NO Regulate H-like Cation Channels That Underlie Feeding and Locomotion in the Predatory Sea Slug Pleurobranchaea californica</i> . <i>ACS Chem. Neurosci.</i> 9:8, 1986-1993. 10.1021/acschemneuro.8b00187
Debby Liu	Spring 2019	Acute ER stress Represses Neural Activity and Seizures through Mdm2-p53 Signaling-dependent Protein Translation (under revision)
Francheska Merced-Nieves	Summer 2018	Associations of phthalates found in personal care products with cognitive function in 4.5-month-old infants. Merced-Nieves, F.M., Musaad, S., Aguiar, A., Korrick, S.A., Schantz, S.L. <i>Developmental Neurotoxicology Society Conference</i> , Clearwater, FL, June 2018. Oral Presentation.
	Fall 2018	Association of prenatal exposure to benzophenone-3 with cognitive function in 4.5-month-old infants. Merced-Nieves, F.M., Musaad, S., Aguiar, A., Calafat, A.M., Ye, X., Korrick, S.A., Schantz, S.L. <i>International Society for Environmental Epidemiology</i> , Ottawa, CA, August 2018. Poster Presentation.
	Fall 2018	Association of phthalates and phenols found in personal care products with cognitive function in 4.5-month-old infants. <i>American Pediatric Association Environmental Scholars Retreat</i> , Providence, RI, October 2018. Oral Presentation.

## Student Publications, continued

	Spring 2019	Associations of phthalates and phenols found in personal care products with cognitive function in 4.5-month-old infants. Toxicology Seminar, January 2019, Champaign-Urbana, IL. Oral Presentation.
Ghazal Naseri	Spring 2019	Naseri Kouzehgarani, G., Bothwell, M.Y., M.U. Gillette. 2019. Circadian Rhythm of Redox State in Hippocampal CA1 Regulates Neuronal Excitability. European Journal of Neuroscience. 00: 1-13.
	Spring 2019	Kandel M.E., G. Naseri Kouzehgarani, M.U. Gillette, G. Popescu. 2019. Gradient Light Interference Microscopy (GLIM) for Investigating Turbid Acute Brain Slices. SPIE Proceedings, Quantitative Phase Imaging V.
	Spring 2019	Kaufman C.D., Liu, S.C., C. Cvetkovic, G. Naseri Kouzehgarani, R. Bashir, M.U. Gillette. 2019. Emergence of Functional Neuromuscular Junctions in an Engineered, Multicellular Spinal Cord-Muscle Bioactuator. In Revision.
	Spring 2019	Kandel, M.E., C. Hu, S. Young, G. Naseri Kouzehgarani, E. Min, K.M. Sullivan, H. Kong, J.M. Li, D.N. Robson, M.U. Gillette, C. Best-Popescu, G. Popescu. 2019. Epi-illumination Gradient Light Interference Microscopy (epi-GLIM) for Imaging Opaque Structures. In Revision.
	Spring 2019	Nelson NG, Wen Xuan L, Weingarten MJ, Carnevale LN, Das A, Liang N-C. (2019) Combined ?9- tetrahydrocannabinol administration and moderate alcohol consumption: effects on ingestive behaviors in adolescent male rats. Psychopharmacology. PMID: 30415276.
Lydia Nguyen	Summer 2018	[ABSTRACT] Nguyen, L.T., Shende, S.A., Rackley, A., Chapman, S.B. & Mudar, R.A. (2018). Strategy-Based Cognitive Training Effects on Event-Related Neural Oscillations in Amnestic Mild Cognitive Impairment. Alzheimers & Dementia: The Journal of the Alzheimers Association, 14(7), 1067.
	Fall 2018	Mudar, R.A., Nguyen, L.T., Eroh, J., Chiang, H-S., Rackley, A., & Chapman, S.B. (2019). Event-related Neural Oscillation Changes Following Reasoning Training in Individuals with Mild Cognitive Impairment. Brain Research, 1704, 229-240. doi: 10.1016/j.brainres.2018.10.017
	Fall 2018	[ABSTRACT] Nguyen, L.T., Nie, Q., Myers, D., Gibson, A., Kerssens, C., Mudar, R.A., & Rogers, W.A. (2018). Social Engagement Through Video Chat for Older Individuals With and Without Cognitive Impairment. Innovation in Aging, 2(suppl_1), 998.
	Spring 2019	Nguyen, L.T., Marini, F., Zacharczuk, L., Llano, D.A., & Mudar, R.A. (in press). Theta and Alpha Band Oscillations During Value-Directed Strategic Processing. Behavioural Brain Research.
Elli Sellinger	Spring 2019	Willing J, Drzewiecki CM, Sellinger EP, Juraska JM. Neurogenesis and early postnatal apoptosis in the rat medial prefrontal cortex are altered by perinatal phthalate exposure. Submitted March, 2019.
Megan Sieg	Fall 2018	Balachandran R, Sieg M, Tran CTQ, Clancy B, Beaudin S, Eubig P. (2018) Cholinergic and dopaminergic interactions alter attention and response inhibition in Long-Evans rats performing the 5-choice serial response time task. Submitted to Pharmacology, Biochemistry and Behavior for publication.
Stephanie Soriano	Summer 2018	Jewett, K. A., Lee, K. Y., Eagleman, D. E., Soriano, S., & Tsai, N. P. (2018). Dysregulation and restoration of homeostatic network plasticity in fragile X syndrome mice. Neuropharmacology, 138, 182-192.
Georgiy Yudnitsev	Fall 2018	Slater, B. J., Yudintsev, G., Lee, C. M., & Llano, D. A. (2019). Thalamocortical and intracortical inputs differentiate layer-specific mouse auditory corticocollicular neurons. Journal of Neuroscience, 39(2), 256-270.
Liran Ziegelman	Summer 2018	L. Ziegelman, Y. Hu and M. E. Hernandez, "Neuromechanical Simulation of Hand Pronation and Supination Task in Parkinson's disease," 2018 40th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), Honolulu, HI, 2018, pp. 2060-2063. doi: 10.1109/EMBC.2018.8512605