Curriculum Vitae
Elizabeth Anne Dunn Hammock

January 29, 2025

General Information

University address: Neuroscience
Psychology
COLLEGE OF ARTS AND SCIENCES
Psychology Department Building A0203
Florida State University
Tallahassee, Florida 32306-4301
Phone: 850-645-9943; Fax: 850-644-7739

E-mail address: ehammock@fsu.edu
hammock@psy.fsu.edu

Web site: http://www.neuro.fsu.edu/faculty/ehammock/

Professional Preparation

2005 PhD, Emory University. Major: Neuroscience.

Nondegree Education and Training

2005–2009 Postdoctoral Fellow, Vanderbilt University, Nashville, TN.

Professional Experience

2021–present Associate Professor, PSYCHOLOGY, Florida State University.

2014–2021 Assistant Professor, PSYCHOLOGY, Florida State University.

2014 Research Faculty I, PSYCHOLOGY, Florida State University.

2009–2014 Instructor, Department of Pediatrics, Vanderbilt University Medical Center, Nashville, TN.

Honors, Awards, and Prizes

2023-2024 University Teaching Award for Outstanding Teaching in the Major, Florida State

University (2024).
Travel Award, Winter Conference on Brain Research, Big Sky, MT (2015). ($1,000).
Luton Pilot Research Award, Department of Psychiatry, Vanderbilt University (2010). ($4,000).
Young Investigator Award, National Alliance for Research on Schizophrenia and Depression (2010).

NARSAD is an acronym for National Alliance for Research on Schizophrenia and Depression, the former name of the Brain & Behavior Research Foundation.

Young Investigator Travel Award, Winter Neuropeptide Conference, Breckenridge CO (2006).
Travel Award, 11th Annual Wisconsin Symposium on Emotion; Genes, Brain and Emotion (2005).
Travel Award, Neural Control of Behavior, UCLA (2004).
Travel Award, Atlanta Area Chapter, Society for Neuroscience (2004).
Fine Science Tools Travel Award, Atlanta Area Chapter of the Society for Neuroscience (2003).
Outstanding Young Investigator Award, International Behavioral and Neural Genetics Society (2003).
Graduate Scholar 2001-2005, Center for Behavioral Neuroscience (2001).
Merit Award, Emory University (2000). ($300).

Award granted for high achievement in first-year course work and rotations.

Tuition waiver and stipend 1999-2005, Emory University (1999).

Fellowship(s)

NIH Biobehavioral Intervention in Developmental Disabilities Training Program Fellow, (NIH T32MH075883) (2006–2007).
NIH Neurogenomics Training Grant Post-Doctoral Fellow, Vanderbilt University, (NIH T32MH065215) (2005–2006).
Ruth L. Kirschstein National Research Service Award, NIH F31MH067397 (2002–2005).

Current Membership in Professional Organizations

International Society for Developmental Psychobiology
Society for Behavioral Neuroendocrinology
Society for Neuroscience
Society for Social Neuroscience

Teaching

Courses Taught
Undergraduate:
Conditioning and Learning with Laboratory (EXP3422C)
Social Neuroscience: Neurobiology of Social Behavior (PSY4930; PSB4006)
Undergraduate laboratory supervision (PSY4915; PSY4920; PSY4910; PSY4039; BSC4900; BSC4901; BMS4901; BSC4970; CHM1051L)

Graduate:
Seminar in Physiological Psychology: Neurobiology of Social Behavior (PSB6059)
Graduate Seminar: Learning and Connecting (PSY6919)
Graduate Seminar: Peer Review Tutorial (PSY6919)
PhD Research Supervision Directed Individual Study (PSY5900; PSY5908; PSY6656)

New Course Development

Learning and Connecting (2019)
Peer Review (2019)
Social Neuroscience (2016)
Neurobiology of Social Behavior (2014)

Doctoral Committee Chair

Day, K. R., graduate. (2023). *Examining oxytocin modulation of trigeminal sensory circuitry in neonatal mice*.
Vaidyanathan, R., graduate. (2020). *Oxytocin receptor in sensori-motor circuits and its association with hypothalamus activity*.
Tabbaa, M., graduate. (2019). *Mechanisms of oxytocin regulation of sensory processing and sociality in mice and humans*.
Greenwood, M. A., graduate. (2019). *Novel sites of oxytocin receptor expression in the mouse periphery and modulation of pupillary behavior by oxytocin*.
Brown, J., doctoral candidate.
Gonzalez, A., doctoral candidate.
Ochoa, R., doctoral candidate.

Doctoral Committee Member

Brandt, E., graduate. (2024).
Zhao, C., graduate. (2024).
Norris, C. U., graduate. (2024).
Perkins, E. R., graduate. (2022).
French, J., graduate. (2021).
Cole, L. A., graduate. (2020).
Yu, C. C., graduate. (2018).
Drislane, L. E., graduate. (2017).
Jennings, S. D., doctoral candidate.
Johnson, C. E., doctoral candidate.
Moseley, P., doctoral candidate.
Randolph, A., doctoral candidate.
Robison, M., doctoral candidate.

Doctoral Committee University Representative

Kim, S., graduate. (2022).
Thabet, Y., doctoral candidate.
Gutierrez, D., doctoral student.

Master's Committee Chair

Brown, J., graduate. (2021).

Master's Committee Member

Abreu, K., student.
Findlay, K., student.
Miller, H. M., student.
Rice, T. B., student.
Thompson, B., student.

Bachelor's Committee Chair

Rivera, K., graduate. (2023).
Bayramov, B., graduate. (2022).
Smith, C., graduate. (2021).
Aiken, R., graduate. (2020).
Guidubaldi, J., graduate. (2020).
Moses, A., graduate. (2020).
Johnson, C., graduate. (2019).
Merritt, T., graduate. (2018).
Carlton, C., graduate. (2017).
Coleman, A., graduate. (2016).
Ruffner, S., student.

Bachelor's Committee Member

Diaz, W., graduate. (2021).
Wellman, N., graduate. (2020).
Bridges, D., graduate. (2018).
Sigel, S., graduate. (2018).
Ackart, D., student.
Carley, A., student.
Heichelbech, J., student.

Mason, G., student.
Wolcott, J., student.

Research and Original Creative Work

Program of Research and/or Focus of Original Creative Work

I use genetic, molecular, cellular, and behavioral techniques in an evolutionary framework to understand the neurobiological mechanisms of social and affective behaviors in developing and mature animals. My goal is to contribute to our understanding of the molecular and cellular mechanisms underlying the interaction between life experience and genetic variation.

Publications

Invited Journal Articles

Donaldson, Z. R., Hammock, E. A. D., & Lim, M. M. (2024). Larry J. Young (1967-2024). *Nature Neuroscience*, *27*(6), 1037-1038. doi:10.1038/s41593-024-01637-z

Hammock, E. A. D. (2011). Biologically constrained behavioral genetics research. *Politics and the Life Sciences*, *30*(2), 93-97. doi:10.2990/30_2_93

Hammock, E. A. D. (2007). Gene Regulation as a Modulator of Social Preference in Voles. *Advances in Genetics*, *59*, 107-127. doi:10.1016/S0065-2660(07)59004-8

Refereed Journal Articles

Makhanova, A., McNulty, J., Eckel, L., Nikonova, L., Bartz, J., Bloshinsky, A. S., & Hammock, E. A. D. (in press). AVPR1A RS3 and Relationship Maintenance Processes in Newlywed Couples. *Frontiers in Psychology*.

MacLean, E. L., Carranza, E., Gnanadesikan, G., King, K., Allen, A., Linde-Krieger, L. B., Feldman, R., White-Traut, R. C., Hammock, E. A. D., Carter, C. S., Leng, G., Tecot, S. R., & Bell, A. F. (2024). Neurophysin I is an Analytically Robust Surrogate Biomarker for Oxytocin. *Psychoneuroendocrinology*, *161*. doi:https://doi.org/10.1016/j.psyneuen.2023.106951

Sharma, K., Govar, A., Ghimire, B., Nishimori, K., Hammock, E. A. D., & Teruyama, R. (2023). Sexually dimorphic oxytocin receptor-expressing (OXTR) neurons in the anteroventral periventricular nucleus (AVPV) in the postpartum female mouse are involved in maternal behavior. *Journal of Neuroendocrinology*, *35*(10), e13337. doi:https://doi.org/10.1111/jne.13337

Johnson, C. E., Hammock, E. A. D., & Dewan, A. (2023). Vasopressin receptor 1a, oxytocin receptor, and oxytocin knockout male and female mice display normal perceptual abilities toward non-social odorants. *Hormones and Behavior*, *148*, 105302. doi:https://doi.org/10.1016/j.yhbeh.2022.105302

Althammer, F., Roy, R., Lefevre, A., Najjar, R., Schoenig, K., Bartsch, D., Eliava, M., Feresin, R., Hammock, E. A. D., Murphy, A. Z., Charlet, A., Grinevich, V., & Stern, J. E. (2022). Altered PVN-to-CA2 hippocampal oxytocin pathway and reduced number of oxytocin-receptor expressing astrocytes in heart failure rats. *Journal of Neuroendocrinology*, *34*(7). doi:http://doi.org/10.1111/jne.13166

Arroyo, J. P., Terker, A. S., Zuchowski, Y., Watts, J. A., Bock, F., Meyer, C., Luo, W., Kapp, M. E., Gould, E. R., Miranda, A. X., Carty, J., Jiang, M., Vanacore, R. M., Hammock, E., Wilson, M., Zent, R., Zhang, M., Bhave, G., & Harris, R. C. (2022). Kidney collecting duct cells make vasopressin in response to NaCl induced hypertonicity. *JCI Insight*.

JCI Insight: https://insight.jci.org/articles/view/161765; was featured on the cover BioRxiv: https://doi.org/10.1101/2022.05.13.491898.

Gonzalez, A., & Hammock, E. A. D. (2022). Oxytocin and microglia in the development of social behaviour. *Philosophical Transactions of the Royal Society B*, *377*(1858). doi:https://doi.org/10.1098/rstb.2021.0059

Biggs, L., & Hammock, E. A. D. (2022). Oxytocin via oxytocin receptor excites neurons in the endopiriform nucleus of juvenile mice. *Scientific Reports*, *12*. doi:https://doi.org/10.1038/s41598-022-15390-5

Gnanadesikan, G. E., Hammock, E. A. D., Tecot, S. R., Lewis, R., Hart, R., Carter, C. S., & MacLean, E. L. (2022). What are oxytocin assays measuring? Epitope mapping, metabolites, and comparisons of wildtype & knockout mouse urine. *Psychoneuroendocrinology*, *143*. doi:doi: 10.1016/j.psyneuen.2022.105827

Makhanova, A., McNulty, J., Eckel, L., Nikonova, L., Bartz, J., & Hammock, E. A. D. (2021). CD38 is associated with bonding-relevant cognitions and relationship satisfaction over the first three years of marriage. *Scientific Reports*, *11*(1), 2965. doi:10.1038/s41598-021-82307-z

Bertoni, A., Schaller, F., Tyzio, R., Gaillard, S., Santini, F., Xolin, M., Diabira, D., Vaidyanathan, R., Matarazzo, V., Medina, I., Hammock, E. A. D., Zhang, J., Chini, B., Gaiarsa, Jean-Luc, & Muscatelli, F. (2021). Oxytocin administration in neonates shapes hippocampal circuitry and restores social behavior in a mouse model of autism. *Molecular Psychiatry*. doi:10.1038/s41380-021-01227-6

Tabbaa, M., Moses, A., & Hammock, E. A. D. (2021). Oxytocin receptor disruption in Avil-expressing cells results in blunted sociability and increased inter-male aggression. *PLoS ONE*, *16*(11), e0260199. Retrieved from https://doi.org/10.1371/journal.pone.0260199 doi:10.1371/journal.pone.0260199

Maldonado, P., Nuno-Perez, A., Kirchner, J., Hammock, E. A. D., Gjorgjieva, J., & Lohmann, C. (2021). Oxytocin shapes spontaneous activity patterns in the developing visual cortex by activating somatostatin interneurons. *Current Biology*, *31*, 322-333. doi:https://doi.org/10.1016/j.cub.2020.10.028

Gnanadesikan GE, Hammock, E. A. D., Tecot SR, Carter CS, & MacLean EL. (2021). Specificity of plasma oxytocin immunoassays: A comparison of commercial assays and sample preparation techniques using oxytocin knockout and wildtype mice. *Psychoneuroendocrinology*. doi:10.1016/j.psyneuen.2021.105368

Day, K. R., Coleman, A., Greenwood, M., & Hammock, E. A. D. (2020). AVPR1A distribution in the whole C57BL/6J mouse neonate. *Scientific Reports*, *10*(14512). doi:https://doi.org/10.1038/s41598-020-71392-1

Vaidyanathan, R., Schaller, F., Muscatelli, F., & Hammock, E. A. D. (2020). Colocalization of Oxtr with Prader-Willi Syndrome transcripts in the trigeminal ganglion of neonatal mice. *Human Molecular Genetics*. doi:10.1093/hmg/ddaa094

Tabbaa, M., & Hammock, E. A. D. (2020). Orally administered oxytocin alters brain activation and behaviors of pre-weaning mice. *Hormones and Behavior*, *118*, 104613. doi:10.1016/j.yhbeh.2019.104613

Vaidyanathan, R., & Hammock, E. A. D. (2020). Oxytocin receptor gene loss influences expression of the oxytocin gene in C57BL/6j mice in a sex- and age-dependent manner. *Journal of Neuroendocrinology*, *32*(2), e12821. doi:10.1111/jne.12821

Newmaster, K. T., Nolan, Z. T., Chon, U., Vanselow, D. J., Weit, A. R., Tabbaa, M., Hidema, S., Nishimori, K., Hammock, E. A. D., & Kim, Y. (2020). Quantitative cellular-resolution map of the oxytocin receptor in postnatally developing mouse brains. *Nature Communications*, *11*(1), 1885. doi:10.1038/s41467-020-15659-1

Chu, C., Hammock, E. A. D., & Joiner, T. E. (2020). Unextracted plasma oxytocin levels decrease following in-laboratory social exclusion in young adults with a suicide attempt history. *Journal of Psychiatric Research*, *121*, 173-181. doi:10.1016/j.jpsychires.2019.11.015.

Jones, C., Opel, R., Kaiser, M. E., Chau, A. Q., Quintana, J., Nipper, M. A., Finn, D. A., Hammock, E. A. D., & Lim, M. (2019). Early-life sleep disruption increases parvalbumin in primary somatosensory cortex and impairs social bonding in prairie voles. *Science Advances*, *5*(1). doi:10.1126/sciadv.aav5188

Chu, C., Hom, M. A., Gallyer, A. J., Hammock, E. A. D., & Joiner, T. E. (2019). Insomnia predicts increased perceived burdensomeness and decreased desire for emotional support

following an in-laboratory social exclusion paradigm. *J Affect Disord*, *243*, 432-440. doi:10.1016/j.jad.2018.09.069

Greenwood, M. A., & Hammock, E. A. D. (2019). Oxytocin Receptor Binding Sites in the Periphery of the Neonatal Prairie Vole. *Frontiers in neuroscience*, *13*, 474. doi:doi: 10.3389/fnins.2019.00474

Greenwood, M., & Hammock, E. (2017). Oxytocin receptor binding sites in the periphery of the neonatal mouse. *PLOS ONE*, *12*(2), e0172904. doi:10.1371/journal.pone.0172904

Vaidyanathan, R., & Hammock, E. (2017). Oxytocin receptor dynamics in the brain across development and species. *Developmental Neurobiology*, *77*(2), 143-157. doi:doi: 10.1002/dneu.22403.

Hammock, E. A. D. (2015). Developmental perspectives on oxytocin and vasopressin. *Neuropsychopharmacology*, *40*(1), 24-42. doi:10.1038/npp.2014.120.

Roth, T. L., Raineki, C., Salstein, L., Perry, R., Sullivan-Wilson, T., Sloan, A., Lalji, B., Hammock, E. A. D., Wilson, D., Levitt, P., Okutani, F., Kaba, H., & Sullivan, R. M. (2013). Neurobiology of secure infant attachment and attachment despite adversity: A mouse model. *Genes, Brain, and Behavior*, *12*(7), 673-680. doi:10.1111/gbb.12067

Hammock, E. A. D., & Levitt, P. (2013). Oxytocin receptor ligand binding in embryonic tissue and postnatal brain development of the C57BL/6J mouse. *Frontiers in Behavioral Neuroscience*, *7*, 195. doi:10.3389/fnbeh.2013.00195

Hammock, E. A. D., Law, C. S., & Levitt, P. (2013). Vasopressin eliminates the expression of familiar odor bias in neonatal female mice through V1aR. *Hormones and Behavior*, *63*(2), 352-360. doi:10.1016/j.yhbeh.2012.12.006

Hammock, E. A. D., Veenstra-VanderWeele, J., Yan, Z., Kerr, T. M., Morris, M., Anderson, G., Carter, C. S., Cook, E., & Jacob, S. (2012). Examining autism spectrum disorders by biomarkers: example from the oxytocin and serotonin systems. *Journal of the American Academy of Child and Adolescent Psychiatry*, *51*(7), 712-721. doi:10.1016/j.jaac.2012.04.010

Hammock, E. A. D., & Levitt, P. (2012). Modulation of parvalbumin interneuron number by developmentally transient neocortical vasopressin receptor 1a (V1aR). *Neuroscience*, *222*, 20-28. doi:10.1016/j.neuroscience.2012.07.025

Campbell, D. B., Datta, D., Jones, S. T., Lee, E. B., Sutcliffe, J. S., Hammock, E. A. D., & Levitt, P. (2011). Association of oxytocin receptor (*OXTR*) gene variants with social phenotypes of Autism Spectrum Disorders. *Journal of Neurodevelopmental Disorders*, *3*(2), 101-112. doi:10.1007/s11689-010-9071-2

Hammock, E. A. D., & Levitt, P. (2011). Developmental expression mapping of a gene implicated in multiple neurodevelopmental disorders, A2bp1 (Fox1). *Developmental Neuroscience*, *33*, 64-74. doi:10.1159/000323732

Reeb-Sutherland, B. C., Fifer, W. P., Byrd, D. L., Hammock, E. A. D., Levitt, P., & Fox, N. A. (2011). One-month-old infants learn about the social world while they sleep. *Developmental Science*, *14*(5), 1134-1141. doi:10.1111/j.1467-7687.2011.01062.x

Ahern, T. H., Hammock, E. A. D., & Young, L. J. (2011). Parental division of labor, coordination, and the effects of family structure on parenting in monogamous prairie voles (*Microtus ochrogaster*). *Developmental Psychobiology*, *53*(2), 118-131. doi:10.1002/dev.20498

Hammock, E. A. D., Eagleson, K. L., Barlow, S., Earls, L., Miller III, D. M., & Levitt, P. (2010). Homologs of genes expressed in *Caenorhabditis elegans* GABAergic neurons are also found in the developing mouse forebrain. *Neural Development*, *5*, 32. doi:10.1186/1749-8104-5-32

Donaldson, Z. R., Bai, Y., Putnam, A., Kondrashov, F. A., Stoinski, T. L., Hammock, E. A. D., & Young, L. J. (2008). Evolution of a behavior-linked microsatellite-containing element in the 5' flanking region of the primate *AVPR1A* gene. *BMC Evolutionary Biology*, *8*, 180. doi:10.1186/1471-2148-8-180

Fondon, J., Hammock, E. A. D., Hannan, A. J., & King, D. G. (2008). Simple Sequence Repeats: Genetic modulators of brain function and Behavior. *Trends in Neurosciences*, *31*(7), 328-334. doi:10.1016/j.tins.2008.03.006

Young, L. J., & Hammock, E. A. D. (2007). On switches and knobs, microsatellites and monogamy. *Trends in Genetics*, *23*(5), 209-212. doi:10.1016/j.tig.2007.02.010

Hammock, E. A. D., & Young, L. J. (2006). Oxytocin, vasopressin and pair bonding: implications for autism. *Philosophical Transactions of the Royal Society B: Biological Sciences*, *361*(147), 2187-2198. doi:10.1098/rstb.2006.1939

Hammock, E. A. D., & Levitt, P. (2006). The discipline of neurobehavioral development: the emerging interface of processes that build circuits and skills. *Human Development*, *49*, 294-309. doi:10.1159/000095581

Young, L. J., Murphy-Young, A. Z., & Hammock, E. A. D. (2005). Anatomy and neurochemistry of the pair bond. *Journal of Comparative Neurology*, *493*, 51-57. doi:10.1002/cne.20771.

Hammock, E. A. D., Lim, M. M., Nair, H. P., & Young, L. J. (2005). Association of vasopressin 1a receptor levels with a regulatory microsatellite and behavior. *Genes, Brain and Behavior*, *4*, 289-301. doi:10.1111/j.1601-183X.2005.00119.x.

Hammock, E. A. D., & Young, L. J. (2005). Microsatellite instability generates diversity in brain and sociobehavioral traits. *Science*, *308*(5728), 1630-1634. doi:10.1126/science.1111427

Lim, M. M., Hammock, E. A. D., & Young, L. J. (2004). A method for acetylcholinesterase staining on brain sections previously processed for receptor autoradiography. *Biotechnic and Histochemistry*, *79*, 11-16. doi:10.1080/10520290410001671344

Hammock, E. A. D., & Young, L. J. (2004). Functional microsatellite polymorphism associated with divergent social structure in vole species. *Molecular Biology and Evolution*, *21*(6), 1057-1063. doi:10.1093/molbev/msh104

Lim, M. M., Hammock, E. A. D., & Young, L. J. (2004). The role of vasopressin in the genetic and neural regulation of monogamy. *Journal of Neuroendocrinology*, *16*(4), 325-332. doi:10.1111/j.0953-8194.2004.01162.x

Lim, M. M., Hammock, E. A. D., & Young, L. J. (2004). Vole species as an animal model for the evolution of social behavior: from genes to brain to behavior. *Acta Zoologica Sinica*, *50*(4), 479-489.

Hammock, E. A. D., & Young, L. J. (2002). Variation in the vasopressin V1a receptor promoter and expression: implications for inter- and intra-specific variation in social behaviour. *European Journal of Neuroscience*, *16*, 399-402. doi:10.1046/j.1460-9568.2002.02083.x.

Pilcher, D. L., Hammock, E. A., & Hopkins, W. D. (2001). Cerebral volumetric asymmetries in non-human primates: A magnetic resonance imaging study. *Laterality*, *6*(2), 165-179. doi:10.1080/713754406

Invited Book Chapters

Brown, J. S., & Hammock, E. A. D. (in press). Social processes in animals: Individual differences in affiliative capacity. In Robert D. Latzman, & Christopher J. Patrick (Eds.), *Neurobehavioral Individual Differences: A Transdisciplinary Approach To Advancing Clinical Science*. Springer Nature.

Hammock, E. A. D. (2023). Neuropeptides in mental health: CRF, AVP, and OXT. In Charlotte Markey, & Howard S. Friedman (Eds.), *Encyclopedia of Mental Health, 3rd Ed*. Elsevier.

Hammock, E. (2018). Oxytocin and vasopressin systems in the development of social behavior. In Oliver Schultheiss, & Pranjal Mehta (Eds.), *Routledge International Handbook of Social Neuroendocrinology*. Taylor & Francis; Oxon, UK.

Hammock, E. A. D. (2014). Neuropeptides in mental health: CRF, AVP, and OXT. In *Encyclopedia of Mental Health, 2nd Ed*. Elsevier.

Eagleson, K. L., Hammock, E. A. D., & Levitt, P. R. (2010). Interneuron Pathophysiologies: Paths to Neurodevelopmental Disorders. In Sarah Pallas (Ed.), *Developmental Plasticity of Inhibitory Circuitry*. Springer.

Hammock, E. A. D., & Young, L. J. (2006). Neurochemistry, neuroendocrinology and molecular neurobiology of affiliative behaviors. In Jeffrey D. Blaustein, & Abel Lajtha (Eds.), *Handbook of Neurochemistry and Molecular Neurobiology*. Germany: Springer.

Hammock, E. A. D., & Young, L. J. (2006). Neuropeptide systems and social behavior: Non-coding repeats as a genetic mechanism for rapid evolution of social behavior. In Leah A. Krubitzer, & Jon H. Kaas (Eds.), *Evolution of Nervous Systems*. Academic Press, Oxford.

Refereed Book Chapters

Hammock, E. (2017). Oxytocin and Plasticity of Social Behavior. In Moses V. Chao (Ed.), *The Oxford Handbook of Developmental Neural Plasticity*. Oxford University Press. Retrieved from http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780190635374.001.0001/oxfordhb-9780190635374-e-9

Invited Reviews

Hammock, E. A. D. (2009). BOOK REVIEW of Clonality: The Genetics, Ecology, and Evolution of Sexual Abstinence in Vertebrate Animals by J.C. Avise. *Integrative and Comparative Biology*, *49*(5), 609-610.

Presentations

Invited Presentations at Conferences

Hammock, E. A. D. (presented 2024, July). *Oxytocin in sensory-dependent social development*. Presentation at BAP2024, British Association of Psychopharmacology, Birmingham, England. (International)

Hammock, E. A. D. (presented 2024, May). *Oxytocin in sensory-dependent social development*. Presentation at WCNH, World Congress of Neurohypophyseal Hormones, Atlanta, GA. (International)

Vaidyanathan, R., & Hammock, E. A. D. (presented 2019, October). *Molecular anatomy of oxytocin receptor and MAGEL2 in the periphery of neonatal mice*. Presentation at 2019 PWS Research Symposium, Foundation for Prader-Willi Research, New Orleans, LA. (International)

Hammock, E. (presented 2018, October). *Does the mechanism of action of intranasal oxytocin in the neonate start in the periphery?* Presentation at 2018 PWS Research Symposium, Foundation for Prader-Willi Research, Las Vegas, NV. (International)

Refereed Presentations at Conferences

Tabbaa, M., Vaidyanathan, R., Moses, A., Day, K., Brown, J. S., Biggs, L., Forti, E. R., Fernandez, N., & Hammock, E. A. D. (accepted). *Exogenous Oxytocin Impacts Sensory-Dependent Development*. Presentation to be given at Neurocircuitry of Social Behavior, Keystone Symposia, Daejeon, South Korea. (International). (Cancelled due to COVID-19)

Ochoa, R., & Hammock, E. A. D. (presented 2024, October). *The role of oxytocin receptor in forced social interactions in juvenile mice*. Poster presentation at SfN 2024, Society for Neuroscience, Chicago, IL. (International)

Gnanadesikan, G. E., Hammock, E. A. D., Tecot, S. R., Lewis, R., & MacLean, E. L. (presented 2021). *Developing a new extraction method to minimize interference in immunoassay of urinary oxytocin*. Poster presentation at Virtual Conference, International Society for Wildlife Endocrinology. (International)

Day, K., Smith, C., & Hammock, E. A. D. (presented 2021). *Orofacial stimulation in neonatal mice*. Poster presentation at the meeting of Society for Behavioral Neuroendocrinology. (International)

Tabbaa, M., Moses, A., & Hammock, E. A. D. (presented 2021). *Oxytocin receptors in Advillin-expressing cells are necessary for typical social behavior in adult male and female mice*. Poster presentation at S4SN Virtual Conference- February, Society for Social Neuroscience, Virtual. (International)

Brown, J., & Hammock, E. A. D. (presented 2021). *Oxytocin/Oxytocin receptor modulation of social odor investigation in juvenile mice*. Poster presentation at the meeting of Society for Behavioral Neuroendocrinology. (International)

Fernandez, N., Forti, E., & Hammock, E. A. D. (presented 2021). *Oxytocin-paired anogenital stimulation in neonatal mice*. Poster presentation at Neuroscience 2021, Society for Neuroscience. (International)

Day, K., Smith, C., & Hammock, E. A. D. (presented 2021). *Oxytocin-paired orofacial stimulation in neonatal mice*. Poster presentation at the meeting of Society for Social Neuroscience. (International)

Day, K. R., Smith, C., & Hammock, E. A. D. (presented 2021). *Oxytocin-paired orofacial stimulation in neonatal mice*. Poster presentation at Neuroscience 2021, Society for Neuroscience. (International)

Biggs, L., & Hammock, E. A. D. (presented 2019). *Electrophysiological activity of oxytocin receptor expressing neurons in the mouse endopiriform nucleus*. Poster presentation at Neuroscience 2019, Society for Neuroscience, Chicago, IL. (International)

Makhanova, A., McNulty, J. K., Eckel, L. A., Nikonova, L., Bartz, J. A., & Hammock, E. A. D. (presented 2019). *Genetic Variation in Oxytocin and Vasopressin Systems: Associations with Relationship Processes in Newlyweds*. Presentation at Annual Meeting, Society for Personality and Social Psychology (SPSP), Portland, OR. (National)

Makhanova, A., McNulty, J. K., Eckel, L. A., Nikonova, L., Bartz, J. A., & Hammock, E. A. D. (presented 2019). *Genetic Variation in the Oxytocin and Vasopressin Systems: Insights from a Newlywed Sample*. Presentation at Connecting Minds in Social Neuroendocrinology Preconference, Human Behavior and Evolution Society (HBES), Boston, MA. (National)

Bertoni, A., Gaillard, S., Tyzio, R., Diabira, D., Vaidyanathan, R., Matarazzo, V., Hammock, E. A. D., Chini, B., Gaiarsa, Jean-Luc, & Muscatelli, F. (presented 2019). *How does an oxytocin treatment in early life impact social behavior and hippocampal alterations in Magel2-deficient mice?* Presentation at 23rd ESN Biennial Meeting Milano, ESN, Milan, Italy. (International)

Tabbaa, M., & Hammock, E. A. D. (presented 2019). *Mice prefer oxytocin-containing social stimuli*. Poster presentation at Neuroscience 2019, Society for Social Neuroscience, Chicago, IL. (International)

Tabbaa, M., & Hammock, E. A. D. (presented 2019). *Mice prefer oxytocin-containing social stimuli*. Poster presentation at Neuroscience 2019, Society for Neuroscience, Chicago, IL. (International)

Greenwood, M. A., & Hammock, E. A. D. (presented 2019). *Modulation of pupillary behavior by oxytocin in mice*. Poster presentation at Neuroscience 2019, Society for Neuroscience, Chicago, IL. (International)

Vaidyanathan, R., & Hammock, E. A. D. (presented 2019). *Molecular anatomy of oxytocin receptors in peripheral sensory ganglia of neonatal mice*. Poster presentation at Neuroscience 2019, Society for Neuroscience, Chicago, IL. (International)

Vaidyanathan, R., & Hammock, E. A. D. (presented 2019). *Molecular anatomy of oxytocin receptors in peripheral sensory ganglia of neonatal mice*. Poster presentation at Neuroscience 2019, Society for Social Neuroscience, Chicago, IL. (International)

Maldonado, P. P., Nuno-Perez, A., Kirchner, J., Hammock, E. A. D., Gjorgjieva, J., & Lohmann, C. (presented 2019). *Oxytocin modulates spontaneous activity patters in the developing sensory cortex*. Poster presentation at Neuroscience 2019, Society for Neuroscience, Chicago, IL. (International)

Greenwood, Maria, A., & Hammock, E. A. D. (presented 2019). *Oxytocin receptor ligand binding in the periphery of the neonatal prairie vole*. Poster presentation at Vole Meeting 2019, Vole Meeting, Austin, TX. (International)

Day, K., Greenwood, M. A., & Hammock, E. A. D. (presented 2019). *Peripheral vasopressin 1A receptors in neonatal mice*. Poster presentation at Neuroscience 2019, Society for Neuroscience, Chicago, IL. (International)

Newmaster, K. T., Nolan, Z., Chon, U., Tabbaa, M., Hidema, S., Nishimori, K., Hammock, E. A. D., & Kim, Y. (presented 2019). *Quantitative brain wide map of the oxytocin receptor in postnatally developing mouse brains*. Poster presentation at Neuroscience 2019, Society for Neuroscience, Chicago, IL. (International)

Guidubaldi, J., Greenwood, M. A., & Hammock, E. A. D. (presented 2019). *The effects of ocular atropine administration on c-Fos activation in oxytocin wild-type and knockout mice*. Poster presentation at Neuroscience 2019, Society for Neuroscience, Chicago, IL. (International)

Nolan, Z., Hidema, S., Nishimori, K., Tabbaa, M., Hammock, E., & Kim, Y. (presented 2018). *Brain-wide mapping of the developmentally regulated expression of the oxytocin receptor in mice*. Poster presentation at Neuroscience 2018, Society for Neuroscience, San Diego, CA. (International)

Lim, M., Chau, A., Cocking, D., Quintana, J. R., Hammock, E., & Jones, C. (presented 2018). *Early life sleep disruption increases cortical parvalbumin and impairs social and behavioral development in prairie voles*. Poster presentation at Neuroscience 2018, Society for Neuroscience, San Diego. (International)

Biggs, L., & Hammock, E. (presented 2018). *Electrophysiological characteristics of oxytocin receptor expressing neurons in endopiriform nucleus across development of mice*. Poster presentation at ISDP 2018, International Society for Developmental Psychobiology, San Diego, CA. (International)

Tabbaa, M., & Hammock, E. (presented 2018). *Oral oxytocin alters brain activation and behaviors of developing mice in a dose, age, and sex dependent manner*. Poster presentation at Neuroscience 2018, Society for Neuroscience, San Diego, CA. (International)

Tabbaa, M., & Hammock, E. (presented 2018). *Oral oxytocin alters brain activation and behaviors of developing mice in a dose, age, and sex dependent manner*. Poster presentation at ISDP 2018, International Society for Developmental Psychobiology, San Diego, CA. (International)

Greenwood, M., & Hammock, E. (presented 2018). *Oxytocin receptor expression in the periphery of neonatal rats and prairie voles*. Poster presentation at ISDP 2018, International Society for Developmental Psychobiology, San Diego, CA. (International)

Greenwood, M., & Hammock, E. (presented 2018). *Oxytocin receptor expression in the periphery of neonatal rats and prairie voles*. Poster presentation at Neuroscience 2018, Society for Neuroscience, San Diego, CA. (International)

Vaidyanathan, R., & Hammock, E. (presented 2018). *Trigeminal ganglia correlates of hypothalamic oxytocin production in neonatal mice*. Poster presentation at ISDP 2018, International Society for Developmental Psychobiology, San Diego. (International)

Vaidyanathan, R., & Hammock, E. (presented 2018). *Trigeminal ganglia correlates of hypothalamic oxytocin production in neonatal mice*. Poster presentation at Neuroscience 2018, Society for Neuroscience, San Diego. (International)

Tabbaa, M., & Hammock, E. (presented 2017). *Neural and behavioral response to oral oxytocin in pre-weaning mice*. Poster presentation at the meeting of Society for Neuroscience, Washington, D.C. (International)

Tabbaa, M., & Hammock, E. (presented 2017). *Neural and behavioral response to oral oxytocin in pre-weaning mice*. Poster presentation at the meeting of Society for Social Neuroscience, Washington, D.C. (International)

Greenwood, M. A., & Hammock, E. (presented 2017). *Peripheral expression of oxytocin receptors: A cross-species comparison*. Poster presentation at the meeting of Society for Neuroscience, Washington, D.C. (International)

Greenwood, M. A., & Hammock, E. (presented 2017). *Peripheral expression of oxytocin receptors: A cross-species comparison*. Poster presentation at the meeting of Society for Social Neuroscience, Washington, D.C. (International)

Vaidyanathan, R., & Hammock, E. (presented 2017). *Postnatal oxytocin production in mice*. Poster presentation at the meeting of Society for Neuroscience, Washington, D.C. (International)

Vaidyanathan, R., & Hammock, E. (presented 2017). *Postnatal oxytocin production in mice*. Poster presentation at the meeting of Society for Social Neuroscience, Washington, D.C. (International)

Hammock, E., Jones, C., Quintana, J., Champaigne, R., Opel, R., Cocking, D., Chau, A., Toro, J., & Lim, M. (presented 2016, November). *Early life sleep fragmentation impairs social behavior and affects parvalbumin expression in adult prairie voles*. Poster presentation at the meeting of Society for Social Neuroscience, San Diego, CA. (International)

Lim, M., Hammock, E., Quintana, J., Champaigne, R., Opel, R., Cocking, D., & Driessen, R. (presented 2016, November). *Effect of developmental sleep fragmentation on social behavior and parvalbumin expression in prairie voles*. Poster presentation at the meeting of Society for Neuroscience, San Diego, CA. (International)

Tabbaa, M., & Hammock, E. (presented 2016, November). *Neural activation of oxytocin receptor expressing circuits during pre-weaning development*. Poster presentation at the meeting of Society for Neuroscience, San Diego, CA. (International)

Tabbaa, M., & Hammock, E. (presented 2016, November). *Neural activation of oxytocin receptor expressing circuits during pre-weaning development*. Poster presentation at the meeting of Society for Social Neuroscience, San Diego, CA. (International)

Greenwood, M., & Hammock, E. (presented 2016, November). *Oxytocin receptor in peripheral tissues of the neonatal mouse*. Poster presentation at the meeting of Society for Neuroscience, San Diego, CA. (International)

Greenwood, M., & Hammock, E. (presented 2016, November). *Oxytocin receptor in peripheral tissues of the neonatal mouse*. Poster presentation at the meeting of Society for Social Neuroscience, San Diego, CA. (International)

Vaidyanathan, R., & Hammock, E. (presented 2016, November). *Postnatal oxytocin production in infant mice*. Poster presentation at the meeting of Society for Neuroscience, San Diego, CA. (International)

Vaidyanathan, R., & Hammock, E. (presented 2016, November). *Postnatal oxytocin production in infant mice*. Poster presentation at the meeting of Society for Social Neuroscience, San Diego, CA. (International)

Chu, C., Hammock, E., & Joiner, T. (presented 2016, November). *The role of oxytocin in social exclusion and suicidal behavior*. Poster presentation at the meeting of Society for Social Neuroscience, San Diego, CA. (International)

Hammock, E., Cocking, D., & Lim, M. (presented 2015, October). *Early post-natal sleep fragmentation prevents normal social development in male prairie voles*. Poster presentation at Annual Meeting, Society for Social Neuroscience, Chicago, IL. (International)

Hammock, E., Cocking, D., & Lim, M. (presented 2015, October). *Early post-natal sleep fragmentation prevents normal social development in male prairie voles*. Poster presentation at Annual Meeting, Society for Neuroscience, Chicago, IL. (International)

Vaidyanathan, R., Carlton, C., Kidwai, E., Merritt, T., Sakinah, I., Quintana, J., Hoffman, G., & Hammock, E. (presented 2015, October). *Oxytocin receptor in the periphery of the perinatal mouse*. Poster presentation at Annual Meeting, Society for Social Neuroscience, Chicago, IL. (International)

Vaidyanathan, R., Carlton, C., Kidwai, E., Merritt, T., Sakinah, I., Quintana, J., Hoffman, G., & Hammock, E. (presented 2015, October). *Oxytocin receptor in the periphery of the perinatal mouse*. Poster presentation at Annual Meeting, Society for Neuroscience, Chicago, IL. (International)

Hammock, E. (presented 2015, January). *Vasopressin and oxytocin in social brain development*. Presentation at Winter Conference on Brain Research, WCBR, Big Sky, MT. (International)

Hammock, E. A. D. (presented 2012). *Atypical Early Social Experience Programs the Serotonergic Raphe and Anxiety-like Behavior*. Presentation at Gatlinburg Conference on Research and Theory in Intellectual and Developmental Disabilities, Vanderbilt Kennedy Center, Annapolis, MD. (National)

Hammock, E. A. D., Law, C. S., & Levitt, P. (presented 2012). *Vasopressin eliminates orienting bias in female neonatal C57BL/6J mice through V1aR*. Poster presentation at the meeting of Society for Neuroscience, New Orleans, LA. (International)

Salstein, L., Moriceau, S., Roth, T. L., Hammock, E. A. D., Levitt, P., Okutani, F., Kaba, H., & Sullivan, R. (presented 2010). *A mouse model to understand interactions between biological vulnerabilities and adverse early experiences on infant attachment behavior*.

Poster presentation at the meeting of Society for Neuroscience, San Diego, CA. (International)

Hammock, E. A. D., & Levitt, P. (presented 2010). *A role for vasopressin 1a receptor in the maturation of the cerebral cortex*. Poster presentation at the meeting of Society for Neuroscience, San Diego, CA. (International)

Reeb-Sutherland, B. C., Suway, J. G., Hammock, E. A. D., Levitt, P., & Fox, N. A. (presented 2010). *Individual differences in early associative learning predict behavioral and neural correlates of human infant social engagement during the first year of life*. Presentation at the meeting of International Society for Developmental Psychobiology, San Diego, CA. (International)

Hammock, E. A. D., Barlow, S., Eagleson, K. L., Earls, L., Watson, J., Miller III, D. M., & Levitt, P. (presented 2008). *Gene expression profiling of C. elegans GABAergic neurons reveals conserved transcripts expressed in mouse telencephalic proliferative zones*. Poster presentation at the meeting of Society for Neuroscience, Washington, D.C. (International)

Hammock, E. A. D., Eagleson, K. L., & Levitt, P. (presented 2007). *Decreased oxytocin immunoreactivity in adult male uPAR knockout mice*. Poster presentation at the meeting of Society for Neuroscience, San Diego, CA. (International)

Donaldson, Z. R., Bai, Y., Kondrashov, F. A., Stoinski, T. L., Hammock, E. A. D., Hopkins, W. D., & Young, L. J. (presented 2007). *Evolution of the primate vasopressin V1a receptor 5' flanking region*. Poster presentation at the meeting of Society for Neuroscience, San Diego, CA. (International)

Lim, M. M., Liu, Y., Hammock, E. A. D., Nair, H. P., Ryabinin, A. E., Wang, Z., & Young, L. J. (presented 2005). *CRF1 and CRF2 receptors in the nucleus accumbens modulate social attachment*. Poster presentation at the meeting of Society for Neuroscience, Washington, D.C. (International)

Ak, P., Donaldson, Z. R., Hammock, E. A. D., Benham, C. J., & Young, L. J. (presented 2005). *DNA duplex destabilization at polymorphic microsatellite regions of the prairie vole avpr1a gene may underlie variation in gene expression and social behavior*. Poster presentation at the meeting of Society for Neuroscience, Washington, D.C. (International)

Hammock, E. A. D., Dharamsi, L. M., Ak, P., Benham, C. J., & Young, L. J. (presented 2005). *Microsatellite variation in primate avpr1a: implications for the evolution of human social behavior*. Poster presentation at the meeting of Society for Neuroscience, Washington, D.C. (International)

Hammock, E. A. D., & Young, L. J. (presented 2005). *Normal variation in behavioral traits predicted by a regulatory microsatellite in the promoter of the vasopressin 1a receptor*

gene in voles. Poster presentation at the meeting of Society of Biological Psychiatry, Atlanta, GA. (National)

Hammock, E. A. D., Lim, M. M., Jones, S. V., Ressler, K. J., & Young, L. J. (presented 2004). *Functional microsatellite polymorphism in vole vasopressin receptor gene predicts brain and behavior phenotypes*. Poster presentation at the meeting of Federation of European Neuroscience Societies, Lisbon, Portugal. (International)

Hammock, E. A. D., & Young, L. J. (presented 2004). *Genetic contribution to variation in reward mechanisms underlying pair bond formation in voles*. Poster presentation at Frontiers in Addiction Biology: Genomics and Beyond, Vanderbilt University, Nashville, TN. (Local)

Hammock, E. A. D., Lim, M. M., & Young, L. J. (presented 2004). *Microsatellite polymorphism predicts vasopressin 1a receptor gene expression and behavior in prairie voles*. Poster presentation at the meeting of Society for Neuroscience, San Diego, CA. (International)

Hammock, E. A. D., Lim, M. M., Jones, S. V., Ressler, K. J., & Young, L. J. (presented 2004). *Natural variation in vasopressin V1aR gene structure contributes to variation in sensory processing of social odors*. Poster presentation at Life and Death in the brain, Hunter College, CUNY, New York, NY. (Local)

Hammock, E. A. D., Lim, M. M., Jones, S. V., Ressler, K. J., & Young, L. J. (presented 2004). *Natural variation in vasopressin V1aR gene structure contributes to variation in sensory processing of social odors*. Poster presentation at Gordon Research Conference on Genes and Behavior, Genes & Behavior GRS, Ventura, CA. (International)

Lim, M. M., Hammock, E. A. D., Nair, H. P., Harvey, S., Vandenbergh, J. G., & Young, L. J. (presented 2004). *Patterns of CRF receptor distribution in the nucleus accumbens are associated with monogamous social organization across vole species*. Poster presentation at the meeting of Society for Neuroscience, San Diego, CA. (International)

Hammock, E. A. D., & Young, L. J. (presented 2004). *Vasopressin V1a Receptor promoter non-conservation across species: implications for species-typical behaviors*. Poster presentation at Neural Control of Behavior, UCLA, Los Angeles, CA. (Local)

Hammock, E. A. D., Lim, M. M., Nair, H. P., & Young, L. J. (presented 2003). *Functional variation in vasopressin 1a receptor gene structure within and between vole species predicts behavior*. Poster presentation at the meeting of International Behavioral and Neural Genetics Society, New Orleans, LA. (International)

Hammock, E. A. D., Lim, M. M., Nair, H. P., & Young, L. J. (presented 2003). *Genetic control of variability in brain vasopressin V1a receptor expression and behavior in prairie voles*. Poster presentation at the meeting of Society for Neuroscience, New Orleans, LA. (International)

Lim, M. M., Nair, H. P., Hammock, E. A. D., & Young, L. J. (presented 2003). *Species differences in CRFR1 and CRFR2 in prairie and meadow voles predict individual differences in social behavior*. Poster presentation at the meeting of Society for Neuroscience, New Orleans, LA. (International)

Hammock, E. A. D., Phelps, S. M., Sharer, C. A., Insel, T. R., & Young, L. J. (presented 2001). *Individual differences in neuropeptide receptor expression and promoter structure in wild prairie voles*. Poster presentation at the meeting of Society for Neuroscience, San Diego, CA. (International)

Hammock, E. A. D., Chen, R. Z., Jaenisch, R., & Young, L. J. (presented 2001). *Normal neuropeptide receptor expression in an animal model of Rett syndrome*. Poster presentation at International Meeting for Autism Research, INSAR, San Diego, CA. (International)

Invited Workshops

Hammock, E. (2010, June). *Genes, Cognition, and Social Behavior*. Workshop delivered at National Science Foundation, Washington, D.C. (National)

Invited Lectures and Readings of Original Work

Hammock, E. A. D. (2024, April). *Oxytocin in sensory-dependent social development*. Delivered at Yale University, New Haven, CT. (Local)

Hammock, E. A. D. (2022, February). *Building social brains: sensory experience and oxytocin*. Delivered at Kent State University, virtual. (Local)

Hammock, E. A. D. (2021, January). *Oxytocin in experience-dependent development*. Delivered at Louisiana State University, virtual. (Local)

Hammock, E. A. D. (2020, October). *Oxytocin in experience-dependent development*. Delivered at Florida Atlantic University, virtual. (Local)

Hammock, E. A. D. (2020, February). *Developmental roles for oxytocin in sensory systems*. Delivered at Utah State University. (Local)

Hammock, E. A. D. (2020, February). *Developmental roles for oxytocin in sensory systems*. Delivered at University at Buffalo. (Local)

Hammock, E. (2019, May). *New roles for oxytocin in sensory systems*. Delivered at FSU College of Medicine. (Local)

Hammock, E. (2016, February). *Oxytocin in Social Brain Development*. Delivered at FSU College of Medicine. (Local)

Hammock, E. (2015, May). *Vasopressin and Oxytocin in Social Behavior Development*. Delivered at Florida State University College of Medicine, Tallahassee, FL. (Local)

Hammock, E. (2015, April). *Vasopressin and Oxytocin in Social Behavior Development*. Delivered at Florida State University Neuroscience Colloquium, Tallahassee, FL. (Local)

Hammock, E. A. D. (2014, March). *Testing animal models of human disorders: Oh assay can you see?* Delivered at VKC Participant Recruitment and Assessment Core Training Series, Vanderbilt University. (Local)

Hammock, E. A. D. (2013, May). *Oxytocin in behavioral development*. Delivered at Pediatric Endocrinology Fellows Research Conference, Vanderbilt University, Nashville, TN. (Local)

Hammock, E. A. D. (2013, February). *Neurobiology of developing social expertise: a role for vasopressin*. Delivered at Vanderbilt University Psychology Seminar. (Local)

Hammock, E. A. D. (2012, December). *Neurobiology of developing social expertise: a role for vasopressin*. Delivered at University of Tennessee Health Science Center Pharmacology Seminar. (Local)

Hammock, E. A. D. (2012, November). *No milk for you: Early weaning in mice induces long term changes in anxiety-like behavior and the serotonin system*. Delivered at Conte Center Symposium, Vanderbilt University. (Local)

Hammock, E. A. D. (2012, October). *Behavioral aspects of vasopressin*. Delivered at Pediatric Endocrinology Fellows Research Conference, Vanderbilt University, Nashville, TN. (Local)

Hammock, E. A. D. (2012, August). *Genetic and environmental risk in behavioral development*. Delivered at Pediatric Endocrinology Fellows Research Conference, Vanderbilt University, Nashville, TN. (Local)

Hammock, E. A. D. (2012, May). *Early life experience programs the serotonin system*. Delivered at Pediatrics Research Retreat, Vanderbilt University. (Local)

Hammock, E. A. D. (2012, January). *Genetic and Neural Mechanisms of Social Behavior Development: Translational Neuroethology*. Delivered at Center for Human Genetics Research, Vanderbilt University, Nashville, TN. (Local)

Hammock, E. A. D. (2011, March). *Neural Mechanisms of Social Behavior Development*. Delivered at Pediatrics Research Conference Series, Vanderbilt University, Nashville, TN. (Local)

Hammock, E. A. D. (2009, April). *DNA Instability and Individual Differences in Brain and Behavior*. Delivered at University of Washington Genome Sciences 2009 Symposium on Genes and Behavior, Seattle, WA. (National)

Hammock, E. A. D. (2008, May). *DNA Instability and Individual Differences in Brain and Behavior*. Delivered at Department of Biological Sciences Seminar Series, Vanderbilt University. (Local)

Hammock, E. A. D. (2007, November). *Microsatellite Instability and Individual Differences in Brain and Behavior*. Delivered at International Society for Developmental Psychobiology, San Diego, CA. (International)

Hammock, E. A. D. (2006, March). *Neuropeptides and Social Behavior*. Delivered at University of Oklahoma. (Local)

Hammock, E. A. D. (2006, February). *Genetics and Monogamy of Voles*. Delivered at Gordon Research Conference on Genes and Behavior, Ventura, CA. (International)

Hammock, E. A. D. (2006, January). *Repeat DNA and Social Behavior: The Vasopressin 1a Receptor*. Delivered at Twenty-seventh annual Winter Neuropeptide Conference, Breckenridge, CO. (International)

Hammock, E. A. D. (2005, October). *Junk DNA and the Evolution of Social Behavior*. Delivered at German Zoological Society, Bayreuth, Germany. (International)

Hammock, E. A. D. (2005, September). *Microsatellite Instability and Individual Differences in Brain and Behavior*. Delivered at International Society for Psychoneuroendocrinology, Montreal, Canada. (International)

Hammock, E. A. D. (2005, March). *Junk DNA and the Evolution of Social Behavior*. Delivered at Frontiers in Neuroscience lecture series, Emory University, Atlanta, GA. (Local)

Hammock, E. A. D. (2004, April). *Functional variation in vasopressin 1a receptor gene structure between and within vole species predicts brain and behavior phenotypes*. Delivered at Atlanta Chapter Society for Neuroscience. (Local)

Hammock, E. A. D. (2004, January). *Functional variation in vasopressin 1a receptor gene structure between and within vole species predicts brain and behavior phenotypes*. Delivered at Keck Center Symposium, North Carolina State University, Raleigh, NC. (Local)

Hammock, E. A. D. (2003, November). *Functional variation in vasopressin 1a receptor gene structure within and between vole species predicts behavior*. Delivered at International Behavioral And Neural Genetics Society Symposium, New Orleans, LA. (International)

Hammock, E. A. D. (2003, April). *Variability in gene structure and expression: implications for behavior*. Delivered at Center for Behavioral Neuroscience Symposium, Atlanta, GA. (Local)

Contracts and Grants

Contracts and Grants Funded

Hammock, E. A. D. (May 2024–May 2025). *Prader-Willi Syndrome Etiology and Therapeutics*. Funded by FSU IPRD. Total award $12,500.

Reyes, Elena (Co-PI), Rosado, Javier I (Co-PI), Killian, Michael (Co-PI), Ye, Ming (Co-PI), Abbott, Laurie Lynn (Co-PI), Schwartz, Joseph Allan (Co-PI), Bahorski, Jessica (Co-PI), Uejio, Christopher K (Co-PI), Hammock, Elizabeth Anne Dunn (Co-PI), Holmes, Christopher D (Co-PI), Stanwood, Gregg (PI), Graham, Devon Lee (Co-PI), He, Zhe (Co-PI), Hickner, Robert (Co-PI), & Nagpal, Ravinder Kumar (Co-PI). (Sep 2023–Aug 2027). *The Bioecological Center for Rural Children's Health (BeRCH)*. Funded by Environmental Protection Agency. (84063201). Total award $1,900,000.

Fadool, Debra A (Co-PI), Lee, Choogon (Co-PI), Spector, Alan C (Co-PI), Williams, Diana L (Co-PI), Delp, Michael D (Co-PI), Hammock, Elizabeth Anne Dunn (Co-PI), Delp, Judy Muller (Co-PI), Gordon, Bradley S (Co-PI), Singh, Prashant (Co-PI), Hennigar, Stephen R (Co-PI), Parvatiyar, Michelle Anne Stegemeyer (Co-PI), La Favor, Justin D (Co-PI), Storace, Douglas A (Co-PI), & Steiner, Jennifer (PI). (Jan 2020–Apr 2020). *EIEG:Purchase of EchoMRI to Assess Body Composition in Mice, Rats and Tissue Specimens*. Funded by FSU CRC. (None). Total award $70,000.

Hammock, Elizabeth Anne Dunn (PI). (Sep 2019–Aug 2021). *Role of Sexually Dependent Oxytocin Receptor Expressing Neurons in the Preoptic Area*. Funded by Louisiana State University. (PO-0000129512). Total award $35,468.

Schmidt, Norman B (Co-PI), Maner, Jon K (Co-PI), Hammock, Elizabeth Anne Dunn (Co-PI), & Winnicki, Brittany (PI). (Apr 2019–Mar 2021). *A Multi-Method Investigation of Mechanisms of Attachment in Hoarding Disorder*. Funded by National Institute of Mental Health. (F31MH118874). Total award $74,150.

Hammock, Elizabeth Anne Dunn (PI). (Jan 2018–Oct 2023). *Neural Mechanisms Of Infant Attachment*. Funded by National Institutes of Health. (R01MH114994). Total award $1,875,632.

Hammock, E. (2018–2019). *"Neural mechanisms of mammalian social imprinting"*. Funded by The Good Nature Institute. Total award $20,000.

Hammock, Elizabeth Anne Dunn (PI). (Dec 2017–Nov 2019). *Neural Mechanisms of Oxytocin-enhanced Infant Feeding and Social Behavior Development*. Funded by Foundation for Prader-Willi Research. (NONE). Total award $108,000.

Hammock, E. (2017–2018). *"Neural mechanisms of mammalian social imprinting"*. Funded by The Good Nature Institute. Total award $20,000.

Hammock, E. (2016–2017). *"Electronic Laboratory Notebooks in Behavioral Neuroscience"*. Funded by UROP, FSU. Total award $1,000.

Hammock, E. (2016–2017). *"Neural mechanisms of mammalian social imprinting"*. Funded by The Good Nature Institute. Total award $20,000.

Hammock, Elizabeth Anne Dunn (PI). (May 2015–Aug 2015). *FYAP: Neural Mechanisms of Social Support in Development*. Funded by FSU CRC. (None). Total award $20,000.

Hammock, E., & Johnson-Dubytz, K. (2015–2016). *"3D printing in a Behavioral Neuroscience Laboratory"*. Funded by UROP, FSU. Total award $500.

Hammock, E. A. D. (Nov 2012–Oct 2013). *"Oxytocin and multisensory integration in the neonate"*. Funded by Hobbs Discovery Grant, Vanderbilt Kennedy Center. Total award $30,000.

Hammock, E. A. D. (Jul 2011–Jun 2013). *"Neurodevelopmental oxytocin and emotional resilience"*. Funded by NARSAD: The Brain and Behavior Research Foundation. Total award $60,000.

Hammock, E. A. D. (2010–2010). *"Mechanisms of developmental programming of the serotonergic system by life experience"*. Funded by Sylvio O. Conte Center, Vanderbilt University. Total award $20,000.

Pilot grant.

Hammock, E. A. D. (Jul 2009–Aug 2012). *"Neurodevelopmental mechanisms of social behavior"*. Funded by National Institute of Health. (MH080759). Total award $324,424.

sub-contract PI, 92 percent.

Hammock, E. A. D. (Jun 2005–Jun 2006). *"Evolution of Gene Structure and Social Behavior in Primates"*. Funded by Center for Behavioral Neuroscience Venture Grant. Total award $30,000.

Postdoctoral Supervision

Biggs, L. (Dec 2017–May 2023).

Service

Florida State University

FSU University Service

Member, Animal Care and Use Committee (2023–present).

FSU Department Service

Member, Chair Selection Committee (2024–present).

Member, Animal Neuroscience Faculty Search Committee (2023–present).

Member, Graduate Studies Committee (2022–present).

Member, Faculty Development Committee (2021–2023).

Member, Developmental Human Neuroscience Faculty Search Committee (2022–2023).

Member, Undergraduate Studies Committee (2020–2022).

Outside Area Member, Social Area Faculty Search Committee (2021–2022).

Member, Undergraduate Studies Committee (2017–2019).

Outside Area Member, Social Area Faculty Search Committee (2018).

Member, The Stan and Paula Warmath Endowment for Distinguished Service to the Psychology Department Committee (2016–2018).

Chair, Graduate Research Day Committee (2016–2017).

Member, Graduate Research Day Committee (2014–2016).

Member, Library Committee (2014–2016).

FSU Program Service

Member, Neuroscience Graduate Studies Committee (2022–present).

Member, Bylaws committee, CTP training program (2019–present).

Faculty Advisor, Neuroscience Graduate Student Association (2018–present).

Chair, Neuroscience Program Publicity Committee (2018–present).

Speaker Host, Neuroscience Colloquium Series (2016–present).

Member, QER subcommittee (2023–2024).

Member, Grad Made Good Award Committee (2023).

Member, Diversity and Belonging Task Force (2020–2023).

Member, Beidler Award Committee (2016–2018).

Member, Neuroscience Graduate Program Recruiting Committee (2014–2015).

The Profession

Editorial Board Membership(s)

Hormones and Behavior (2015–present).

Guest Reviewer for Refereed Journals

Neurotoxicology and Teratology (2024–present).
Aging Brain (2023–present).
Neuropeptides (2023–present).
NPJ Science of Learning (2023–present).
Brain Structure and Function (2022–present).
eNeuro (2022–present).
Neuropharmacology (2022–present).
Comprehensive Psychoneuroendocrinology (2021–present).
Neuropsychopharmacology (2020–present).
Nature Communications (2019–present).
PLoS ONE (2019–present).
Proceedings of the Royal Society B: Biological Sciences (2019–present).
Environmental Epigenetics (2018–present).
Science Advances (2018–present).
ACS Chemical Neuroscience (2017–present).
Developmental Neurobiology (2016–present).
Early Human Development (2016–present).
Scientific Reports (2016–present).
Social Neuroscience (2016–present).
Autism Research (2015–present).

Brain Research (2015–present).
Journal of Ethology (2015–present).
Journal of Neuroendocrinology (2015–present).
Psychoneuroendocrinology (2015–present).
Biological Psychiatry (2014–present).
European Psychiatry (2014–present).
Neuroscience (2014–present).
Neuroscience and Biobehavioral Reviews (2014–present).
Physiology and Behavior (2014–present).
Translational Psychiatry (2014–present).
Behavioral Neuroscience (2013–present).
Behaviour (2013–present).
Behavioral Ecology and Sociobiology (2012–present).
Cerebral Cortex (2012–present).
Frontiers in Neuroscience (2012–present).
Journal of Autism and Developmental Disorders (2012–present).
Journal of Neuroscience (2012–present).
Developmental Neuroscience (2011–present).
Behavioral Brain Research (2008–present).
Child Development (2008–present).
Hormones and Behavior (2008–present).
Proceedings of the National Academy of Sciences (2008–present).
Genes, Brain, and Behavior (2007–present).
Molecular Psychiatry (2007–present).
Trends in Genetics (2006–present).

Reviewer or Panelist for Grant Applications

Agence Nationale de la Recherche (ANR, fr: National Agency for Research) (2019–present).
Foundation for Prader-Willi Research (2017–present).
Israel Science Foundation (2012–present).
National Institutes of Health; NIMH ad hoc reviewer (2024).
National Institutes of Health; NIMH ad hoc reviewer (2023).
National Science Foundation (2023).
National Institutes of Health; NIMH ad hoc reviewer (2022).
National Institutes of Health; NICHD ad hoc reviewer (2021).
National Institutes of Health; NIMH ad hoc reviewer (2021).
National Science Foundation (2021).
National Science Foundation (2020).
National Institutes of Health; ZRG1 BBBP-T (57) R - PAR Panel: Human-Animal Interaction Research (2018–2019).
DIP - German-Israeli Project Cooperation - Research Projects (2017).
Netherlands Organisation for Scientific Research (2016).
National Science Foundation (2010–2011).

Service to Professional Associations

Treasurer, Society for Social Neuroscience (2023–present).
Member Board of Directors, Society for Social Neuroscience (2019–present).
Chapter Representative, Local Chapter, Society for Neuroscience (2018–present).
Award Selection Committee Chair, Society for Social Neuroscience (2021).
Member, Trainee Professional Development Awards Selection Committee, Society for Neuroscience (2018–2020).
Treasurer, Local Chapter, Society for Neuroscience (2015–2018).

Additional Service Not Reported Elsewhere

Hammock, E. A. D. (2022). *Member, External Advisory Board P01 NINDS NS119159*. Pain Mechanisms Lab, Wake Forest University.

Expert Commentary

Hammock, E. A. D. (2021). *Quoted in Spectrum News for comments on research in the Journal of Clinical Investigation*.

https://www.spectrumnews.org/news/vasopressin-relieves-social-deficits-in-an-autism-mouse-model/.

Hammock, E. (2020). *Quoted in Spectrum News for comments on research in Proceedings of the National Academy of Sciences*.

https://www.spectrumnews.org/news/hormone-level-in-infants-may-predict-autism-diagnosis/.

Hammock, E. (2019). *Wrote article for Spectrum News (How the social hormone vasopressin might help autistic people) for perspective on research in Science Translational Medicine. Pull-quotes were used in additional press by The Scientist and Scientific American*.

https://www.spectrumnews.org/opinion/viewpoint/how-the-social-hormone-vasopressin-might-help-autistic-people/ Quoted in:
https://www.the-scientist.com/news-opinion/autism-symptoms-may-improve-with-modification-of-hormonal-pathway-65827
https://www.scientificamerican.com/article/experimental-autism-drugs-aim-to-improve-social-communications-skills/.

Hammock, E. (2017). *Quoted in New Scientist for comments on research published in Nature*.

https://www.newscientist.com/article/2133227-brain-switch-in-voles-makes-them-fall-in-love-at-first-sight/.