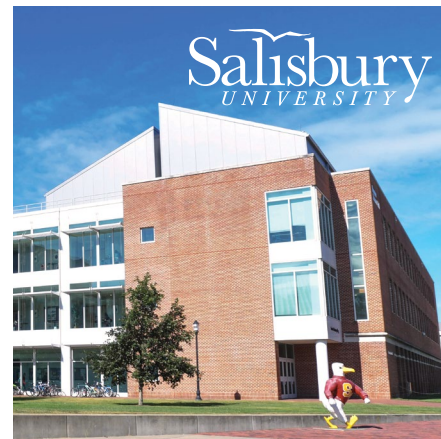


Richard A. Henson School of Science & Technology

Faculty and Students in Print

Congratulations to the Henson School faculty whose research and scholarship efforts have yielded nearly 250 recent publications in academic journals, books and other outlets.

The following list includes publications by Henson School faculty (in bold) and more than 90 students (in maroon) since January 2017.



Biological Sciences

Anderson, P. D., Phillips, R. A. Identification of genes required for enzalutamide resistance in castration-resistant prostate cancer cells in vitro. *Molecular Cancer Therapeutics*.

Baskerville, A. T., Erickson, F. L., Gillasp, G., Donahue, J. (2017). Identification of an Arabidopsis WD-Repeat Protein that Activates the Deubiquitinase UBP3 and Interacts with Two E3 Ubiquitin Ligases (Supplement 1b102 ed., vol. 31 no. 1). The *FasEB Journal*.

Baskerville, A. T., Donahue, J., Gillasp, G., **Erickson, F. L.** (2020). Identification of a WD-repeat protein that binds and activates the deubiquitinase UBP3 from *Arabidopsis thaliana* (2nd ed., vol. 91, pp. 90-99). BIOS. <https://bioone.org/journals/bios/volume-91/issue-2>

Cordero, A. G., Stearns, S., Quinteros, K., **Berns, C. M., Binz, S. M.**, Janzen, F. (2019). The postembryonic transformation of the box turtle's shell. *Evolution and Development*, 21, 297-310.

Newsome, S. D., Feeser, K. L., **Bradley, C. J.**, Wolf, C., Takacs-Vesbach, C., Fogel, M. L. (2020). Isotopic and genetic methods reveal the role of the gut microbiome in mammalian host essential amino acid metabolism. *Proceedings of the Royal Society B*.

Padilla-Gamino, J. L., Roth, M. S., Rodrigues, L. J., **Bradley, C. J.**, Bidigare, R. R., Gates, R. D., Smith, C. M., Spalding, H. L. (2019). Ecophysiology of mesophotic reef-building corals in Hawaii is influenced by symbiont-host associations, photoacclimatization, trophic plasticity, and adaptation. *Limnology and Oceanography*, 64(5).

Décima, M., Landry, M. R., **Bradley, C. J.**, Fogel, M. L. (2017). Alanine $\delta^{15}\text{N}$ trophic fractionation in heterotrophic protists. *Limnology and Oceanography*. <http://dx.doi.org/10.1002/lno.10567>

Buskey, E. J., Strickler, J. R., **Bradley, C. J.**, Hartline, D. K., Lenz, P. H. (2017). Escapes in copepods: comparison between myelinate and amyelinate species. *The Journal of Experimental Biology*, 220(5), 754-758. <http://dx.doi.org/10.1242/jeb.148304>

Newsome, S. D., Wolf, N., **Bradley, C. J.**, Fogel, M. L. (2017). Assimilation and isotopic discrimination of hydrogen in tilapia: implications for studying animal diet with $\delta^2\text{H}$. *Ecosphere*, 8(1), e01616. <http://dx.doi.org/10.1002/ecs2.1616>

Bradley, C. J., Bloodworth, G., Silaphone, K. S., Prandy, A., Robinson, N. *Wicomico River Health - 15 Year Water Monitoring Report*, *Wicomico Creekwatchers* (pp. 4).

Bradley, C. J., Silaphone, K. S. *Wicomico River Health - 2018 Water Monitoring Report*, *Wicomico Creekwatchers* (pp. 4).

Bradley-Schmidt, C. J., Stribling, J. M., Silaphone, K. S. *Wicomico River Health - 2017 Water Monitoring Report*, *Wicomico Creekwatchers* (pp. 4).

Bressman, N. R. (2022). Terrestrial capabilities of invasive fishes and their management implications. *Integrative and Comparative Biology*.

Bressman, N. R., Morrison, C. H., Ashley-Ross, M. A. (2021). Reffling: A Novel Locomotor Behavior Used by Neotropical Armored Catfishes (Loricariidae) in Terrestrial Environments. *Ichthyology and Herpetology*, 109(2), 608-625.

Bressman, N. R., Hill, J. E., Ashley-Ross, M. A. (2020). Why did the invasive walking catfish cross the road? Terrestrial chemoreception described for the first time in a fish. *Journal of fish biology*, 97(3), 895-907.

Bressman, N. R., Armbruster, J. W., Lujan, N. K., Udoh, I., Ashley-Ross, M. A. (2020). Evolutionary optimization of an anatomical suction cup: Lip collagen content and its correlation with flow and substrate in Neotropical suckermouth catfishes (Loricarioidei). *Journal of morphology*, 281(6), 676-687.

Bressman, N. R., Love, J. W., King, T. W., Horne, C. G., Ashley-Ross, M. A. (2019). Emersion and Terrestrial Locomotion of the Northern Snakehead (*Channa argus*) on Multiple Substrates. *Integrative organismal biology (Oxford, England)*, 1(1), obz026.

Bressman, N. R., Simms, M., Perlman, B. M., Ashley-Ross, M. A. (2019). Where do fish go when stranded on land? Terrestrial orientation of the mangrove rivulus *Kryptolebias marmoratus*. *Journal of fish biology*, 95(1), 335-344.

Bressman, N. R., Gibb, A. C., Farina, S. C. (2018). A walking behavior generates functional overland movements in the tidepool sculpin, *Oligocottus maculosus*. *Zoology (Jena, Germany)*, 131, 20-28.

Bressman, N. R., Fudge, D. (2021). *From reductionism to synthesis: The case of hagfish slime* (vol. 255). *Comparative Biochemistry and Physiology B-Biochemistry and Molecular Biology*.

Briand, C. H., Folkoff, M. E. Integrating multiple sources to reconstruct the pre- and early postcolonial forests of the Chesapeake: 1588-1838. *Human Ecology*, 47, 27-38.

Briand, C. H., Geleta, S. B., Kratochvil, R. (2018). Sweet Sorghum (*Sorghum bicolor* [L.] Moench) a Potential Biofuel Feedstock: Analysis of Cultivar Performance on the Mid-Atlantic Coastal Plain. *Renewable Energy*, 129, 328-333. <https://www.sciencedirect.com/science/article/pii/S0960148118306347>

Bunting, J. C. (2021). Creating, Implementing, and Evaluating Forensics Activities Kits in a Remote Learning Modality. *Journal of Forensic Science Education*, 3, 8.

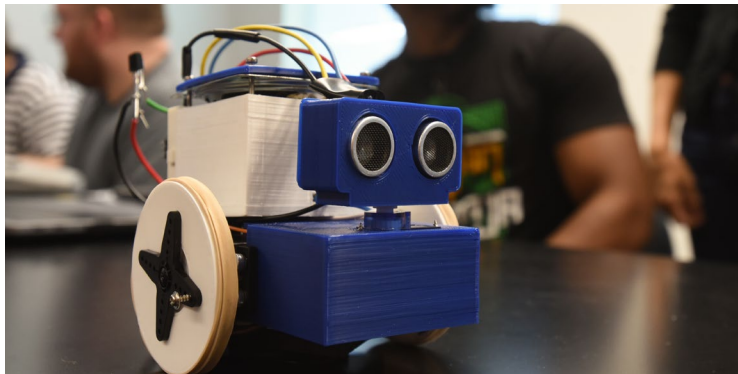
- Wen, C., Shen, L., Chen, J., Zhang, J., Feng, Y., Wang, Z., **Chen, X., Cai, J.,** Wang, L., He, Y., Wen, X.-J., Ma, T., Wang, C. (2022). Red Imported Fire Ants (Hymenoptera: Formicidae) Cover the Insecticide-Treated Surfaces with Particles to Reduce Contact Toxicity. *Journal of Pest Science* 95, 1135-1150.
- Wen, C., Chen, J., Qin, W.-Q., **Chen, X., Cai, J.,** Wen, J.-B., Wen, X.-J., Wang, C. (2020). Red imported fire ants (Hymenoptera: Formicidae) cover inaccessible surfaces with particles to facilitate food search and transportation. *Insect Science*, n/a(n/a). <https://onlinelibrary.wiley.com/doi/abs/10.1111/1744-7917.12891>
- Chen, X.** (2020). Effects of a tropical cyclone on salt marsh insect communities and post-cyclone reassembly processes. *Ecography*. <https://onlinelibrary.wiley.com/doi/full/10.1111/ecog.04932>
- Chen, X.** (2019). Food transport of red imported fire ants (Hymenoptera: Formicidae) on vertical surfaces. *Scientific Report*.
- Ma, T., Wang, H., Liang, S., Xiao, Q., Cao, P., **Chen, X.,** Niu, Y., He, Y., Sun, Z., Wen, X., Wang, C. (2019). Effects of soil-treatment with fungal biopesticides on pupation behaviors, emergence success and fitness of tea geometrid, *Ectropis grisescens*. *Journal of Asi-Pacific Entomology*, 22(1), 208-214. <https://doi.org/10.1016/j.aspen.2018.12.026>
- Qin, W., **Chen, X.,** Hooper-Bui, L., **Cai, J.,** Wang, L., Sun, Z., Wen, X., Wang, C. (2019). Food-burying behavior in red imported fire ants (Hymenoptera: Formicidae). *PeerJ*.
- Ennerfelt, H., Voithofer, G., Tibbo, M., Miller, D., Warfield, R., Allen, S., Clark, J. K.** (2019). Disruption of peripheral nerve development in a zebrafish model of hyperglycemia. *Journal of neurophysiology*, 122(2), 862-871.
- Rocker, A., Howell, J., Voithofer, G., Clark, J. K.** (2019). Acute effects of hyperglycemia on the peripheral nervous system in zebrafish (Danio rerio) following nitroreductase-mediated β -cell ablation. *American journal of physiology. Regulatory, integrative and comparative physiology*, 316(4), R395-R405.
- Craciun, I., Gutiérrez-Ibáñez, C., **Corfield, J. R.,** Hurd, P. L., Wylie, D. R. (2018). Topographic Organization of Inferior Olive Projections to the Zebrian II Stripes in the Pigeon Cerebellar Uvula. *Frontiers in Neuroanatomy*, 12(18). *Journal Article (Accepted)*
- Ksepka, D. T., Balanoff, A. M., Smith, N. A., **Corfield, J. R.,** Smaers, J. B. (2020). Tempo and pattern of avian brain size evolution. *Current Biology*, 30(11), 2026-2036. *Journal Article (Accepted)*
- Wylie, D. R., Gutiérrez-Ibáñez, C., **Corfield, J. R.,** Craciun, I., Graham, D. J., Hurd, P. L. (2017). Inferior olivary projection to the zebrian II stripes in lobule IXcd of the pigeon flocculus: A retrograde tracing study. *The Journal of Comparative Neurology*, 525(14), 3158-3173.
- Emmert, E. A. B., Geleta, S. B., Rose, C. M., Seho-Ahiable, G. E., Hawkins, A. E., Baker, K. T., Evans, A. S., Harris, M. E., Mrozinski, A. C., Folkoff, M. E., Anderson, P. D., Briand, C. H.** (2021). Effect of land use changes on soil microbial enzymatic activity and soil microbial community composition on Maryland's Eastern Shore. *Applied Soil Ecology/Elsevier*, 161(161), 7.
- Byrd, J. J., **Emmert, E. A. B.,** Maxwell, R., Townsend, H. (2019). Guidelines for Biosafety in Teaching Laboratories Version 2.0: A Revised and Updated Manual for 2019. *Journal of Microbiology and Biology Education*, 20(3), 3.
- Delong, L.,** Noone, B., **Erickson, F. L.** (2017). *Isolation, Identification, and Characterization of Local Wild Yeasts for Use In Fermentation* (943.4rd ed., vol. 31). The FASEB Journal.
- Freeman, A. R.,** Ophir, A. G. (2021). Sex differences in social odor discrimination by southern giant pouched rats (*Cricetomys ansorgei*). *Ethology*, 127(12), 1019-1032.
- Cook, C. N., **Freeman, A. R.,** Liao, J. C., Mangiamale, L. A. (2021). The Philosophy of Outliers: Reintegrating Rare Events Into Biological Science. *Integrative and comparative biology*.
- Freeman, A. R.** (2021). Female-female reproductive suppression: impacts on signals and behavior. *Integrative and comparative biology*.
- Freeman, A. R.,** Hare, J. F., Caldwell, H. K. (2020). Call-specific patterns of neural activation in auditory processing of Richardson's ground squirrel alarm calls. *Brain and behavior*, 10(6), e01629.
- Freeman, A. R.,** Ophir, A. G., Sheehan, M. J. (2020). The giant pouched rat (*Cricetomys ansorgei*) olfactory receptor repertoire. *PloS one*, 15(4), e0221981.
- Freeman, A. R.,** Aulino, E. A., Caldwell, H. K., Ophir, A. G. (2020). Comparison of the distribution of oxytocin and vasopressin 1a receptors in rodents reveals conserved and derived patterns of nonapeptide evolution. *Journal of neuroendocrinology*, 32(4), e12828.
- Freeman, A. R.,** Sheehan, M. J., Ophir, A. G. (2019). Anogenital distance predicts sexual odour preference in African giant pouched rats. *Animal Behaviour*, 148, 123-132.
- Freeman, A. R.,** Wood, T. J., Bairos-Novak, K. R., Anderson, W. G., Hare, J. F. (2019). Gone girl: Richardson's ground squirrel offspring and neighbours are resilient to female removal. *Royal Society open science*, 6(9), 190904.
- Freeman, A. R.,** Hare, J. F., Caldwell, H. K. (2019). Central distribution of oxytocin and vasopressin 1a receptors in juvenile Richardson's ground squirrels. *Journal of neuroscience research*, 97(7), 772-789.
- Freeman, A. R.,** Ophir, A. G. (2018). Scent-marking behavior of the southern giant pouched rat (*Cricetomys ansorgei*). *Journal Of Mammalogy*, 99(6), 1430-1435.
- Bairos-Novak, K. R., Ryan, C. P., **Freeman, A. R.,** Anderson, W. G., Hare, J. F. (2018). Like mother, like daughter: heritability of female Richardson's ground squirrel *Urocitellus richardsonii* cortisol stress responses. *Current zoology*, 64(2), 153-163.
- Freeman, A. R.,** Hare, J. F., Anderson, W. G., Caldwell, H. K. (2018). Effects of arginine vasopressin on Richardson's ground squirrel social and vocal behavior. *Behavioral neuroscience*, 132(1), 34-50.
- Caldwell, H. K., Aulino, E. A., **Freeman, A. R.,** Miller, T. V., Witche, S. K. (2017). Oxytocin and behavior: Lessons from knockout mice. *Developmental neurobiology*, 77(2), 190-201.
- Morales-Medina, J. C., Iannitti, T., **Freeman, A. R.,** Caldwell, H. K. (2017). The olfactory bulbectomized rat as a model of depression: The hippocampal pathway. *Behavioural brain research*, 317, 562-575.
- Biddle, J. R., Grant, A. H., Liebgold, E. B.** (2017). Factors affecting the growth of Red-backed Salamanders, *Plethodon cinereus*. *Herpetologica*, 73, 89-93.
- Grant, A. H., Liebgold, E. B.** (2017). *Color-biased dispersal inferred by fine-scale genetic spatial autocorrelation in a color polymorphic salamander* (vol. 108, pp. 588-593). *Journal of Heredity*.
- Montgomery, C. and Hogue, A.** 2022. The First Confirmed Occurrence of *Myotis septentrionalis* (Northern Long-eared Bat) on the Delmarva Peninsula. *Northeastern Naturalist* 29:N35-N39.
- Hogue, A. and Breon, K.** 2022. The greatest threats to species. *Conservation Science and Practice* 2022:e12670
- Hogue, A.** 2020. Land Footprint of the United States of America. *Journal of the Washington Academy of Sciences* 106:15-38.
- Hogue, A. and McGowan, A.** and. 2018. Comparison of Driving Transect Methods for Acoustic Monitoring of Bats. In: H. Mikkola (ed.), *Bats*. London: IntechOpen. pp. 7-19.
- James, L., Baier, A. L., **Pager, R. A.,** Clements, P., **Hunter, K. L., Taylor, R. C.,** Ryan, M. J. 2022. Cross-modal facilitation of auditory discrimination in a frog. *Biology Letters*. 18: 20220098. <https://doi.org/10.1098/rsbl.2022.0098>
- James, L., Halfwerk, W., **Hunter, K. L., Page, R. A., Taylor, R. C.,** Wilson, P. S., Ryan, M. J. Covariation among multimodal components in the tungara frog's courtship display. *Journal of Experimental Biology*, 224(12), jeb241661.
- Garcia, M. J., Rodríguez-Brenes, S., Kobisk, A., Adler, L.,** Ryan, M. J., **Taylor, R. C., Hunter, K. L.** (2019). Epigenomic Changes in the Tungara Frog (*Physalaemus pustulosus*): Possible Anthropogenic Effects. *Evolutionary Ecology*, 33(4), 14.
- Holmgren, C. A., **Hunter, K. L.,** Betancourt, J. L. (2019). Creosote bush (*Larrea tridentata*) ploidy history along its diploid-tetraploid boundary in southeastern Arizona-southwestern New Mexico, USA. *Journal of Arid Environments*, 164, 7-11.

- Ryan, M. J., Page, R. A., **Hunter, K. L., Taylor, R. C.** (2019). "Crazy love"—nonlinearity and irrationality in mate choice. *Animal Behaviour*, 147, 189-198.
- Garcia, M. J., Cronin, A., Bowling, T., Bushera, H., Hunter, K. L., Taylor, R. C.** (2019). Dueling frogs: do male green tree frogs (*Hyla cinerea*) eavesdrop on and assess nearby calling competitors? *Behavioral Ecology and Sociobiology*.
- Cronin, A.,** Ryan, M. J., Page, R. A., **Hunter, K. L., Taylor, R. C.** (2019). Environmental heterogeneity alters mate choice behavior for multimodal signals. *Behavioral Ecology and Sociobiology*, 73.
- Coss, D., Hunter, K. L., Taylor, R. C.** (2020). Silence is sexy: Soundscape complexity alters mate choice in túngara frogs. *Behavioral Ecology*.
- Liebgold, E. B.,** Carleton, K. L. (2020). The Right Light: Tiger Salamander Capture Rates and Spectral Sensitivity. *Wildlife Society Bulletin*, 44.
- Neville, R. A., Boyd, M., Liebgold, E. B.,** Ransom, T. S. (2020). Ground-nesting warblers on the eastern shore of Maryland: declining population trends and the effects of forest composition and structure. *Acta Ornithologica*, 54, 201-222.
- Liebgold, E. B.,** Gerlach, N. M., Ketterson, E. D. (2019). Density-dependent fitness, not dispersal movements, drives temporal variation in spatial genetic structure in dark-eyed juncos (*Junco hyemalis*). *Molecular Ecology*, 28, 968-979.
- Liebgold, E. B.,** Liebgold, H. L., Ransom, M. J., Ransom, T. S. (2019). The spread of the parthenogenetic Mourning Gecko, *Lepidodactylus lugubris* (Duméril and Bibron 1836) to Paradise Island, The Bahamas, with comments on citizen science observations of non-native herpetofauna. *Bioinvasions Records*, 8, 45-49.
- Liebgold, E. B., Kramer, C. F.,** Roomian, T., **Dolezar, G.,** Cabe, P. (2018). The effects of genetic heterozygosity on home range size and growth in a salamander with limited dispersal. *Population Ecology*, 60, 251-260.
- Grant, A. H.,** Ransom, T. S., **Liebgold, E. B.** (2018). Differential survival and the effects of avian predation on a color polymorphic species, the red-backed salamander (*Plethodon cinereus*). *Journal of Herpetology*, 52(2), 127-135.
- Liebgold, E. B.** (2019). A tale of two tails: a rare occurrence of tail bifurcation in the red-backed salamander (*Plethodon cinereus*). *Herpetological Bulletin*, 148.
- Kock, S. L., **Nyland, J. F.** (2021). Developing and Encouraging the First-Year Undergraduate Researcher. *Honors in Practice.*, 17, 245-247.
- Temkin, A. M., Bowers, R. R., Ulmer, C. Z., Penta, K., Bowden, J. A., **Nyland, J. F.,** Baatz, J. E., Spyropoulos, D. D. (2019). Increased adiposity, inflammation, metabolic disruption and dyslipidemia in adult male offspring of DOSS treated C57/BL6 dams. *Scientific Reports*, 9, 1530. <https://doi.org/10.1038/s41598-018-38383-9>
- Crowe, W., Allsopp, P. J., **Nyland, J. F.,** Magee, P. J., Strain, J. J., Doherty, L. C., Watson, G. E., Ball, E., Riddell, C., Armstrong, D. J., Penta, K. L., Todd, J. J., Spence, T., McSorley, E. M. (2018). Inflammatory response following in vitro exposure to methylmercury with and without n-3 long chain polyunsaturated fatty acids in peripheral blood mononuclear cells from systemic lupus erythematosus patients compared to healthy controls. *Toxicology in Vitro*, 52, 272-278.
- Monastero, R. N., Karimi, R., **Nyland, J. F.,** Harrington, J., Levine, K., Meliker, J. R. (2017). Mercury exposure, serum antinuclear antibodies, and serum cytokine levels in the Long Island Study of Seafood Consumption: a cross-sectional study in NY, USA. *Environmental Research*, 156, 334-340.
- Macht, V. A., Vazquez, M., Petyak, C. E., Grillo, C. A., Kaigler, K., Enos, R. T., McClellan, J. L., Cranford, T. L., Murphy, E. A., **Nyland, J. F.,** Solomon, G., Gertler, A., Wilson, M. A., Reagan, L. P. (2017). Leptin resistance elicits depressive-like behaviors in rats. *Brain, Behavior, and Immunity*, 60, 151-160.
- Eagles-Smith, C. A., Silbergeld, E. K., Basu, N., Bustamante, P., Diaz-Barriga, F., Hopkins, W. A., Kidd, K. A., **Nyland, J. F.** (2018). *Modulators of mercury risk to wildlife and humans in the context of rapid global change* (pp. 28). Ambio. *Journal Article (Accepted with revisions)*
- Shapiro, N., **Olmstead, K. L.** (2020). Maryland's formula: civic education and engagement drive democratic culture. *Diversity & Democracy*, 22(4). <https://www.aacu.org/diversitydemocracy/2020/summer/shapiro>
- Olmstead, K. L.** (2017). *Pushing back against the conservative caricature of higher education.* Washington Post. https://www.washingtonpost.com/opinions/pushing-back-against-the-conservative-caricature-of-higher-education/2017/11/29/aa538382-d3c6-11e7-9ad9-ca0619edfa05_story.html?utm_term=.7ed730101e40
- Morningred, C., Grubb, B., Price, D. L.,** Selfridge, J. A. Assessing Habitat and Management Through Surveys of King's Hairstreak (*Satyrrium kingi*) in a Maryland Coastal Plain Forest. *Journal of the Lepidopterists Society*. Accepted June 2022.
- Manole, D., Wilson, A., Miller, L., Price, D. L.** (2021). Ant biodiversity in forest and dune habitats of an Atlantic Coastal Barrier Island. *Northeastern Naturalist*, 28(4), 556-565.
- Hagadorn, M. A., Mitchell, K., Restein, J., Price, D. L.** (2021). Relationship of Dung Beetle (Coleoptera: Scarabaeidae And Geotrupidae) Abundance and Pest and Parasite Control in Cattle On Pastures Throughout Maryland. *The Coleopterists Bulletin*, 75(2), 382-402.
- Price, D. L., Rowe, E., Mann, H.** (2020). Ants (Hymenoptera: Formicidae) Attracted to Baits in the E.A. Vaughn Wildlife Management Area. *Proceedings of the Entomological Society of Washington*.
- Simons, P., Price, D.** (2019). New state record for *Deltotichium gibossum* (Fabricius) in Maryland, USA. *The Coleopterists Bulletin*, 73(1), 1-2.
- Mann, H. R., Rowe, E.,** Selfridge, J., **Price, D. L.** (2018). Leaf Litter and Arboreal Ants (Hymenoptera: Formicidae) in a Mid-Atlantic Forest. *Northeastern Naturalist*, 25(2), 341-354.
- Simons, P., Molina, M., Hagadorn, M. A., Price, D. L.** (2018). Monitoring of Dung Beetle (Scarabaeidae and Geotrupidae) Activity along Maryland's Coastal Plain. *Northeastern Naturalist*, 25(1), 87-100.
- Freeman, S., **Quillin, K.,** Allison, L., Black, M., Podgorski, G., Taylor, E., Carmichael, J. (2022). *Biological Science 7e (Digital Update)*. Pearson Education.
- Freeman, S., **Quillin, K.,** Allison, L., Black, M., Podgorski, G., Taylor, E., Carmichael, J. (2020). *Biological Science 7e* (7e ed., pp. 1200). Pearson Education.
- Stribling, J. M., Silaphone, K. S.** (2017). *Wicomico River Health - 2016 Water Monitoring Report*, Wicomico Creekwatchers (pp. 4).
- James, L., **Taylor, R. C., Hunter, K. L.,** Ryan, M. J. (2022). Evolutionary and allometric insights into anuran auditory sensitivity and morphology. *Brain, Behavior, and Evolution*.
- Taylor, R. C., Wilhite, K. O., Ludovici, R. J., Mitchell, K. M.,** Halfwerk, W., Page, R. A., Ryan, M. J., **Hunter, K. L.** (2021). Complex sensory environments alter mate choice outcomes. *Journal of Experimental Biology*.
- Taylor, R. C.,** Akre, K., Wilczynski, W., Ryan, M. J. (2018). Behavioral and neural auditory thresholds in a frog. *Current Zoology*.
- Gomes, D. G. E., Halfwerk, W., **Taylor, R. C.,** Ryan, M. J., Page, R. A. (2017). Multimodal weighting differences by bats and their prey: probing natural selection pressures on sexually selected traits. *Animal Behaviour*, 134, 99-102.
- Taylor, R. C.,** Page, R. A., Klein, B. A., Ryan, M. J., **Hunter, K. L.** (2017). Perceived Synchrony of Frog Multimodal Signal Components Is Influenced by Content and Order. *Integrative and Comparative Biology*.
- Stange, N., Page, R. A., Ryan, M. J., & **Taylor, R. C.** (2017). Interactions between complex multisensory signal components result in unexpected mate choice responses. *Animal Behaviour*, 134, 239-247.
- Taylor, R. C.** (2017). Sensory Biology: How Female Treefrogs Pick Mates at a Noisy Party. *Current Biology*, 27(5), R188-R190.



Chemistry

- Friese, S. J., Labb, S., Masteran, C. J., Albright, S. C., Ali, B., Chapman, H., Cheng, Y., Cusic, R. M., Hartlove, B., Marr, A. M., Timmons, M.** (2020). Synthesis of a Water-Soluble, Soft N-Donor BTzBP Ligand /Containing Only CHON. *SynLett*, 31, 1384 - 1388.
- Habay, S. A., Miller, J. M., Bowler, M. M., Manchak, R., Thomas, J. Z.** (2018). An Efficient Synthesis of the Piperidiny1 Dihydroquinazolinone (PDQ) Fragment of Olcegepant. *Tetrahedron Letters*, 59(36), 3389-3391.
- Habay, S. A., Purohit, A., Benner, J. S.** (2020). Thermal cyclization of a 2-isocyanacetamide (pp. 920). *Synthetic Pages*. <https://cssp.chemspider.com/Article.aspx?id=920>
- Habay, S. A., Purohit, A.** (2018). Aminolysis of methyl isocyanacetate with pyrrolidine (pp. 833). *Synthetic Pages*.
- Juncosa, J. I., Takaya, K., Le, H. V., Moschitto, M. J., Mascarenhas, R., Liu, D., Dewey, S. L., Silverman, R. B.** (2018). Design and Mechanism of (S)-3-Amino-4-(difluoromethylenyl)cyclopent-1-ene-1-carboxylic acid, a Highly Potent GABA Aminotransferase Inactivator for the Treatment of Addiction. *Journal of the American Chemical Society*, 140(6), 2151-2164. <https://pubs.acs.org/doi/10.1021/jacs.7b10965>
- Wu, R., Sanishvili, R., Belitsky, B., **Juncosa, J. I.**, Le, H. V., Lehrer, H. J. S., Farley, M., Silverman, R. B., Petsko, G. A., Ringe, D., Liu, D. (2017). PLP and GABA trigger GabR-mediated transcription regulation in *Bacillus subtilis* via external aldimine formation. *Proceedings of the National Academy of Sciences of the United States of America*, 114(15), 3891-3896. <https://www.pnas.org/content/114/15/3891>
- Keifer, D. Z.** (2019). Enthalpy and the Second Law of Thermodynamics. *Journal of Chemical Education*, 96(1407-1411). <https://doi.org/10.1021/acs.jchemed.9b00326>
- Keifer, D. Z., Jarrold, M. F.** (2017). Single-Molecule Mass Spectrometry. *Mass Spectrometry Reviews*, 36, 715-733.
- Lee, L. S., Brunk, N., Haywood, D. G., **Keifer, D. Z.**, Pierson, E. E., Kondylis, P., Wang, J. C.-Y., Jacobson, S. C., Jarrold, M. F., Zlotnick, A. (2017). A Molecular Breadboard: Removal and Replacement of Subunits in an Hepatitis B Virus Capsid. *Protein Science*, 26, 2170-2180.
- Keifer, D. Z., Pierson, E. E., Jarrold, M. F.** (2017). Charge Detection Mass Spectrometry: Weighing Heavier Things. *Analyst*, 142, 1654-1671.
- Keifer, D. Z., Alexander, A. A., Jarrold, M. F.** (2017). Spontaneous Mass and Charge Losses of Trapped Multi-Megadalton Ions Studied by Charge Detection Mass Spectrometry. *Journal of The American Society for Mass Spectrometry*, 28, 498-506.
- Harvey, A., **Luttrel, R. D.** (2019). How Cell Phones Have Changed the Classroom and What to Do About It. *Flipd Blog*.



Computer Science

- Nguewou-Hyousse, H., **Franchi, G.**, Paley, D. *Microfluidic Circuit Dynamics and Control for Caterpillar-Inspired Locomotion in a Soft Robot*. IEEE Conference on Control Technology and Applications (August 21-24, 2018. Copenhagen, Denmark).
- Taddia, Y., Nardin, W., Corbau, C., **Franchi, G.**, Staver, L. *UAVs to assess channels' shape evolution in a restored salt marsh*. American Geophysical Union (December 10-14, 2018. Washington DC, USA).
- Taddia, Y., Nardin, W., Corbau, C., **Franchi, G.**, Stevenson, C., Staver, L. *Channels' shape evolution detected by UAVs in a restored salt marsh*. Coastal Sediments 2019 (CS19) "Advancing Science & Engineering for Resilient Coastal Systems (May 27-31, 2019. Tampa/St. Pete, Florida, USA).
- Franchi, G.**, Anderson, J., Corbau, C., Nardin, W. *Marine debris detection in a coastal vegetated area using UAVs*. American Geophysical Union (December 10-14, 2019. San Francisco CA, USA).
- North, E., Place, A., Silsbe, G., Li, Y., Cornwell, J., Schijf, J., Gonsior, M., Heyes, A., Hunsicker, S., Kilbourne, H., **Franchi, G.**, Vijayaragavan, K., Lee, Y., Veenhof, J., Galasso, F., Trommutter, J., Owens, M., Blair, J. *Replicating whiting events: testing a process for carbon sequestration using algae, sunlight, nutrients, and calcium-rich water*. Ocean Sciences Meeting (16-21 February 2020, San Diego, CA USA)
- Franchi, G.**, Quitadamo, M., Taddia, Y., Vona, I., Pellegrinelli, A., Corbau, C., Lorie, S., Nardin, W. *UAVs multispectral camera detection of seasonal changes in a restored salt marsh*. American Geophysical Union (December 7-11, 2020. San Francisco CA, USA).
- Taddia, Y., Pellegrinelli, A., Corbau, C., **Franchi, G.**, Staver, L., Stevenson, C., Nardin, W. *High-Resolution Monitoring of Tidal Systems Using UAV: A Case Study on Poplar Island, MD (USA)*. Remote Sensing. Special Issue: Remote Sensing in Agriculture and Vegetation - UAV for High-Resolution Salt Marsh Monitoring) ISSN 2072-4292. Remote Sens. 2021, 13, 1364. DOI: 10.3390/rs13071364.
- Nardin, W., Taddia, Y., Quitadamo, M., Vona, I., Corbau, C., **Franchi, G.**, Staver, L., Pellegrinelli, A. *Seasonality and classification mapping of restored tidal marsh by NDVI imagery coupling UAVs and multispectral camera*. Remote Sensing. (Biogeosciences Remote Sensing - Remote Sensing of Ecogeomorphology and Ecohydrology: Feedbacks between Biota and Sediment Transport at the Earth Surface) Manuscript ID 1348093. ISSN 2072-4292. Remote Sens. 2021, 13, 4207. DOI: 10.3390/rs13214207.
- Vona, I., Nardin, W., Taddia, Y., Gray, M., **Franchi, G.** *Modeling approach of coupling oyster restoration and submersed breakwaters to prolong gray infrastructures effectiveness*. American Geophysical Union (December 13-17, 2021. New Orleans, LA USA).
- North, E., Place, A., Silsbe, G., Li, Y., Lee, Y., Schijf, J., Cornwell, J., Hunsicker, S., Kilbourne, H., Gray, M., Hoover, R., **Franchi, G.**, Gonsior, M., Heyes, A., Nardin, W., Khademishamami, M., Owens, M., Sanford, A., Trommutter, J., Alvarez, J., Veenhof, J., Vijayaragavan, K., Sterling, D., Blair, J. *The Coral Defense project: capturing carbon and rebuilding reefs*. Ocean Sciences Meeting (February 27 - March 4 2022, Honolulu HI USA).

Kwak, S.H., Paik, N. and Lu, E. “Detecting Network Intrusion Anomalies through Egonet-based Data Mining with Apache Spark”, Extended Abstract, *Companion of SC: IEEE/ACM International Conference for High Performance Computing, Networking, Storage and Analysis (SuperComputing)*, Nov. 2021

Thomas, I., Lu, E. “GPU Accelerated Graph Based Anomaly Detection”, *Proceedings of the IEEE International Conference on Mobile Ad-hoc Sensor Systems (MASS), National Workshop for REU Research in Networking and Systems*, Nov. 2019

Gantt, C., Jin, Y. and Lu, E. “Deep neural networks for sparse-view filtered backprojection imaging”, *Proc. SPIE Computational Imaging*, 109900W, May 2019

Liao, F., Koshelev, E., Milton, M., Jin, Y. and Lu, E. “Change Detection by Deep Neural Networks for Synthetic Aperture Radar Image”, *Proceedings of the IEEE International Conference on Computing, Networking and Communications (ICNC), National Workshop for REU Research in Networking and Systems*, Jan. 2017

Jing, Y., Miner, A. S. (2018). Computation tree measurement language (CTML). *Formal Aspects of Computing*, 30(3-4), 443-462. <https://doi.org/10.1007/s00165-018-0457-3>

Aboul-Enein, O., Jing, Y. Bostelman, R. (2021). *Formalizing Performance Evaluation of Mobile Manipulator Robots Using CTML* (vol. 2B: Advanced Manufacturing, pp. 10 pages). The American Society of Mechanical Engineers (ASME). <https://doi.org/10.1115/IMECE2020-23234>

Jing, Y., Miner, A. (2018). In Annabelle McIver and Andras Horvath (Ed.), *Action and State Based Computation Tree Measurement Language and Algorithms* (vol. 11024, pp. 190--206). Springer: 15th International Conference on Quantitative Evaluation of SysTems (QEST 2018). https://doi.org/10.1007/978-3-319-99154-2_12

Wang, S., Zhou, G., Watson, A., Xie, L., Sun, M., Jung, W. (2021). Wearable motion sensor-based chewing side detection. *Smart Health*, 21(July 2021), 17. <https://www.sciencedirect.com/science/article/abs/pii/S2352648321000271>

Wang, S., Zhou, G., Guan, J., Ma, Y., Liu, Z., Ren, B., Zhao, H., Watson, A., Jung, W. (2021). Inferring food types through sensing and characterizing mastication dynamics. *Smart Health*, 20(April 2021), 19. <https://www.sciencedirect.com/science/article/abs/pii/S2352648321000131>

Jung, W., Watson, A., Kuehn, S., Korem, E., Koltermann, K., Sun, M., **Wang, S., Liu, Z., Zhou, G.** (2021) *LAX-Score: Quantifying Team Performance in Lacrosse and Exploring IMU Features towards Performance Enhancement*. *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies*, vol. 5(3). <https://doi.org/10.1145/3478076>

Sun, M., Watson, A., Blackwell, G., Jung, W., **Wang, S., Koltermann, K., Helm, N., Zhou, G., Cloud, L., Pretzer-Aboff, I.** (2021). *TremorSense: Tremor Detection for Parkinson's Disease Using Convolutional Neural Network*. 2021 IEEE/ACM Conference on Connected Health: Applications, Systems and Engineering Technologies (CHASE). <https://doi.org/10.1109/CHASE52844.2021.00009>

Li, M., Zhang, F., **Barnes, S., and Wang, X.** 2020: “Assessing storm surge impacts on coastal inundation due to climate change: case studies of Baltimore and Dorchester County in Maryland.” *Natural Hazards*, 103(2), 2561-2588.

Li, M., F. Zhang, Y. Guo and **Wang, X.** 2020: “Probabilistic projections of high tide flooding for the State of Maryland in the 21st century.” Book chapter in *Evaluating Climate Change Impacts*, edited by Lyubchich Gel, Kilbourne, Miller, Newlands and Smith. Chapman and Hall/CRC. ISBN 9780815392378, 71-94.

Li, M., F. Zhang, **S. Barnes and Wang, X.** 2018: “Impacts of sea level rise and ocean warming on storm surge and coastal inundation in the mid and late 21st century”. American Geophysical Union fall meeting, Washington, D. C.



Geography and Geosciences

Cawthern, T. R. (2018). *Physical Geology - Lab Exploration*. Kendall Hunt Publishing Company.

Chen, M., Cawthern, T.R., Jones, S., and Namwamba, F. (2022). *Physical Geology – Lab Exploration*. 3rd ed., Kendal Hunt Publishing Company.

Chen, M., Maier, K. J., Ritenour, D. M., Sun, C. (2022) *Improving Global TBI Tracking and Prevention: An Environmental Science Approach*. *Global Journal of Health Science*. 14(3):20. DOI:10.5539/gjhs.v14n3p20

Chen, M. (2021) Integration of Creative Thinking and Critical Thinking to Improve Geosciences Education. *Geography Teacher*.

Chen, M. Ritenour, D., and Maier K. (2020) Enhancing the U.S. TBI data infrastructure: Geospatial perspective. *Annals of GIS*. Volume 26, Issue 3: *Advances in Geospatial Analysis for Health Research*

Chen, M., and Cawthern, T.R. (2018). *Physical Geology – Lab Exploration*. 2nd ed., Kendal Hunt Publishing Company.

Hamilton, S. E., Castellanos-Galindo, G. A., Millones-Mayer, M., Chen, M. (2018). Remote Sensing of Mangrove Forests: Current Techniques and Existing Databases. In Makowski, Christopher; Finkl, Charles W. (Ed.), *Threats to Mangrove Forests: Hazards, Vulnerability, and Management* (vol. 25, pp. 497-520). Berlin: Springer International Publishing.

Caviglia-Harris, J. L., Biggs, T., Ferreira, E., **Harris, D. W.**, Mullan, K., Sills, E. W. (2021) The color of water: The contributions of green and blue water to agricultural productivity in the Western Brazilian Amazon. *World Development*, 146 (October 2021).

Wu, Y., Mullan, K., Biggs, T., Caviglia-Harris, J. L., **Harris, D. W.**, Sills, E. W. (2021). Do Forests Provide Watershed Services for Farmers in the Humid Tropics? Evidence from the Brazilian Amazon. *Ecological Economics*, 183 (May 2021), 16.

West, T., Swisher, M., Caviglia-Harris, J. L., Sills, E., Roberts, D., **Harris, D. W.**, Putz, F. (2018). Impacts of REDD+ payments on a coupled human-natural system in Amazonia. *Ecosystem Services*, 33, 68-76. *Journal Article (Accepted)*

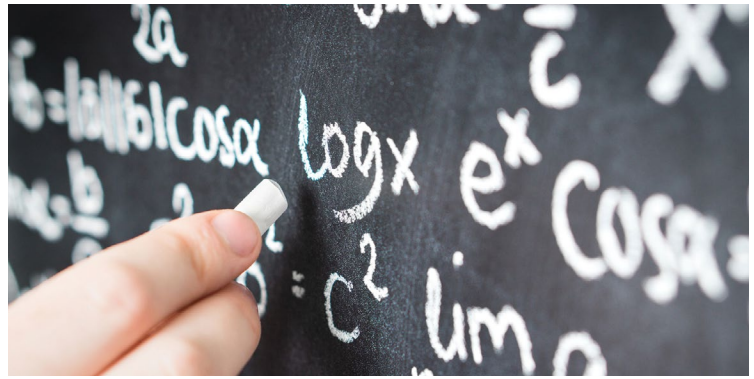
West, T., Grogan, K., Swisher, M., Sills, E., Caviglia-Harris, J. L., **Harris, D. W.**, Roberts, D., Putz, F. (2018). A Hybrid Optimization-Agent-Based Model of Redd+ Payments to Small Farmers in the Old Deforestation Frontier of the Brazilian Amazon. *Environmental Modelling and Software*, 100, 159-174.

McCombs, A. G., Hiscox, A. L., Suyker, A. (2019). Point-to-Grid Conversion in Flux Footprints: Implications of Method Choice and Spatial Resolution for Regional-Scale Studies. *Boundary Layer Meteorology*, 172(3), 457-459.

McCombs, A. G., Hiscox, A. L., Wang, C., Desai, A., Suyker, A., Biraud, S. (2018). Carbon flux phenology from the sky: Evaluation for maize and soybean. *Journal of Atmospheric and Oceanic Technology*, 35(4), 877-892.

Parnell, D. B. (in press). A Sea Gull Century Climatology, 1989-2020. No. <https://seagullcentury.org/wp-content/uploads/2021/06/SGC-Climatology-Darren-Parnell.pdf>

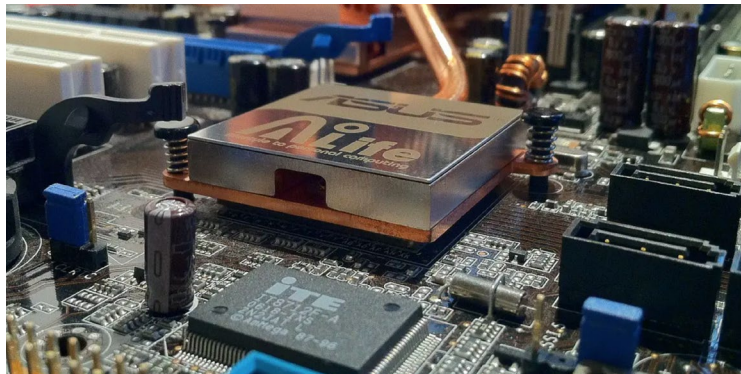
- Hernandez, S., Maurer, J. J., Yabsley, M., Peters, V. E., **Presotto, A.**, Murray, M., Curry, S., Sanchez, S., Gerner-Smidt, P., Hise, K., Huang, J., Johnson, K., Kwan, T., Lipp, E. K. Free-Living Aquatic Turtles Are Reservoirs and Serve as Sentinels of Salmonella spp. for Water Bodies. *Frontiers Veterinary Science/Frontiers*.
- Langbauer, W., Karidozo, M., Madden, M., Parry, R., **Koehler, S., Fillebrown, J., Wehlan, T.**, Osborn, F., **Presotto, A.** (2021). From elephant memory to conservation action: using chili oil to mitigate conflict one elephant at a time. *Animal Conservation*.
- Janmaat, K. R.L., de Guinea, M., Collet, J., Byrne, R., Robira, B., van Loon, E., Jang, H., Biro, D., Ramos-Fernandez, G., Ross, C., **Presotto, A.**, Allritz, M., Alavi, S., Van Belle, S. (2021). Using natural travel paths to infer and compare primate cognition in the wild. *iScience/CellPress*, 24(4).
- Suscke, P., **Presotto, A.**, Izar, P. (2021). The role of hunting on Sapajus xanthosternus' landscape of fear in the Atlantic Forest, Brazil. *American Journal of Primatology/Wiley Online*. 1101 Camden Av.
- Abreu, F., Garber, P., Souto, A., **Presotto, A.**, Schiel, N. (2021). Navigating in a challenging semiarid environment: the use of a route-based mental map by a small-bodied neotropical primate. *Springer Nature*.
- Presotto, A.**, Remillard, C., Spagnoletti, N., Salmi, R., Verderane, M., **Stafford, K.**, Santos, R. R. d., Madden, M., Fragaszy, D., Visalberghi, E., Izar, P. (2020). Rare Bearded Capuchin (Sapajus libidinosus) Tool-Use Culture is Threatened by Land use Changes in Northeastern Brazil. *International Journal of Primatology/Springer*(41), 1-18.
- Marques, K., **Presotto, A.**, Silva, M., Mendes, S. (2018). Área de vida de muriquis-do-norte (Brachyteles hypoxanthus): Comparação entre três métodos. *Boletim da Sociedade Brasileira de Mastologia*(80), 90-95.
- Katsis, L., Cunneynworth, P., Turner, K., **Presotto, A.** (2018). Spatial patterns of primate electrocution in Diani, Kenya. *International Journal of Primatology*, 39(4), 493-510.
- Presotto, A.**, Izar, P., Verderane, M., Biondi, L., Mendonça-Furtado, O., Spagnoletti, N., Madden, M. (2018). Intersection as key locations for bearded capuchin monkeys (Sapajus libidinosus) traveling within a route network map. *Animal Cognition*, 21(3), 393-405.
- Xu, W., Richard, F.-H., Madden, M., Chenae, S., Mu, L., **Presotto, A.** (2017). Coupling African elephant movement and habitat modeling for landscape availability-suitability-connectivity assessment in Kruger National Park. *Pachyderm*(58), 97-106.
- Salmi, R., **Presotto, A.**, Scarry, C. J., P. H., DoranSheehy, D. M. (2020). Spatial cognition in western gorillas (Gorilla gorilla): an analysis of distance, linearity, and speed of travel routes. *Springer Nature*.
- Presotto, A.**, Richard, F.-H., **Curry, C.**, Madden, M. (2019). Spatial mapping shows that some African Elephants use cognitive maps to navigate the core but not the periphery of their home ranges. *Animal Cognition*, 22, 251-263.
- Skeeter, B. R.** (2020). *Introduction to Weather and Climate Lab Manual*, 2nd edition (pp. 151). Dubuque, IA: Kendall-Hunt.
- Skeeter, B.R.** (2019). Introducing the Concept of the "Causal Continuum" in Introductory Weather and Climate Courses. *The Geographical Bulletin*, 60, 81-83.
- Zaprowski, B. J.** (2017). *An Introduction to Earth-Space Science Laboratory Manual* (6th edition ed., pp. 102 pages). Kendall Hunt. *Instructor's Manual*
- Brazer, S. E., **de Socio, M. J.** (2021). Scaffolding and support through information literacy: Reimagining a Geography of Sport class project. *The Geography Teacher*.
- James, M. (2020). *Alter Road* (pp. 302). Conroe, TX: Defiance Press & Publishing LLC.
- Cerulli, D., Scott, M. S.**, Aunap, R., Parn, J., Mander, U. (2017). Global index of natural hazard awareness. *Ecological Indicators*.



Mathematical Sciences

- Austin, J. W.** & Curl, E. (2022). Exploring combinatorics and graph theory with simple Blokus. *The College Mathematics Journal*.
- Groth, R. E., **Austin, J. W.**, Naumann, M., **Rickards, M.** (2021). Toward a theoretical structure to characterize early probabilistic thinking. *Mathematics Education Research Journal*, 33, 241-261.
- Peperak, M.** & **Austin, J. W.** (2021). Developing understanding of fraction equivalence. *Banneker Banner*, 33(1), 3-9.
- Austin, J. W., Schneider, L. M.** (2020). Generalized Fibonacci Sequences in Pythagorean Triple Preserving Matrices. *The Fibonacci Quarterly*, 58(4), 340-350.
- Austin, J. W.** (2019). Generating Pythagorean triples of a given height. *Missouri Journal of Mathematical Sciences*, 31(2), 136-145.
- Austin, J. W.**, Kronenthal B. G., & Miller, S.M. (2019). The settlers of "Catanbinatorics." *Mathematics Magazine*, 92(3), 187-198.
- Groth, R. E., **Austin, J. W.**, Naumann, M., **Rickards, M.** (2018). Probability puppets. *Teaching Statistics*, 41(2), 54-57.
- Austin, J. W.** (in press). Developing Understanding of Fraction Equivalence. *Banneker Banner*.
- Anderson, J., Austin, J. W., Jing, Y., Schneider, L., Shifler, R. M.** (2018). *Faculty Writing Groups for Mathematicians* (October/November 2018 ed.). MAA Focus.
- Austin, J. W.** (2019). Problem 1161. *The College Mathematics Journal*, 50(5), 379.
- Austin, J. W.** (2018). Problem B-1225. *The Fibonacci Quarterly*, 56(1), 82.
- Austin, J. W.**, Kronenthal, B.G., Miller, S.M. (2021). Off to a Good Start: Using Mathematics to Evaluate Settlement Locations in Catan. In M. Capaldi (Ed.) *Teaching mathematics through games* (pp. 137-143). MAA Press. *Book Chapter (Published)*
- Barber, R., Hetzler S.** "Calculus with Emphasis on Business Decisions" 3rd Edition, Kendall Hunt, ISBN 978-1-7924-7342-5, August 2021
- Barber, R.** "The Cubic Formula", Applied Business Mathematics ABM, ISBN 978-1-7371813-1-6, May 2021
- Barber, R.** "Jerk and Jounce, The forgotten Points", Applied Business Mathematics ABM, ISBN 978-1-7371813-3-0, May 2021
- Barber, R.** "Function Analysis, Applied Business Mathematics ABM, ISBN 978-1-7371813-4-7, May 2021
- Barber, R.** "Calculus and Elasticity", Applied Business Mathematics ABM, ISBN 978-1-7371813-6-1, February 2022
- Barber, R.** "Measuring Concavity", Applied Business Mathematics ABM, ISBN 978-1-7371813-8-5, July 2022
- Barber, R.** "Essentials of the Derivative", Applied Business Mathematics ABM, ISBN 978-1-7371813-9-2, July 2022
- Barber, R.** "The Calculus Point", Applied Business Mathematics ABM, 978-1-7371813-7-8, July 2022

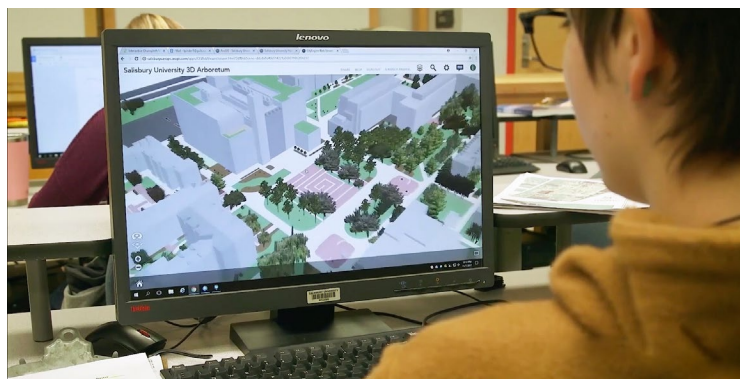
- Bardzell, M. J., Bergner, J. A.,** Terrill, B. J. A Collaborative Journey Using Children's Literature to Integrate Mathematics and English. *PDS Partners*, 16(1), 28-32.
- Groth, R. E., **Bergner, J. A.** (2021). Pre-service teachers' learning from significant opportunities for improvement in a positive error culture. *Mathematics Teacher Education and Development*, 23(4), 143-161.
- Groth, R. E., **Bergner, J. A.,** Weaver, S. D., Follmer, D. J. (2021). Virtual tools and protocols to support collaborative reflection during lesson study. *Innovations in Science Teacher Education*, 6(4).
- Groth, R. E., **Bergner, J. A., Austin, J. W.,** Burgess, C. R., **Holdai, V.** (2020). Undergraduate Research in Mathematics Education: Using Qualitative Data About Children's Learning to Make Decisions About Teaching. *Mathematics Teacher Educator*, 8(3), 134-151. <https://doi.org/10.5951/MTE.2020.0008>
- Groth, R. E., **Bergner, J. A., Austin, J. W.,** Burgess, C. R., **Holdai, V.** (2020). Undergraduate Research in Mathematics Education: Using Qualitative Data About Children's Learning to Make Decisions About Teaching. *Mathematics Teacher Educator*, 8(3), 134-151.
- Groth, R. E., **Bergner, J. A.,** Weaver, S. D., **Welsh, G. S.** (2020). Using Japanese Lesson Study to merge inservice professional development and preservice clinical experiences. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 93(2), 93-99.
- Groth, R. E., **Bergner, J. A., Austin, J. W.** (2020). Dimensions of learning probability vocabulary. *Journal for Research in Mathematics Education*, 51(1), 75-104.
- He, Y., Zhang, J., Shen, L., Wang, L., Qian, C., Lyu, H., Yi, C., **Cai, J., Chen, X.,** Wen, X., Wang, C. (2022). Eugenol derivatives: strong and long-lasting repellents against both undisturbed and disturbed red imported fire ants. *Journal of Pest Science*.
- Zhang, L., Wang, L., Chen, J., Zhang, J., He, Y., Lu, Y., **Cai, J., Chen, X.,** Wen, X., Xu, Z., Wang, C. (2022). Toxicity, horizontal transfer, and physiological and behavioral effects of cycloxaprid against *Solenopsis invicta* (Hymenoptera: Formicidae). *Pest Management Science*, 78: 2228-2239.
- Cai, J.,** Yang, H. (2020). A finite volume-alternating direction implicit method for the valuation of American options under the Heston model. *INTERNATIONAL JOURNAL OF COMPUTER MATHEMATICS*, 97(3), 700-724.
- Xiong, H., **Cai, J., Chen, X.,** Liang, S., Wen, X., Wang, C. (2019). The Effects of Trichoderma Fungi on the Tunneling, Aggregation, and Colony-Initiation Preferences of Black-Winged Subterranean Termites, *Odontotermes formosanus* (Blattodea: Termitidae). *forests*, 10.
- Liang, S., **Cai, J., Chen, X.,** Z. J., J. Z., Z. H., L. T., Z. S., X. W., C. W. (2019). Larval aggregation of *Heortia vitessoides* (Lepidoptera: Crambidae) and evidence of horizontal transfer of avermectin. *Forests*, 10(331).
- Halperin, A., Goodnow, R.,** Wang, H., and Wu, B. (2022). Proof of a conjecture on n -tuple graphs. *Theory and Applications of Graphs*
- Halperin, A.** (2020). Mastery-based testing with a final exam component. *PRIMUS* 30(8-10), 1017-1039
- Halperin, A.** and Magnant, C. (2019). Beginning Mathematical Writing Assignments. *Prompt: A Journal of Academic Writing Assignments*, 3(2)
- Coll, V., **Halperin, A.,** Magnant, C., and Salehi, P. (2018). Enomoto and Ota's conjecture holds for large graphs. *Graphs and Combinatorics*, 34(6), 1619-1635
- Jump, A.** and **Halperin, A.** (2017). A Sharp Upper Bound On k -Color Connectivity. *NCUR Proceedings*, 768-776
- Duklewski, B., Holdai, V., Wainwright, B. A.** (2018). On Some Limitations of Financial Models. *The Journal of Undergraduate Mathematics and Its Applications*, 2018(Volume 1), 41-68.
- Treuth, M. G., Ogburn, N., Treuth, J., **Holdai, V.** (2021). Changes in Pre-Operative Risk After the Initiation of the Maryland Cardiac Surgery Quality Initiative. *Journal of the American College of Cardiology*, 77(18)(86).
- DeRidder, A. M., Kalluri, S., **Holdai, V.** (2020). A retrospective chart review evaluating the relationship between cancer diagnosis and drinking water source on the Lower Eastern Shore of Maryland. (2020;38 ed., pp. 1). Journal Of Clinical Oncology for American Society for Clinical Oncology Conference.
- Layton, K., Rayne, F., Cao, W., Bulas, D., **Holdai, V.** (2020). *Increasing the Use of Ultrasound in the Diagnosis of Appendicitis in Children in a Community Hospital Emergency Department*. Pediatric Radiology Annual Meeting. *Research Report (Published)*
- Li, M., Holdai, V.** (2018). A Retrospective Statistical Analysis of Second Primary Cancers in Delmarva Peninsula, U.S.A. *Journal of Emerging Investigators*.
- Evans, L., Schneider, L., Shifler, R. M., Short, L., Warman, S.** (2020). Galkin's lower bound conjecture holds for the Grassmannian. *Communications in Algebra*, 48(2), 857-865.
- Bones, L., Fowler, G., Schneider, L. M., Shifler, R. M.** (2020). Conjecture O holds for some horospherical varieties of Picard Rank 1. *Involve, a journal of mathematics*, 13(4), 551-558.
- Harris, P., Rahmoeller, M., **Schneider, L. M.,** Simpson, A. (2019). When is the q -multiplicity of a weight a power of q ? *Electronic Journal of Combinatorics*, 26(4), 29 pages.
- Harris, P., **Schneider, L. M.,** Rahmoeller, M. (in press). On the asymptotic behavior of the q -analog of Kostant's partition function. *Journal of Combinatorics. Journal Article (Accepted)*
- Shannon, K.** "It's Not the Moore Method, But... A Student Driven, Textbook Supported, Approach to Teaching Upper-Division Mathematics", *PRIMUS*, vol 28, number 02, pp118-127, 2018. <http://www.tandfonline.com/doi/abs/10.1080/10511970.2017.1348416>
- Shifler, R. M., Warman, S.** (2022). On the spectral properties of the quantum cohomology of odd quadrics. *Involve, a journal of mathematics*, to appear.
- Pech, C., **Shifler, R. M.** (2022). Curve neighborhoods of Schubert varieties in the odd symplectic Grassmannian. *Transformation Groups*, to appear.
- Shifler, R. M.,** Withrow, C. (2022). Minimum quantum degrees of isotropic Grassmannians of Types B and C. *Annals of Combinatorics*, to appear.
- Li, C., Mihalcea, L. C., **Shifler, R. M.** (2019). Conjecture O holds for the odd symplectic Grassmannian. *Bulletin of the London Mathematical Society*, 51(4), 705-714.
- Mihalcea, L. C., **Shifler, R. M.** (2019). Equivariant quantum cohomology of the odd symplectic Grassmannian. *Mathematische Zeitschrift*, 291(3-4), 1569-1603.
- Li, C., **Shifler, R. M.,** Yang, M., Zhang, C. (2022). On Frobenius-Perron Dimension. *Proceedings of the American Mathematical Society*, to appear.
- Stoner, M. A.** (2020). *Breathing Life Into Calculus: Using Simulation to Enhance Students' Understanding of the Relevance of Calculus to Physiology* (Special Issue: Mathematics for the Life Sciences ed.). PRIMUS.



Physics

- Shakur, A. M., Binz, S. M.** (2021). Diffraction Experiment with a Smart Cart. *The Physics Teacher*, 59(4), 3. <https://doi.org/10.1119/10.0004155>.
- Shakur, A. M.** (in press). *Backward-Design Model for an Astronomy Course Using RSpec*. The Physics Teacher. Manuscript (Accepted)
- Mazzola, C. N., **Troup, N. W.**, et al. (2020). The close binary fraction as a function of stellar parameters in APOGEE: a strong anticorrelation with α abundances. *MNRAS*, 499(2), 1607-1626.
- Lewis, H. M., **Troup, N. W.**, et al. (2020). Geometry of the Draco C1 Symbiotic Binary. *IAPJ*, 900(2), L43.
- Ahumada, R., **Troup, N. W.**, et al. (2020). The 16th Data Release of the Sloan Digital Sky Surveys: First Release from the APOGEE-2 Southern Survey and Full Release of eBOSS Spectra. *IAPJS*, 249(1), 3.
- Hayes, C. R., **Troup, N. W.**, et al. (2020). First results from the Dark Skies, Bright Kids astronomy club draw-a-scientist test. *Physical Review Physics Education Research*, 16(1), 010131.
- Price-Whelan, A. M., Hogg, D. W., Rix, H.-W., Beaton, R. L., Lewis, H. M., Nidever, D. L., Almeida, A., Badenes, C., Barba, R., Beers, T. C., Carlberg, J. K., De Lee, N., Fernandez-Trincado, J., Frinchaboy, P. M., Garcia-Hernandez, D.-A., Green, P. J., Hasselquist, S., Longa-Pena, P., Nitschelm, C., Sobeck, J., Stassun, K. G., Stringfellow, G. S., **Troup, N. W.** (2020). Close Binary Companions to APOGEE DR16 Stars: 20,000 Binary-star Systems Across the Color-Magnitude Diagram. *IAPJ*, 895(1), 2.
- Aguado, D. S., **Troup, N. W.**, et al. (2019). The Fifteenth Data Release of the Sloan Digital Sky Surveys: First Release of MaNGA-derived Quantities, Data Visualization Tools, and Stellar Library. *IAPJS*, 240(2), 23.
- Sun, M., Arras, P., Weinberg, N. N., **Troup, N. W.**, Majewski, S. R. (2018). Orbital decay in binaries containing post-main-sequence stars. *MNRAS*, 481(3), 4077-4092.
- Price-Whelan, A. M., Hogg, D. W., Rix, H.-W., Lee, N. D., Majewski, S. R., Nidever, D. L., **Troup, N. W.**, Fernandez-Trincado, J. G., Garcia-Hernandez, D. A., Longa-Pena, P., Nitschelm, C., Sobeck, J., Zamora, O. (2018). Binary Companions of Evolved Stars in APOGEE DR14: Search Method and Catalog of similar to 5000 Companions. *Astronomical Journal*, 156(1).
- Wilson, R. F., Teske, J., Majewski, S. R., Cunha, K., Smith, V., Souto, D., Bender, C., Mahadevan, S., **Troup, N. W.**, Prieto, C. A., Stassun, K. G., Skrutskie, M. F., Almeida, A., Garcia-Hernandez, D. A., Zamora, O., Brinkmann, J. (2018). Elemental Abundances of Kepler Objects of Interest in APOGEE. I. Two Distinct Orbital Period Regimes Inferred from Host Star Iron Abundances. *Astronomical Journal*, 155(2).
- Skinner, J., Covey, K. R., Bender, C. F., Rivera, N., De Lee, Nathan, Souto, D., Chojnowski, D., **Troup, N. W.**, et al. (2018). Forty-four New and Known M-dwarf Multiples in the SDSS-III/APOGEE M-dwarf Ancillary Science Sample. *Astronomical Journal*, 156(2).
- Badenes, C., Mazzola, C., Thompson, T. A., Covey, K., Freeman, P. E., Walker, M. G., Moe, M., **Troup, N. W.**, et al. (2018). Stellar Multiplicity Meets Stellar Evolution and Metallicity: The APOGEE View. *Astrophysical Journal*, 854(2).

- Abolfathi, B., **Troup, N. W.**, et al. (2018). The Fourteenth Data Release of the Sloan Digital Sky Survey: First Spectroscopic Data from the Extended Baryon Oscillation Spectroscopic Survey and from the Second Phase of the Apache Point Observatory Galactic Evolution Experiment. *Astrophysical Journal Supplement Series*, 235(2).
- Holtzman, J. A., **Troup, N. W.**, et al. (2018). APOGEE Data Releases 13 and 14: Data and Analysis. *IAPJ*, 156(3), 125.
- Grieves, N., Ge, J., Thomas, N., Ma, B., Sithajan, S., Ghezzi, L., Kimock, B., Willis, K., De Lee, Nathan, Lee, B., Fleming, S. W., Agol, E., **Troup, N. W.**, et al. (2017). Exploring the brown dwarf desert: new substellar companions from the SDSS-III MARVELS survey. *Monthly Notices Of The Royal Astronomical Society*, 467(4), 4264-4281.
- Fernandez, M. A., **Troup, N. W.**, et al. (2017). IN-SYNC VI. Identification and Radial Velocity Extraction for 100+Double-Lined Spectroscopic Binaries in the APOGEE/IN-SYNC Fields. *Publications Of The Astronomical Society Of The Pacific*, 129(978).
- Blanton, M. R., **Troup, N. W.**, et al. (2017). Sloan Digital Sky Survey IV: Mapping the Milky Way, Nearby Galaxies, and the Distant Universe. *Astronomical Journal*, 154(1).
- Zasowski, G., **Troup, N. W.**, et al. (2017). Target Selection for the SDSS-IV APOGEE-2 Survey. *Astronomical Journal*, 154(5).
- Albaret, F. D., **Troup, N. W.**, et al. (2017). The 13th Data Release of the Sloan Digital Sky Survey: First Spectroscopic Data from the SDSS-IV Survey Mapping Nearby Galaxies at Apache Point Observatory. *Astrophysical Journal Supplement Series*, 233(2).
- Majewski, S. R., **Troup, N. W.**, et al. (2017). The Apache Point Observatory Galactic Evolution Experiment (APOGEE). *Astronomical Journal*, 154(3).
- Serenelli, A., Johnson, J., Huber, D., Pinsonneault, M., Ball, W. H., Tayar, J., Aguirre, V. S., Basu, S., **Troup, N. W.**, et al. (2017). The First APOKASC Catalog of Kepler Dwarf and Subgiant Stars. *Astrophysical Journal Supplement Series*, 233(2).
- Linden, S. T., Pryor, M., Hayes, C. R., **Troup, N. W.**, et al. (2017). Timing the Evolution of the Galactic Disk with NGC 6791: An Open Cluster with Peculiar High- α Chemistry as Seen by APOGEE. *Astrophysical Journal*, 842(1).



Urban and Regional Planning

- Ali, Amal K.** 2019. "Cities in North Africa." In Anthony M. Orum (Ed.), "Encyclopedia of Urban and Regional Studies." Hoboken: NJ, Wiley Blackwell
- Ali, Amal K.** 2020. "Challenges in Managing Urban Growth: the Case of Cairo." In Deden Rukmana (Ed.), "The Routledge Handbook of Planning Megacities in the Global South." New York City: NY, Routledge.

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