



Awards and Recognitions

Shirl Richardson, Sr Administrative Specialist in the Department of Biological Sciences was recipient of the June 2023 COS Excellence in Mastering Challenges Continuously ($E=mc^2$) Staff Award. This award recognizes staff for their distinguished track record of conscientious work supporting our faculty, staff, and students. She received a voucher for a free meal at Avesta from Dean John Quintanilla. More on Shirl's award can be found at: <https://cos.unt.edu/news/shirl-richardson-receives-june-cos-emc%C2%B2-award>

Shannon Collins, graduate student with Dr. Elinor Lichtenberg, received the E. Lucy Braun Award for best graduate student poster at the 2022 Ecological Society of America Annual Meeting for her poster titled, "Bottom-up impacts of rotational grazing disturbance on ground-nesting bee assemblages: do they dig it?" This award was announced in April 2023.

Supuni Dhameera Silva received the 2023 Golden Eagle Award, the most prestigious award that UNT bestows on a student leader! This award is based on academic, research, and co-curricular contributions to UNT and the greater community. Supuni is a UNT Biology PhD candidate working in STEM education research in Dr. Rudi Thompson's Lab. During her time at UNT, she has represented the College of Science by serving as a senator for the Graduate Student Council (GSC), and was the first-place winner of the 2021 Three Minute Thesis Competition (3MT)! More about Supuni can be found at: <https://cos.unt.edu/news/unt-biology-phd-candidate-supuni-dhameera-silva-receives-2023-golden-eagle-award>



Shirl Richardson with Dean Dr. John Quintanilla



Shannon Collins

Supuni Silva

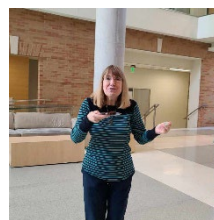
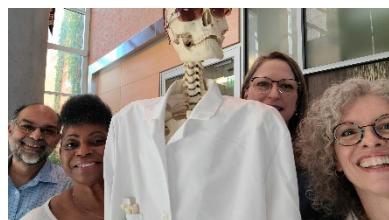
Graduate Awards and Scholarships

Department of Biological Science's Outstanding Teaching Assistant Awards: Congratulations to the Department of Biological Sciences Outstanding Teaching Assistant (OTA) / Graduate Services Assistant Awardees of 2023. The OTA, which is awarded annually, recognizes the excellence of our graduate students employed as Teaching Assistants and/or Graduate Services Assistants for their outstanding service in our undergraduate laboratory courses and/or similar supportive role. These OTA's, who are nominated by the Teaching Lab Supervisors, participated in all aspects of the laboratory offering, including review of the manual, laboratory preparation, teaching in the labs, and proctor grading for the laboratory assignments and exams, as well as exams in the associated lecture course. The winners of the 2023 OTA: **Jingya Cai**, her Major Advisor and Faculty Supervisor is Rebecca Dickstein. **Maddy Hannappel**, her Major Advisor and Faculty Supervisor is James Kennedy. **Barbie Kalta**, her Instructional Lab Supervisor is Jaime Baxter-Slye and Major Advisor is Andrew Gregory.



Outstanding Teaching Assistant Awardees with their lab supervisors and major professors

TA/GSA Appreciation Come-and-Go: The 2023 TA/GA Appreciation Come-and-Go was hosted by the Department of Biological Sciences as a way to express our appreciation to our Graduate Assistants for all they do for our students. The cake and punch event was held on May 1st in the Atrium of the Life Sciences Complex.



Photos from the TA/GSA Appreciation event

Faculty Retirement

Retirement Celebration: The Department of Biological Sciences hosted a celebration event for our retiring/recently retired faculty on May 12th, 2023 in the Atrium of the Life Sciences Complex. Upcoming and recent retirees Drs. Sam Atkinson, Robert Benjamin, Rebecca Dickstein, Richard Dixon, Daniel Kunz, Harris Schwark, and Barney Venables were celebrated at the event. Their service and presence at UNT will be missed by their colleagues and students. We wish them all the best!



Retirement for Drs. Atkinson, Benjamin, Dickstein, Dixon, Kunz, Schwark, and Venables

Staff Appointments

Kahylen Minniefield has joined the Microbiology department as a Scientific Laboratory Technician in April. He received his undergraduate degree in Biology with a minor in Mathematics, Chemistry and Computer Science from UNT in 2021. Since earning his degree, he has previously worked at Analytical Food Laboratory as a USP Microbiologist and Moldlab in Carrollton as a Lab Analyst. He currently wishes to build upon his foundational laboratory skills as he applies to a master's program and earns his degree while he works full time at UNT.



Kahylen Minniefield Shelley Schaffer

Shelley Schaffer has joined the BioDiscovery Institute as an Administrative Coordinator. She has more than 20 years of experience in higher education and has been serving learners in various capacities throughout her career. Her leadership roles range from administration, marketing, student support, student advising, admissions, strategic planning, business development, culture keeper, and brand ambassador. She has served on many committees and has been active with DOE reviews. She is returning to UNT where she began her college journey and her love for higher education.

Outreach Activities

University of North Texas chapter of the Society for Ecological Restoration attended the North Central Regional TXSER meeting at the Clymer Meadow Preserve in Celeste, TX sponsored by The Nature Conservancy and UNT Advanced Environmental Research Institute May 26 - 28. Students enjoyed camping, blacklighting, and a prairie tour at one of the last remaining prairie remnants in Texas. Brandon Belcher, Nature Conservancy Director, gave the tour and 'prairie 101' talk.



North Central Regional TXSER meeting

Avery Pearson (MS student) and Rob Whyte (PhD student) from Dr. Elinor Lichtenberg's Lab in conjunction with Bee Campus conducted a pollinator outreach event "Insect Scavenger Hunt in the Garden" this spring at the UNT Community Garden.

Thesis and Dissertation

Congratulations to our graduate students who successfully defended their thesis/dissertation.

Alicia Dunton successfully defended her dissertation titled "Neurotoxic effects of polycyclic aromatic hydrocarbons in vertebrates—from behavioral to cellular levels". Following graduation, she accepted a position as a Toxicologist and Human Health Risk Assessor in at the Environmental Protection Agency's Region 7 office.



Alicia Dunton



Corey Green



Duaa Quedan

Corey Green successfully defended his Ph.D. dissertation as of April, 2023. The title of his dissertation was "Developmental effects of a non-dioxin-like PCB mixture on zebrafish (*Danio rerio*)". His major advisor was Dr. Aaron Roberts. Corey accepted a tenure track position as Assistant Professor of Biology at Eastern New Mexico University, where he will start in Fall 2023.

Duaa Quedan successfully defended her Ph.D. dissertation titled, "Anti-S2 peptides and antibodies binding effect on myosin S2 and anti-S2 peptide's ability to reach the cardiomyocytes *in vivo* and interfere in muscle contraction." Her major advisor was Dr. Douglas Root. She has accepted an assistant professor position in University of Petra in Jordan beginning with the 2023-2024 academic year. She was awarded the outstanding TA for 2020-2021.



Gillian Stallings



Jingya Cai



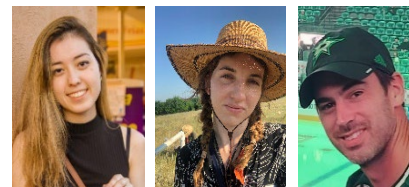
Lauren Crowder

Gillian Stallings successfully defended her M.S. thesis titled, "Secondary production of dragonflies: Comparing ecosystem function of ponds within an urban landscape in North Central Texas" on May 10th. Her major professor was Dr. James H. Kennedy. Gillian is currently employed by the U.S. Geological Survey as an Aquatic Biologist.

Jingya Cai successfully defended her PhD dissertation titled "Identification and Characterization of Genes Required for Symbiotic Nitrogen Fixation in *Medicago truncatula Tnt1* Insertion Mutants." Her major professor was Dr. Rebecca Dickstein. Jingya was also selected to receive the Outstanding Teaching Assistant Award.

Lauren Crowder successfully defended her MS thesis entitled "Air Breathing Fish: Development of Air Breathing in Bristlenose Plecos (*Ancistrus cirrhosus*)" on May 8th, 2023. Her major professor was Dr. Edward Dzialowski. She plans to attend veterinary school.

Layla Dale successfully defended her MS thesis titled "The Linkage of the Nitrilase-Encoding NitC Gene Cluster in *Acinetobacter haemolyticus*". Her major professor was Dr. Daniel Kunz. She will be returning to UNT in August for the PhD program under Dr. Calvin Henard.



Layla Dale Shannon Collins Steven Gore

Shannon Collins successfully defended her MS thesis titled "Bottom-up impacts of grazing disturbance on ground-nesting bee assemblages: do they dig it?". Her major professor was Dr. Elinor Lichtenberg. Shannon Collins is now working as Palouse Prairie Restoration Manager for The Phoenix Conservancy in Pullman, Washington.

Steven Gore successfully defended his PhD dissertation titled "Detection and classification of cancer and other noncommunicable diseases using neural network models". His major professor was Dr. Rajeev Azad. Steven is working as a Research Scientist here at UNT in the Bioinformatics core.

Upcoming Biology Seminars

Fall 2023 *BioFrontiers* Seminar - Friday's 3:00- 4:15PM at Life Sciences Building A, Room 117

- August 25: Dr. Michael Knoblauch, Professor, Washington State University
- September 1: Dr. Nicole De Nisco, Assistant Professor, University of Texas- Dallas
- September 8: Dr. Allyson Hindle, Associate Professor, University of Las Vegas
- September 15: Dr. William Prinz, Chair, University of Texas- Southwestern
- September 22: Dr. Justin Sprick, Assistant Professor, Kinesiology Department, UNT
- September 29: Dr. Davida Smyth, Associate Professor, Texas A&M, San Antonio
- October 6: Dr. James Bednarz, Principle Lecturer, University of North Texas
- October 13: Dr. Lena Nguyen, Assistant Professor, University of Texas at Dallas
- October 20: Dr. Kristin Nielsen, Assistant Professor, University of Texas-Austin
- October 27: Dr. Anton Espira, Neopeutics Inc. / Eco2librium (Kenya)
- November 3: Dr. Wendy Monk, Canadian Rivers Institute, University of New Brunswick
- November 10: Dr. Damar Lopez-Arredondo, Assistant Professor, Texas Tech University
- November 17: Dr. Christopher Voigt, Professor, Massachusetts Institute Technology
- December 1: Dr. Chelsea Little, Assistant Professor, Simon Fraser University, Canada

Extramural Grants and Contracts

Aiding imperiled fish and mussel conservation using swimming performance metrics to inform the design or modification of road stream crossings. Texas Parks and Wildlife Department & Texas Department of Transportation. PI: Ed Mager, \$93,341.

Assessing impacts of grazing management on pollinator conservation in rangeland. US Department of Agriculture, Southern SARE. PI: Elinor Lichtenberg, \$30,000.

Characterization of the carbon dioxide starvation response in a promising greenhouse gas mitigation biocatalyst. UNT BioDiscovery Institute. PI: Calvin Henard; Co-PI-Rajeev Azad, \$30,000.

Checklist Development and Conservation Status Assessment of Texas Native Bees. US Fish and Wildlife Service. PI: Elinor Lichtenberg, \$200,000.

Development and validation of CRISPR interference genome-wide libraries to enable high-throughput single-carbon biocatalyst optimization. Department of Energy Bioenergy Technology Office via MSI STEM Research and Development Consortium. PI: Calvin Henard, \$250,000.

Diamond Eagles Community Learning Area. Diamond Eagles Society. PI – Jamie Baxter-Slye (UNT); Co-PI – M. Thompson (UNT). \$77,500.

Extending the Green: Phase I Native Plant Median Conversion Garden Ridge Blvd. City of Lewisville. PI – Jamie Baxter-Slye (UNT); Co-PI – Elinor Lichtenberg (UNT). \$25,000.

Small RNA interactions with transgenes in genetically modified mosquito lines, NIH-R15, PI: Vanessa Macias, \$466,440. In collaboration with Dr. Nelson Lau at Boston University.

Structural and mechanistic studies of oxalate catabolism. National Science Foundation. PI: Xiaoqiang Wang; Co-PI – Paul Nakata (Baylor College of Medicine), \$800,000.

The Renin-Angiotensin System in Air Pollution-Mediated Exacerbation of Obesity (renewal). National Institute of Health / National Institute of Environmental Health Sciences. PI: Amie Lund; Co-PI: Rajeev Azad, \$435,982.

Publications

Al Sulaimi, R., Macknoja, A., Eskandari, M., Shirani, A., Gautam, B., Park, W., Whitehead, P., Alonso, A.P., Sedbrook, J.C., Chapman, K.D., and Berman, D. (2023) Evaluating the effects of very long chain and hydroxy fatty acid content on tribological performance and thermal oxidation behavior of plant-based lubricants. *Tribology International*. 185: 108576. <https://doi.org/10.1016/j.triboint.2023.108576>

Anderson CE, Ferreira SS, and Antunes MS. Integration of multiple stress signals in plants using synthetic Boolean logic gates. *Plant Physiol*. (2023) Apr 29: kiad254. <https://doi.org/10.1093/plphys/kiad254>

Arias, C.L., Garcia Navarrete, L.T., Mukundi, E., Swanson, T., Yang, F., Hernandez, J., Grotewold, E. and Alonso, A.P. (2023) Metabolic and transcriptomic study of pennycress natural variation identifies targets for oil improvement. *Plant Biotechnol. J.* <https://doi.org/10.1111/pbi.14101>

- Arias-Gaguancela, O., Herrell, E., Aziz, M., and Chapman, K.D. (2023) Two legume fatty acid amide hydrolase isoforms with distinct preferences for microbial- and plant-derived acylamides. *Scientific Reports*. 13: 7486. <https://doi.org/10.1038/s41598-023-34754-z>
- Bautista, N.M., Crespel, A.M., Bautista, G., and Burggren, W.W. (2023) Dietary crude oil exposure during sex differentiation skewed adult sex ratio towards males in the zebrafish. *Sci Total Environ*. 2023 May 26; 892:164449. <https://doi.org/10.1016/j.scitotenv.2023.164449>
- Black, A.N., Bondo, K.J., Mularo, A., Hernandez, A., Yu, Y., Stein, C.M., Gregory, A., Fricke, K.A., Prendergast, J., Sullins, D., Haukos, D., Whitson, M., Grisham, B., Lowe, Z., and DeWoody, J.A. (2023) A Highly Contiguous and Annotated Genome Assembly of the Lesser Prairie-Chicken (*Tympanuchus pallidicinctus*). *Genome Biol Evol*. 2023 Apr 6;15(4):evad043. <https://doi.org/10.1093/gbe/evad043>
- Borisjuk, L., Horn, P., Chapman, K.D., Jakob, P.M., Gündel, A. and Rolletschek, H. (2023). Seeing plants as never before. *New Phytologist*. 238: 1775-1794. <https://doi.org/10.1111/nph.18871>
- Guzha, A., Whitehead, P., Ischebeck, T., Chapman, K.D. (2023) Lipid droplets: Packing hydrophobic molecules within the aqueous cytoplasm. *Annual Review of Plant Biology*. 74:1, 195-223. <https://www.annualreviews.org/doi/abs/10.1146/annurev-arplant-070122-021752>
- Ha, C.M., Escamilla-Trevino, L., Zhuo, C., Pu, Y., Bryant, N., Ragauskas, A.J., Xiao, X., Li, Y., Chen, F., Dixon, R.A. Systematic approaches to C-lignin engineering in *Medicago truncatula*. *Biotechnol Biofuels Bioprod*. 2023 Jun 12;16(1):100. <https://doi.org/10.1186/s13068-023-02339-7>
- Parkash, V., Snider, J. L., Bruce, A., Ermanis, A., Virk, G., Kaur, N., Collins, G., and Chapman, K.D. (2023). Effects of cultivar and nitrogen application rate on lint, seed, oil, and protein yields of field-grown cotton. *Crop Science*. 63: 1541– 1554. <https://doi.org/10.1002/csc2.20938>
- Rippamonti, J., and Dzialowski, E.M. (2023). Thyroid hormone manipulation influences development of endothermy and hatching in white leghorn chickens (*Gallus gallus*). *Journal of Thermal Biology*. 103582. <https://doi.org/10.1016/j.jtherbio.2023.103582>
- Schneider, L.J., Santiago, I., Johnson, B., Stanley, A.H., Penaredondo, B., and Lund, A.K. (2023) Histological features of non-alcoholic fatty liver disease revealed in response to mixed vehicle emission exposure and consumption of a high-fat diet in wildtype C57Bl/6 male mice. *Ecotoxicol Environ Saf*. 261:115094. <https://doi.org/10.1016/j.ecoenv.2023.115094>
- Thyagarajan, A., Rapp, C.M., Schneider, L., Lund, A., Travers, J.B., Sahu, R.P. (2023) Exposure to diesel exhaust particulates and desert sand dust generates microvesicle particles and platelet-activating factor agonists. *Skin Res Technol*. 29(4):e13312. <https://doi.org/10.1111/srt.13312>
- Wilmsen, S.M. and Dzialowski, E.M. (2023). Substrate use and temperature effects in flight muscle mitochondria from an endothermic insect, *Manduca sexta*. *Comparative Biochemistry and Physiology A*. 281: 111439. <https://doi.org/10.1016/j.cbpa.2023.111439>

Oral Presentations

- 13C-Labeling Reveals Non-Conventional Pathways Involved in Fatty Acid Synthesis in Alternative Crops. GRC in Plant Metabolic Engineering, Barcelona, Spain, June 11-16, 2023. Oral Presentation by Dr. Ana Paula Alonso. Co-author: Jean-Christophe Cocuron.
- Advancing Pennycress as Alternative Renewable Energy. U.S DOE BETO Deploying Purpose-Grown Energy Crops for Sustainable Aviation Fuel Workshop, Kansas City, MO. June 5-7, 2023. Oral Presentations by Dr. Ana Paula Alonso.
- Carbon dioxide metabolism in the methanotroph *Methylococcus capsulatus*. 46th Symposium on Biomaterials, Fuels and Chemicals, Society for Industrial Microbiology and Biotechnology, Portland, Oregon, May 3, 2023. Invited seminar by Dr. Calvin Henard. Co-author: Dr. Yao-Chuan Yu.
- Closing an avian embryonic cardiovascular shunt: the role of actin polymerization in smooth muscle ductus arteriosus constriction. American Physiological Society, Physiology Summit 2023, Long Beach, CA. Rippamonti, J.R. and Dzialowski, E.M. 2023.
- Habitat needs of diverse pollinators determine insect conservation and sustainable land management. International Conference on Pollinator Biology, Health & Policy, State College, PA. June 3-6, 2023. Invited talk by Dr. Elinor M. Lichtenberg. Co-authors, S. Jha, Avery Pearson (MS student), Shannon Collins (MS student), E. Lopez, and K. Baum.
- Lignification and reactive oxygen-a blast from the past. Talk by Richard A. Dixon. Interdisciplinary Plant Group Symposium on Redox Regulation of Plant Stress and Development, University of Missouri, Columbia, MO, May 5, 2023.
- Mapping C1 metabolic pathways in the methanotrophic bacterium *Methylococcus capsulatus*. Department of Immunology and Microbiology, University of Colorado Anschutz Medical Campus, Aurora, Colorado, April 28, 2023. Invited seminar by Dr. Calvin Henard.
- Sex-specific differences in vascular dysfunction following traffic-generated air pollution exposure and associated hypoxic conditions. Organization of Sex Specific Differences (OSSD), Calgary, AB, Canada, May 7-11, 2023. Invited symposium speaker, Dr. Amie Lund.

Poster Presentations

- Dale, L., and Kunz, D. The Linkage of the Nitrilase-Encoding NitC Gene Cluster in *Acinetobacter haemolyticus*. American Society for Microbiology Conference, June 2023, Houston, TX.
- Dzialowski, E.M., Sirsat, T.S., Sirsat, S.K.G., Pineda, M.R., Price, E., and Crossley, J. Manipulating thyroid hormone levels alters development of skeletal muscle mitochondria in nestling red-winged blackbirds. American Physiological Society, Physiology Summit 2023, Long Beach, CA.
- Evers, J., and Ayre, B.G. Can we enhance productivity in poplar by enhancing phloem transport? 2023 Biology Research Symposium, Sponsored by the BGSA (Biology Graduate Students Association), University of North Texas, Denton, TX.
- Feragne, M., McGarry, R.C., and Ayre, B.G. Cotton bast fibers – A value-added, cost-neutral co-product. 2023 Biology Research Symposium, Sponsored by the BGSA (Biology Graduate Students Association), University of North Texas, Denton, TX.

Heath, A., Nering, C., Ashman, J., Rutherford, M., Baxter-Slye, J. Organization, Engagement, and Impact of the University of North Texas Student Chapter of the Society for Ecological Restoration. 2023 Texas Regional Alliance for Campus Sustainability Summit (TRACS), College Station, TX

Heckart, A., Ray, S.C., Cocuron, J.C., Rappleye, C.A., Alonso, A.P. Metabolic Characterization of Human Fungal Pathogen, *Histoplasma capsulatum*. Annual Graduate Student Research Symposium, University of North Texas: Biology Graduate Student Association, Denton, TX, April 13-14.

Heckart, A., Ray, S.C., Cocuron, J.C., Rappleye, C.A., Alonso, A.P. Fungus Among Us: Metabolism of Human Pathogen, *Histoplasma capsulatum*. Metabolomics 2023, Niagara Falls, Ontario, Canada, June 18-22.

Higgs, H., Antunes, M., Ayre, B.G., and McGarry, R.C. Applying natural mobility factors to enhance meristem-based gene editing with RNA viruses. 2023 Biology Research Symposium, Sponsored by the BGSA (Biology Graduate Students Association), University of North Texas, Denton, TX.

Kaur, H., McGarry, R.C., and Ayre, B.G. Bast fiber development in *Gossypium hirsutum*. 2023 Biology Research Symposium, Sponsored by the BGSA (Biology Graduate Students Association), University of North Texas, Denton, TX.

LaChance, J. and Alonso, A.P. Targeted Metabolic Profiling of Developing Embryos from *Physaria fendleri*, a Promising Alternative Oilseed Crop Rich in Hydroxy Fatty Acids. Metabolomics 2023, Niagara Falls, Ontario, Canada, June 18-22.

LaChance, J.* and Alonso, A.P. Comparative Metabolomics of Developing Embryos from *Physaria fendleri*, an Alternative Oilseed Crop Specializing in Hydroxy Fatty Acid Production. Annual Graduate Student Research Symposium, University of North Texas: Biology Graduate Student Association, Denton, TX, April 13-14. *2nd Best Poster.

Lewis, E., Morris, V., Gantt, G., Meliane, M., Rhodes, R., and Baxter-Slye. The UNT SER Greenhouse Crew: Primary Producers for the Pollinative Prairie. 2023 Texas Regional Alliance for Campus Sustainability Summit (TRACS), College Station, TX

Lin, Y-T., McGarry, R.C., and Ayre, B.G. Genetic induction of somatic embryogenesis in *Gossypium hirsutum* using embryogenesis regulators. 2023 Biology Research Symposium, Sponsored by the BGSA (Biology Graduate Students Association), University of North Texas, Denton, TX.

Makni, S., Ray, S., Cocuron, J.C., Rappleye, C., and Alonso, A.P. Identification of the macrophage molecules consumed by *Histoplasma capsulatum* during the infection. Metabolomics 2023, Niagara Falls, Ontario, Canada, June 18-22, 2023.

Meadows, B., Connor, M., Morrow, J., Muniz, M., Richter, B., Bednarz, J., and Baxter-Slye, J. The University of North Texas Bird Campus Committee: Student-led Avian Conservation and Education Initiatives on Campus. 2023 Texas Regional Alliance for Campus Sustainability Summit (TRACS), College Station, TX

Muniz, M., Baxter-Slye, J., and Bednarz, J. Monitoring Bird-Window Strikes on the University of North Texas Campus. (2023). 2023 Texas Regional Alliance for Campus Sustainability Summit (TRACS), College Station, TX

Rasoul, A.*, Johnston, C., Alonso A.P. Fueling the Future: A Multi-omics Analysis of Tailored Fatty Acid Composition in Pennycress for Jet Fuel Production. Annual Graduate Student Research Symposium, University of North Texas: Biology Graduate Student Association, Denton, TX, April 13-14. *1st place Best Poster.

Richter, B., Rutherford, M., Thomas, S., Collins, S., Wooley, M., and Baxter-Slye (. University of North Texas Tree Inventory Project: An Applied Student Research Prospectus. 2023 Texas Regional Alliance for Campus Sustainability Summit (TRACS), College Station, TX

Rippamonti, J.R. and Dzialowski, E.M. 2023. Does the cofilin pathway play a role in closure of the avian ductus arteriosus (*Gallus gallus*). American Physiological Society, Physiology Summit 2023, Long Beach, CA.

Rutherford, M., Lawton, C., Lawler, A., Medina, N., Eastland, I., and Baxter-Slye. Biodiversity of the Pecan Creek Pollinative Prairie: Observational Data of a Reconstructed Prairie on the Urban University of North Texas Campus as an Undergraduate Educational Resource. 2023 Texas Regional Alliance for Campus Sustainability Summit (TRACS), College Station, TX

Singh, D., Scott, K.L., Cocuron, J.C., Slot, J.C., Chaverri, P., and Alonso, A.P. Fungal leaf endophytes enrich functional metabolomes in wild Rubiaceae. Metabolomics 2023, hosted by Metabolomics Society, Niagara Falls, Ontario, Canada, June 18-22.

Werra, H., Rippamonti, J.R., and Dzialowski, E.M. Actin polymerization increases in the ductus arteriosus during the developmental transition to lung ventilation. American Physiological Society, Physiology Summit 2023, Long Beach, CA.

BIOSphere is a quarterly newsletter of the Department of Biological Sciences, University of North Texas

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