



Recognition and Awards

Congratulations to our Outstanding Teaching Assistants who were recognized during the Outstanding Teaching Assistant Award Ceremony held on May 29, 2020.

Bethany Hudson – Outstanding Non-Majors Biology Teaching Assistant. Bethany has been a Teaching Assistant in face-to-face and online versions of two non-majors biology lab courses during her academic career. According to her lab supervisor Claudia Gonzales, Bethany has demonstrated consistency and has served as a resource for new Teaching Assistants.



Bethany Hudson



Prajita Pandey

Prajita Pandey – Outstanding Freshman Biology Teaching Assistant. Ipsita Lahiri, the lab supervisor for Freshman Biology labs commented that Prajita is reliable, prepared, organized and professional. She is the first to try new laboratory approaches and does not shy away from change.

Devasantosh Mohanty – Outstanding Microbiology Teaching Assistant. Microbiology Lab Supervisor Roxanna Hughes indicated that Devasantosh is hardworking, flexible and always willing to help. He possesses both the interest and willingness to take on separate lab course preps in a single term. He serves as a role model for other TAs and assists with training of new Teaching Assistants.



Sonya Layton



Dev Mohanty

Sonya Layton – Outstanding Research-based Lab Teaching Assistant. Dr. Lee Hughes recognized Sonya as an extremely valuable Teaching Assistant during her years serving in this position. She always performs above expectations and is willing to go the extra mile to make sure everything is ready and working well for the PHAGES labs. Sonya served as the coordinator of the lab when her faculty member was on sabbatical. She is well liked by her students while also pushing them to do their best work in the laboratory.

Megann Harlow – Outstanding Environmental Science/Ecology Teaching Assistant. Lab supervisor Jaime Baxter-Slye noted that Megann's versatility and ability to establish a good rapport with her students makes her a standout among environmental science/ecology Teaching Assistants. She identifies laboratory needs and then meets those needs. Furthermore, her breadth and depth of knowledge have allowed her to Teaching Assistant in various laboratory environments.

Garima Saxena – Outstanding Upper Division Teaching Assistant. According to Arland Alberts, lab supervisor for Genetics, Parasitology and Immunology labs, Garima who has served as the lead Teaching Assistant, assists with new Teaching Assistant training, is always willing to answer questions or assist with lab prep. She works well with other Teaching Assistants and has a good rapport with her students.

Dr. Ana Alonso received the Early Career Award for Research and Creativity. This award goes to a UNT faculty member within her/his first 10 years in a fulltime faculty appointment whose research accomplishments or creative endeavors have been truly outstanding. <https://vpaa.unt.edu/fs/recognition/list/early-career>.



Dr. Ana Alonso



Dr. Richard Dixon



Dr. Calvin Henard

Dr. Richard Dixon, University Distinguished Research Professor of Biological Sciences, was elected Member-at-Large of the US National Academy of Sciences Class VI Membership Committee in Applied Biological, Agricultural, and Environmental Sciences.

Dr. Calvin Henard was appointed to the editorial board of 'Communications Biology', a Nature research journal.

Thesis and Dissertation

Chase Corley successfully defended his MS thesis 'Analysis of N-acetyethanolamines in the oilseed crop *Camelina sativa*' on June 30, 2020. Regent's Professor Dr. Kent Chapman was Chase's thesis advisor. Chase is working as an Analytical Chemist at University of Texas Southwestern Medical School in Dallas, TX



Corey Chase

Staff Appointments

Dr. Athanas Guzha who graduated with a PhD from University of Goettingen, Germany, recently joined Dr. Kent Chapman's Laboratory as a postdoc. His Ph.D. work was on the organizational changes in the plant cell wall in response to microbial infection. Athanas is currently working on a U.S. Department of Energy- funded project led by the Alonso lab at UNT in collaboration with the Chapman lab at UNT and the Grotewold Lab at Michigan State.



Dr. Athanas Guzha



Michelle Vohs

Michelle Vohs joined the department as Elinor Lichtenberg's lab manager in April 2020. Michelle comes to UNT from the University of Minnesota, where she obtained a BS in Fisheries and Wildlife, and worked as a Research Scientist at the Bee Research Facility. Michelle has experience studying native bees and plants, as well as honey bees.

Alumni News

Dr. Jantana Keereetaweep, former PhD. student in the Dr. Kent Chapman's Laboratory, was selected at the 2020 recipient of the Paul Stumpf Award by the International Symposium on Plant Lipids (ISPL). This award is given to a promising early career scientist for research achievements in the field of plant lipid biochemistry. Jan is currently a post-doctoral scientist in the lab of Dr. John Shanklin at Brookhaven National Laboratory on Long Island, NY. She presented a lecture on her research work at a virtual meeting of the ISPL on July 7, 2020.



Dr. Jantana
Keereetaweep

Extramural Grants and Contracts

A novel role for actin polymerization in the closure of the ductus arteriosus. National Institutes of Health, PI: Edward M. Dzialowski, \$423,508.

Cotton Biotechnology Center. Cotton Incorporated. PI, Kent Chapman; \$100,000.

Conversion Verification Subject Matter Expert Bioenergy Engineering for Products Synthesis (BEEPS) Zymochem Project. Subcontract: Dr. Calvin Henard, \$17,449. Linking ranch management to aquatic ecosystem functioning. Dixon Water Foundation. PI: Hoeinghaus, Co-PI: Roberts. \$135,000 (direct funding), and eligible for an additional \$67,500 in direct matching funds through the Texas Research Incentive Program.

Developing Resistance to Fusarium Head Blight in Wheat. United States Department of Agriculture. PI: Shah, Jyoti, \$80,256.

Elucidation of CO₂-dependent methanotrophy at cellular and ecosystem levels. UNT College of Science Seed Grant. PI: Dr. Calvin Henard, \$10,000.

Engineering Seed Value in Cotton. Cotton Incorporated. PI, Kent Chapman; \$115,000.

New Research Lab and Teaching Facility at the UNT Water Research Field Station. Private foundation award (donor wishes to remain anonymous). PIs: Roberts, Hoeinghaus and Kennedy, on behalf of the Advanced Environmental Research Institute. \$300,000 (direct funding), and eligible for an additional \$150,000 in direct matching funds through the Texas Research Incentive Program.

Patent Filed

Recombinant WRKY polynucleotides, WRKY modified plants and uses thereof. Inventors: Jyoti Shah, Monika Patel, Vijee Mohan; Application # 16831138.

Publications

Atkinson, S.F., Lake, M.C. (2020) Prioritizing riparian corridors for ecosystem restoration in urbanizing watersheds. *PeerJ* 8:e8174 <https://doi.org/10.7717/peerj.8174>.

Aziz, M., Chapman, K.D. (2020) Fatty acid amide hydrolases: An expanded capacity for chemical communication? *Trends in Plant Science* 25 (3), 236-249. <https://doi.org/10.1016/j.tplants.2019.11.002>.

Briceño, C., D. González-Acuña, S.M. Funk, M.L. Bornscheuer, L.K. Knapp & J.E. Jiménez. 2020. Ear mite, *Otodectes cynotis*, on wild foxes (*Pseudalopex* spp.) in Chile. *Journal of Wildlife Diseases* 56:105-112. DOI: 10.7589/2018-10-247.

Burnham, K.K., Burnham, J.L., Johnson, J.A., Konkel, B.W., Stephens, J., Badgett, H. (2020) First record of horned puffin in the North Atlantic and tufted puffin in High Arctic Greenland. *Polar Research*. 39: 4458.

Chowdhury, Z., Mohanty, D., Giri, M.K., Venables, B.J., Chaturvedi, R., Chao, A., Petros, R.A., Shah, J. (2020) Dehydroabietinal promotes flowering time and plant defense via the autonomous pathway genes *FLOWERING LOCUS D*, *FVE*, and *RELATIVE OF EARLY FLOWERING 6*. *Journal of Experimental Botany* DOI: 10.1093/jxb/eraa232.

Esnay, N., Dyer, J.M., Mullen, R.T., Chapman, K.D. (2020) Lipid droplet-peroxisome connections in Plants. *Contact* 3, <https://doi.org/10.1177/2515256420908765>.

Ischebeck, T., Krawczyk, H.E., Mullen, R.T., Dyer, J.M., Chapman K.D. (2020) Lipid droplets in plants and algae: Distribution, formation, turnover and function. *Seminars in Cell & Developmental Biology (SDCB)*. <https://doi.org/10.1016/j.semcd.2020.02.014>

Jiménez, J.E., M.K. Jones, K. Stoddart, S. Dickson, A. Chapman, J.L. Baxter-Slye & K.L. Steigman. 2020. Comparative diet analysis of Barn Owl (*Tyto alba*) and Long-eared Owl (*Asio otus*) in a habitat island in north-central Texas. *Texas Journal of Science* 72. DOI: 10.32011/tjxsci_72_1_Article5.

Lu S., Aziz M., Sturtevant D., Chapman K.D., Guo L. (2020) Heterogeneous distribution of erucic acid in *Brassica napus* seeds. *Frontiers in Plant Science* 10, 1744. <https://doi.org/10.3389/fpls.2019.01744>.

McClure, C.J.W., Lepage, D., Dunn, L., Anderson, D.L., Schulwitz, S.E., Camacho, L., Robinson, B.W., Christidis, L., Schulenberg, T.S., Iliif, M.J., Rasmussen, P.C., Johnson, J.A. (2020) Towards reconciliation of the four world bird lists: hotspots of disagreement in taxonomy of raptors. *Proceedings of the Royal Society B*. 287: 20200683.

McClure, C.J.W., Westrip, J.R.S., Johnson, J.A., Schulwitz, S.E., Virani, M.Z., Davies, R., Symes, A., Wheatley, H., Thorstrom, R., Amar, A., Buij, R., Jones, V.R., Williams, N.P., Buechley, E.R., Butchart, S.H.M. (2020) Raptor conservation priorities must incorporate evolution, ecology and economics, in addition to island endemism. *Biological Conservation*. 245: 108583. Rolletschek H., Schwender, J. König, C., Chapman, K.D., Romsdahl, T. Lorenz, C. Braun, H.-P., Denolf, P., van Audenhove, K., Munz, E., Heinzel, N. Ortleb, S., Rutten, T., McCorkle, S. Borysyuk, T., Gündel, A., Shi, H., Vander Auwermeulen, M., Bourrot, S., Borisjuk L. (2020) Cellular plasticity in response to suppression of storage proteins in the *Brassica napus* embryo. *Plant Cell*. DOI: <https://doi.org/10.1105/tpc.19.00879>.

Price, A.M., Doner, N.M., Gidda, S.K., Jambunathan, S., James, C.N., Schami, A., Yurchenko, O., Mullen, R.T., Dyer, J.M., Puri, V., Chapman, K.D. (2020) Mouse Fat-Specific Protein 27 (FSP27) expressed in plant cells localizes to lipid droplets and promotes lipid droplet accumulation and fusion. *Biochimie* 169, 41-53. <https://doi.org/10.1016/j.biochi.2019.08.002>.

Robertson, M.W., Russo, N.J., McInnes, S.J., Goffinet, B., and Jiménez, J.E. (2020) Potential dispersal of tardigrades by birds through endozoochory: evidence from Sub-Antarctic White-bellied Seedsnipe (*Attagis malouinus*). *Polar Biology* 43: 899-902. DOI: 10.1007/s00300-020-02680-9.

Russo, N.J., M. Robertson, R. MacKenzie, B. Goffinet & J.E. Jiménez. 2020. Evidence of targeted consumption of mosses by birds in sub-Antarctic South America. *Austral Ecology* 45:399-403. DOI: 10.1111/aec.12858.

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Sturtevant, D., Lu, S., Zhou, Z.W., Shen, Y., Wang, S., Song, J.M., Zhong, J., Burks, D.J., Yang, Z.Q., Yang, Q.Y., Cannon, A.E., Herrfurth, C., Feussner, I., Borisjuk, L., Munz, E., Verbeck, G.F., Wang, X., Azad, R.K., Singleton, B., Dyer, J.M., Chen, L.L.,* Chapman, K.D.,* Guo L.* (2020) The genome of jojoba (*Simmondsia chinensis*): A taxonomically isolated species that directs wax ester accumulation in its seeds. *Science Advances* 6 (11), eaay3240. DOI: 10.1126/sciadv.aay3240.

Poster Presentation and Conferences

Ho, D., Miller, W. and Jiménez, J.E. (2020) Biogeography of tardigrades of South America: are the abundance and habitat use patterns between an oceanic island and the mainland similar? Presented at the School of Science student conference, University of North Texas.

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