VITA

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EDUCATION:

2006 B.S. Mississippi State University. Agronomy
2009 M.S. Mississippi State University. Plant Pathology
2013 Ph.D. University of Arkansas. Horticulture

PROFESSIONAL EXPERIENCE:

2020-present Associate Professor, Texas Tech University (70% Teaching; 20% Research; 10% Service)

2013-2020 Assistant Professor, Texas Tech University (70% Teaching; 20% Research; 10% Service)

LICENSES AND CERTIFICATIONS

2017-present TDA Pesticide Applicators License; Lawn and Ornamental

MEMBERSHIP IN PROFESSIONAL AND HONORARY SOCIETIES:

Professional:

1. Golf Course Superintendents Association of America; 2003 to present
2. Crop Science Society of America; 2008 to present
3. Texas Turfgrass Association; 2013 to present
4. West Texas Golf Course Superintendents Association; 2013 to present
5. Sports Turf Managers Association; 2014 to present
6. Texas Sports Turf Managers Association; 2014 to present
7. American Society of Horticultural Science; 2018 to present

Honorary:

1. Gamma Sigma Delta, 2014 to present

HONORS AND AWARDS:

1. Texas Tech Alumni Association New Faculty Award for CASNR in 2016
2. John Burns Award from CISER at TTU 2017
3. Davis College Teaching Award 2022
4. Davis College Undergraduate Advising Award 2023

AREA OF EXPERTISE:

1. Turfgrass management for golf courses, athletic fields, and lawns
2. Water conservation strategies for turf management

PUBLICATIONS

Refereed Journals: total published 21, in press 0

1. **Young, J.**, M. Tomaso-Peterson, and J.A. Crouch. 2008. First report of *Colletotrichum cereale* causing anthracnose foliar blight of creeping bentgrass in Mississippi and Alabama. Plant Disease 92:1475. *(Impact factor = 2.39; Citations = 9) Conducted Koch's postulate and genetic verification of isolates; wrote first report in collaboration*
2. **Young, J.**, M. Tomaso-Peterson, K. de la Cerda, and F.P. Wong. 2010. Two mutations in β-Tubulin 2 gene associated with thiophanate-methyl resistance in *Colletotrichum cereale* isolates from creeping bentgrass in Mississippi and Alabama. Plant Disease 94:207-212. *(Impact factor = 2.39; Citations = 28) Completed research and analysis in writing manuscript from MS thesis research*
3. Tomaso-Peterson, M., and **J. Young.** 2010. Cultivar response of seeded bermudagrass to leaf spot and the influence of nitrogen on disease severity. Applied Turfgrass Science. doi:10.1094/ATS-2010-0326-01-RS. *(Impact factor = N/A; Citations = 2; Accept/reject ratio = 56%) Contributions – Data collection and edits to manuscript*
4. **Young, J.**, M. Tomaso-Peterson, L.P. Tredway, and K. de la Cerda. 2010. Occurrence and molecular identification of azoxystrobin-resistant *Colletotrichum cereale* isolates from golf course putting greens in the Southern United States. Plant Disease. 94:751:757. *(Impact factor = 2.39; Citations = 36) Completed research and analysis in writing manuscript from MS thesis research*
5. **Young, J.**, D.E. Karcher, and M.D. Richardson. 2010. *Microdochium nivale* isolated from Colonial bentgrass cultivars following harsh winter in Northwest Arkansas. Applied Turfgrass Science. doi:10.1094/ATS-2010-1013-01-BR. *(Impact factor = N/A; Citations = 0; Accept/reject ratio = 56%) Contributions – Fungal organism identification, data collection, and corresponding author*
6. **Young, J.**, T.K. Udeigwe, T. Kandakji, P. Gautam*, M.A. Mahmoud. 2014. Evaluating management-induced soil salinization in golf courses in semi-arid landscapes: extending portable x-ray fluorescence spectrometry to soil salinity prediction. Solid Earth 6:393-402. *(Impact factor = 2.27; Citations = 31) Contributions – Data collection and edits to manuscript*
7. Udeigwe, T., **J. Young**, T. Kandakji, D.C. Weindorf, M.A. Mahmoud, and M.H. Stietiya. 2014. Elemental quantification, chemistry, and source apportionment in golf course facilities in semi-arid urban landscape using portable x-ray fluorescence spectrometer. Solid Earth 6:415-424. *(Impact factor = 2.27; Citations = 23) Contributions – Data collection and edits to manuscript*
8. Strunk, W., D. Karcher, **J. Young**, A. Patton, and M. Richardson. 2015. Golf shot performance characteristics influenced by ball lie. Crop, Forage and Turfgrass Management. doi: 10.2134/cftm2015.0136. *(Impact factor = N/A; Citations = 1; Accept/reject ratio = 56%) Contributions – Data collection and edits to manuscript*

9. **Young, J**., M. Richardson, and D. Karcher. 2015. Creeping bentgrass putting green response to combined mowing, rolling, and foot traffic under environmental stress. Agronomy Journal. Available online doi:10.2134/agronj15.0087. *(Impact factor = 1.83; Citations = 4) Contributions – Corresponding author for data collection, analysis, and writing*
10. **Young, J.,** M. Richardson, and D. Karcher. 2016. Golf ball mark severity and recovery as effected by mowing height, rolling frequency, foot traffic, and moisture. Agronomy Journal. 109:1-7. doi:10.2134/agronj2016.04.0240. *(Impact factor = 1.83; Citations = 0) Contributions – Corresponding author all actions; Featured cover article for month)*
11. Kreuser, W., **J. Young**, and M. Richardson. 2017. Modelling performance of growth regulators. Agricultural and Environmental Letters. doi:10.2134/ael2017.01.0001. *(Impact factor = N/A; Citations = 11; Accept/reject ratio = 61%) Contributions – Data collection Lubbock location and assisted with writing manuscript*
12. Li*, L., **J. Young**, and S. Deb. 2019. Effects of cultivation practices and products on bermudagrass fairways in semiarid region. Agronomy Journal 111:1-9. doi:10.2134/agronj2019.04.0262. *(Impact factor = 1.83; Citations = 3) Contributions – MS student project, but rewritten and reanalyzed for manuscript*
13. Culpepper*, T., **J. Young**, D.T. Montague, D. Sullivan, and B. Wherley. 2019. Physiological Responses in C_3 and C_4 Turfgrasses under Soil Water Deficit. HortScience 54(12):2249-2256. (*Impact factor = 0.83; Citations = 5*) *Contributions – MS student project, completely written and reanalyzed for manuscript by me and other co-authors*
14. Baliga*, V., J. Young, M. Carrillo. 2019. Evaluation of water retention products to conserve urban water resources in home lawns. Crop, Forage and Turfgrass Management 5:190051. doi:10.2134/cftm2019.07.0051. (*Impact factor = NA; Citations = 0*) *Contributions – PhD student research written by student, but edited by myself and others.*
15. Gautam*, P., **J. Young**, M. Sapkota*, S. Longing, and D. Weindorf. 2019. Soil carbon sequestration in bermudagrass golf course fairways in Lubbock, Texas. Agronomy Journal.112:148-157. https://doi.org/10.1002/agj2.20023 *(Impact factor = 1.83; Citations = 6) Contributions – MS student project, but rewritten and reanalyzed for manuscript.*
16. Culpepper*, T., **J. Young**, and B. Wherley. 2019. Comparison of four warm-season turfgrass species to natural rainfall and supplemental irrigation in a semiarid climate. Agroecosystems, Geosciences & Environment. 3:e20011 https://doi.org/10.1002/agg2.20011 (*Impact factor = N/A; Citations = 6*) *Contributions – MS student project, completely written and reanalyzed for manuscript by me and co-author*
17. Culpepper*, T., **J. Young**, D.T. Montague, M. Sapkota*, E. Escamilla*, and B. Wherley. 2020. Physiological response to water deficit stress with restricted rooting in tall fescue and Zoysiagrass. Journal of Environmental Horticulture 38(1):29-36. (*Impact factor = N/A; Citations = 2*) *Contributions – MS student project, completely written and reanalyzed for manuscript by me and co-authors*
18. Sapkota, M., **J. Young**, C. Coldren, L. Slaughter, and S. Longing. 2020. Soil physiochemical properties and carbon sequestration of urban landscapes in Lubbock, TX, USA. Urban Forestry and Urban Greening 56: 126847. https://doi.org/10.1016/j.ufug.2020.126847 (*Impact Factor = 4.468; Citations = 12*) *Contributions – MS student project, co-written by student and myself along with colleagues in preparation for publication.*

19. Sapkota, M., **J. Young**, L. Slaughter, V. Acosta-Martínez, and C. Coldren. 2020. Soil microbial biomass and composition from urban landscapes in a semiarid climate. Applied Soil Ecology 158:103810. https://doi.org/10.1016/j.apsoil.2020.103810 (*Impact Factor = 3.60; Citations = 6) Contributions – MS student project, co-written by student and myself along with colleagues in preparation for publication*
20. Straw, C., C. Bolton, J. Young, R. Hejl, J. Friell, and E. Watkins. 2022. Soil moisture variability on golf course fairways across the United States: an opportunity for water conservation with precision irrigation. Agrosystems, Geosciences & Environment, 5, e20323. https://doi.org/10.1002/agg2.20323. (*Impact Factor = N/A; Citations = 0) Contributions – Data from High School Science Fair project included and assisted with writing and editing manuscript)*
21. Phillips, C.L., R. Wang, C. Mattox, T.L.E. Trammell, **J. Young**, and A. Kowalewski. 2023. High soil carbon sequestration rates persist several decades in turfgrass systems: A meta-analysis. Science of The Total Environment 858(3):158874 https://doi.org/10.1016/j.scitotenv.2022.159974. (*Impact Factor = 10.75; Citations = 0) Contributions – Data from previous research included and assisted with writing and editing manuscript).*

In press: total of 2

1. Farzana, K., Coldren, C., Simpson, C., **Young, J.**, Cleveland, T. Evaluating the Sensitivity of Hydrological Response to Changes in Vegetation Classification: A Case Study of St. Charles Bay, Texas, USA. International Journal of Hydrology Science and Technology. (*Impact Factor = 0.9; Citations = 0) Contributions – Edits from dissertation chapter submitted for publication)*.
2. O'Brien, D., Karcher, D., **Young, J**., Richardson, M., Kostka, S., Fidanza, M. Penetrants versus retainers: comparing soil surfactant terminology to performance on sand-based putting greens. ASTM International: Selected Technical Papers. (*Impact Factor = 0; Citations = 0) Contributions – Data from previous research included and assisted with writing and editing manuscript)*

Book Chapter: total of 1

1. Bowling, R. and J. Young. 2023. Advances in turfgrass for ornamental lawns. Chapter in "Achieving Sustainable Turfgrass Management" Burleigh Dodds Science Publishing, Cambridge, UK.

Abstracts: total of 24

1. Udeigwe, T, **J. Young**, T. Kandakji, and P. Gautam*. 2013. Examination in changes in soil chemistry properties resulting from irrigation source and turf management in the Texas high plains. Soil Science of America Abstract #271-13. (poster)
2. Gautam*, P. and **J. Young**. 2014. Long-term carbon sequestration potential from bermudagrass fairways in Lubbock, TX. Crop Science Society of America Abstract # 289-27. (poster)
3. White*, R. and **J. Young**. 2014. Suppression of creeping bentgrass with sequential applications of plant growth regulators. Crop Science Society of America Abstract # 289-21. (poster)

4. Li*, L. and **J. Young**. 2015. Reducing salinity parameters with cultivation practices and products on golf course fairways. Crop Science Society of America Abstract # 143-3.
5. White*, R. and **J. Young.** 2015. Growing degree day models of plant growth regulator efficacy on creeping bentgrass putting greens. Crop Science Society of America Abstract # 80-8. (oral)
6. **Young, J.** and J. Moore-Kucera. 2015. Fertilizer rate and source to reduce summer chlorosis of Kentucky Bluegrass. Crop Science Society of America. Abstract # 239-5. (oral)
7. Li*,L. and **J. Young**. 2016. Reducing salinity parameters with cultivation practices and products on golf course fairways. Crop Science Society of America Abstract # 198-3
8. Baliga*, V. and **J. Young**. 2017. Effects of consumer end conservation products on bermudagrass quality in severe drought conditions. Crop Science Society of America Abstract #107197.
9. Escamilla, E., S. Deb, L. Li*, and **J. Young**. 2017. Estimating the hydraulic parameters of golf course soils under different cultivation practices and product treatments. Soil Science Society of America Abstract #107132.
10. Culpepper*, T. and **J. Young**. 2017. Chronic drought stress of common lawn turf species in the United States transition zone. Crop Science Society of America Abstract #106961.
11. **Young, J**. and L. Li*. 2017. Soil salinity reductions with cultivation practices and products. Crop Science Society of America Abstract #344-1.
12. Baliga*, V. and **J. Young**. 2017. Motivations for water conservation among homeowners in semi-arid West Texas. Crop Science Society of America Abstract #128-3.
13. **Young, J**. 2016. Reducing irrigation demand with polymer coated sand. Crop Science Society of America Abstract # 169-1709.
14. Culpepper*, T. and **J. Young**. 2018. Chronic drought stress of common turfgrass species in a semiarid environment. Crop Science Society of America Abstract, Baltimore, MD.
15. Sapkota*, M. and **J. Young**. 2018. Regrowing bermudagrass following jackrabbit damage. Crop Science Society of America Abstract, Baltimore, MD.
16. Escamilla*, E., **J. Young**, and S. Deb. 2018. Effects of cultivation practices and product treatments on soil moisture retention characteristics in golf course soils with contrasting textures. Crop Science Society of America Abstract #49-4
17. **Young, J.** 2019. Turfgrass science: A future perspective on managing turfgrass. Crop Science Society of America Abstract, San Antonio, TX.
18. Escamilla*, E., **J. Young**, and S. Deb. 2019. Spatial variability of soil physical properties in golf course fairways. Crop Science Society of America Abstract, San Antonio, TX.
19. Escamilla*, E., S. Deb, and **J. Young**. 2019. Evaluation of hydraulic properties of selected growing media mixes for greenhouse crop production. Soil Science Society of America Abstract, San Antonio, TX.
20. Sapkota*, M., **J. Young**, L. Slaughter, and V. Acosta-Martinez. 2019. Soil microbial community dynamics in urban turfgrass soils in a semiarid climate. Crop Science Society of America Abstract, San Antonio, TX.
21. Sapkota*, M. and **J. Young**. 2019. Soil physiochemical properties and carbon sequestration of urban landscapes in Lubbock, TX. Crop Science Society of America Abstract, San Antonio, TX.

22. **Young, J.**, S. Deb, and D. Karcher. 2020. Effect of water penetrating and retaining surfactants on putting green surface characteristics. Crop Science Society of America Abstract, Virtual Conference.
23. Lafferty*, H., **J. Young**, and C. Straw. 2022. Soil water dynamics across golf course fairways. Crop Science Society of America Abstract, Baltimore, MD.
24. Young, J. 2024. Building Awareness of Turfgrass Science at the High School Level. Crop Science Society of America Abstract, San Antonio, TX.

Technical reports: total of 2

1. White*, R. and **J. Young**. 2015. Suppression of creeping bentgrass with sequential applications of PGRs. Golfdom Magazine 71(6):43.
2. **Young, J.** 2016. Update on Pesticide Resistance in Sports Turf. SportsTurf 32(1):20-25.

Other publications: total of 6

1. **Young. J**., T. Udeigwe, and L. Li*. 2015. Reducing salinity in golf course fairways. Golf Course Management Magazine 83(5):98.
2. Gautam*, P. and **J. Young**. 2015. Long-term carbon sequestration potential from bermudagrass fairways. Golf Course Management Magazine 83(9):99.
3. **Young, J.** 2016. Evaluation of polymer-coated sands to conserve water. Sports Turf Magazine 32(10):20-22.
4. **Young**, J., M. Richardson, and D. Karcher. 2017. Creeping bentgrass response to combined stresses. Australian Turfgrass Management, May-June:56-60.
5. **Young, J.** 2020. Managing fairways with cultivation practices and surfactants in a semiarid environment. Golf Course Management, January:128-133.
6. **Young, J.** 2020. Effects of water-retention or -penetration surfactants on playing surface of creeping bentgrass greens. Golf Course Management, March:87.

PRESENTATIONS AND LECTURES: Total of 196

1. May 28, 2013, Physiological effect of mowing, rolling, and foot traffic on creeping bentgrass putting greens, Turf Chat Episode 29, Online.
2. July 8, 2013, Physiological effects of mowing, rolling and foot traffic on creeping bentgrass putting greens, Texas Turfgrass Association, Arlington, TX.
3. October 22, 2013, Spring dead spot management, West Texas Golf Course Superintendents Association, Lubbock, TX.
4. October 22, 2013, Preparing for and managing turf through water shortages and drought, West Texas Golf Course Superintendents Association, Lubbock, TX.
5. November 8, 2013, Out of sight, out of mind: How soil affects turfgrass management, Texas Recreation and Park Services, Midland, TX.
6. November 13, 2013, Best management practices for leaf spot of bermudagrass, Texas Turfgrass Association, Dallas, TX.
7. November 13, 2013, Managing spring dead spot from cultural practices to fungicides Texas Turfgrass Association, Dallas, TX.
8. November 14, 2013, Foliar feeding nitrogen to putting green turf, Texas Turfgrass Association, Dallas, TX.
9. December 4, 2013, Foliar nitrogen application on creeping bentgrass putting greens, Kansas Turfgrass Association, Topeka, KS.

10. December 4, 2013, Effect of intensive mowing and rolling practices on creeping bentgrass putting greens, Kansas Turfgrass Association, Topeka, KS.
11. December 4, 2013, Drought response in tall fescue cultivars, Kansas Turfgrass Association, Topeka, KS.
12. December 5, 2013, Help! My turf has declined and I'm not sure it will recover, Kansas Turfgrass Conference, Topeka, KS.
13. January 20, 2014, Preparing for and managing turf through water shortages and drought, Rio Grande Golf Course Superintendents Association, El Paso, TX.
14. February 4, 2014, Preparing for and managing turf through water shortages and drought, Golf Course Superintendents Association of America, Orlando, FL (B. Wherley Texas A&M)
15. April 9, 2014, Weed identification and management for West Texas, Texas A&M AgriLife Sports Turf Workshop, Lubbock, TX.
16. June 24, 2014, Water use of turfgrass species in West Texas, West Texas Home Builders Association, Lubbock, TX.
17. July 21, 2014, Specticle field day demonstration and update, Texas Tech Turf Field Day, Lubbock, TX.
18. July 21, 2014, Sodium removal from golf course fairways, Texas Tech Turf Field Day, Lubbock, TX. (T. Udeigwe Texas Tech University)
19. July 21, 2014, Wetting agent demonstration on V8 creeping bentgrass, Texas Tech Turf Field Day, Lubbock, TX.
20. July 21, 2014, Drip system demonstration for determining water use of turf species in West Texas, Texas Tech Turf Field Day, Lubbock, TX.
21. October 21, 2014, How calibration can help your turf health and finances, West Texas Golf Course Superintendents Association, Lubbock, TX.
22. November 6, 2014, Water use of turfgrass species in West Texas, TTU Policy Roundtable Discussion, Lubbock, TX.
23. November 10, 2014, Turf disease identification and management for Central Texas, Central Texas Golf Course Superintendents Association, Kyle, TX.
24. December 17, 2014, Proper fertility practices for commercial turf management, Texas Turfgrass Association, Ft. Worth, TX.
25. December 17, 2014, Golf's future includes the use of poor quality water: Are you ready? Texas Turfgrass Association, Ft. Worth, TX.
26. January 22, 2015, Turfgrass selection for disease, herbicide, and drought tolerance, Texas A&M AgriLife Commercial CEU Event, Lubbock, TX.
27. January 31, 2015, Picking the right turf for West Texas, American Society of Landscape Architects West Texas Chapter, Lubbock, TX.
28. February 24, 2015, Preparing for and managing turf through water shortages and drought, Golf Course Superintendents Association of America, San Antonio, TX. (B. Wherley Texas A&M)
29. March 3, 2015, Turf management strategies to mitigate urban heat islands, Texas Tech Climate Science Center, Lubbock, TX.
30. March 12, 2015, Selecting and managing turfgrass in home lawns, Lubbock Master Gardeners, Lubbock, TX.
31. June 3, 2015, Distance education in teaching turfgrass management, SERA-25 Research Group, Oklahoma City, OK.

32. June 13, 2015, Conserving water in home lawns through turf selection and management, Lubbock Arboretum, Lubbock, TX.
33. July 20, 2015, Developing and implementing an IPM plan for your turf's everyday needs, Texas Turfgrass Association, Galveston, TX.
34. July 29, 2015, iSTEM Turfgrass Science, iSTEM/PRISM, Lubbock, TX.
35. August 3, 2015, Show and tell turfgrass lesson, Lubbock Arboretum, Lubbock, TX.
36. September 16, 2015, The economic impact of water quality and scarcity on agriculture and horticulture production on the Southern High Plains, Department of Horticulture at University of Arkansas, Fayetteville, AR.
37. September 17, 2015, Turfgrass management in West Texas, Guest lecture in Dr. Mike Richardson's class at University of Arkansas, Fayetteville, AR.
38. October 21, 2015, Review your bentgrass management plan, Golf Course Superintendents Association of America, Webinar online.
39. October 27, 2015, Summer chlorosis and using technology to improve turf health, West Texas Golf Course Superintendents Association, Lubbock, TX.
40. October 27, 2015, Drift away: Give me the people, but keep the pesticides on your target, West Texas Golf Course Superintendents Association, Lubbock, TX.
41. October 27, 2015, A West Texan's integrated pest management plan, West Texas Golf Course Superintendents Association, Lubbock, TX.
42. November 5, 2015, Water quantity and quality in urban and peri-urban areas, Agriculture in Arid Areas Conference with Delegates from Oman, Lubbock, TX.
43. November 17, 2015, Fertilizer source and rate to reduce summer chlorosis of Kentucky bluegrass, ASA-CSSA-SSSA Conference, Minneapolis, MN.
44. November 19, 2015, Identifying and managing common insect pests on the Southern High Plains of Texas, Winfield Solutions CEU Event, Lubbock, TX.
45. December 15, 2015, Bentgrass green management: Utilizing PGRs and growing degree day models, Texas Turfgrass Association, San Antonio, TX.
46. December 16, 2015, Proper fertility practices, Texas Turfgrass Association, San Antonio, TX.
47. December 17, 2015, Drifting – Watch out!, Texas Turfgrass Association, San Antonio, TX.
48. January 28, 2016, Best management practices for commercial and home lawns in West Texas, Texas A&M AgriLife Commercial Applicators CEUs, Lubbock, TX.
49. February 9, 2016, Preparing for and managing turf through water shortages and drought, Golf Course Superintendents Association of America, San Diego, CA. (B. Wherley Texas A&M)
50. March 6, 2016, Turfgrass selection and irrigation management for West Texas, Lubbock Home and Garden Expo, Lubbock, TX.
51. March 19, 2016, Basic Turf Selection and Management for Lubbock, Texas, Lubbock Master Gardener's Internship Class, Lubbock, TX.
52. March 29, 2016, Recognizing and Managing Soil-Borne Pathogens on Your Golf Course, Louisiana-Mississippi Golf Course Superintendent Association, New Orleans, LA.
53. March 31, 2016, Turf and Athletic Field Management for School Grounds, Texas A&M AgriLife Independent School District Grounds Education, Lubbock, TX.
54. April 2, 2016, SASES Breakout Session: Turfgrass Science Research. Students of Agronomy, Soils, and Environmental Sciences Conference, Lubbock, TX.

55. April 9, 2016, Picking the right turf for west Texas, Texas A&M AgriLife Potter County Education, Amarillo, TX.
56. July 17, 2016, There's a fungus among us; understanding turf diseases, Texas Turfgrass Association Summer Conference, Bastrop, TX.
57. July 18, 2016, Evaluation of polymer coated sands and residential wetting agents for commercial turf use, Texas Turfgrass Association Summer Conference, Bastrop, TX.
58. July 27, 2016, iSTEM—Turfgrass Science, Visiting Chinese Students in Association with STEM-CORE, Lubbock, TX.
59. August 18, 2016, The nitty gritty in residential turf management, Texas Nursery and Landscape Association Conference, Houston, TX.
60. August 18, 2016, The Soil Food Web, Texas Nursery and Landscape Association Conference, Houston, TX.
61. September 13, 2016, Weed management strategies for athletic fields, Texas Sports Turf Managers Association, Amarillo, TX.
62. September 26, 2016, Texas Tech Turf Research Update, Lone Star Golf Association's Texas Trophy, Amarillo, TX.
63. October 17, 2016, West Texas Lawn Care: Turf or not to turf, that is the question, Osher Lifelong Learning Institute, Lubbock, TX.
64. November 3, 2016, Year-long weed control in turf, AgriLife Extension Integrated Pest Management Conference, Dallas, TX.
65. November 18, 2016, Commercial and residential turf weed management, Bes-Tex Pesticide Applicators Training, San Angelo, TX.
66. November 29, 2016, Bermudagrass sports field selections for the transition zone, Oklahoma Turfgrass Research Foundation Conference, Stillwater, OK.
67. November 29, 2016, Water retention products for the landscape, Oklahoma Turfgrass Research Foundation Conference, Stillwater, OK.
68. November 30, 2016, Let's calibrate: Save your grass and bottom line, Oklahoma Turfgrass Research Foundation Conference, Stillwater, OK.
69. December 15, 2016, Labels, Labels, Labels – They are Important, Texas Turfgrass Association, San Antonio, TX.
70. January 27, 2017, Proper Turf Management Practices for IPM, Lubbock County Pesticide Recertification Course, Lubbock, TX.
71. January 31, 2017, Weed Management Practices for Turf, Amarillo Pesticide Recertification Course, Amarillo, TX.
72. February 7, 2017, Preparing for and managing turf through water shortages and drought, Golf Course Superintendents Association of America, Orlando, FL. (B. Wherley Texas A&M).
73. February 10, 2017, Minimizing Turf Pests with Selection and Management Practices, Ornamental and Turf Symposium, Amarillo, TX.
74. June 27, 2017, Let's Talk Turf, Randall County Horticulture Series, Canyon, TX.
75. July 7, 2017, Professional Turfgrass Field day research updates and demonstrations, Texas Tech Turf Field Day, Lubbock, TX.

76. September 20, 2017, Cultivation practices and management of athletic fields, Texas Sports Turf Managers Association Field Day West Texas Region, Canyon, TX.
77. October 25, 2017, Soil salinity lowered without more water? 5-minue Rapid Session at Crop Science Society of America Conference, Tampa Bay, FL.
78. November 8, 2017, Building a drought management plan, Live Webinar for BrightView Golf and the Golf Course Superintendents Association of America, 45 Attendees online live.
79. December 7, 2017, Can you alleviate salinity with less water? Golf session at Texas Turfgrass Association Winter Conference, Dallas, TX.
80. December 7, 2017, Drift and your responsibility, Commercial session at Texas Turfgrass Association Winter Conference, Dallas, TX.
81. January 26, 2018, Spray Drift Minimization, Lubbock County Pesticide Recertification Course, Lubbock, TX.
82. January 31, 2018, Proper Landscape Management Practices in IPM, Amarillo Pesticide Recertification Course, Amarillo, TX.
83. February 5, 2018, Preparing for and managing turf through water shortages and drought, Golf Course Superintendents Association of America, San Antonio, TX. (B. Wherley Texas A&M).
84. March 5, 2018, Management of your tall fescue lawn through the seasons, Post-Master Gardener Education, Lubbock, TX.
85. April 14, 2018, Maximizing irrigation efficiency in your turfgrass landscape, 2nd Saturday Lubbock Arboretum Meeting, Lubbock, TX.
86. July 15, 2018, What in the world is wrong with my turf?, Texas Turfgrass Association Summer Conference, Bastrop, TX.
87. August 16, 2018, Maximizing water use efficiency in turf, Texas Nursery and Landscape Association Conference, San Antonio, TX.
88. August 28, 2018, Nematodes: The power of invisibility, West Texas Golf Course Superintendent's Association, Canyon, TX.
89. October 31, 2018, Applying irrigation more efficiently to the landscape, West Texas Golf Course Superintendents Association Irrigators Conference, Lubbock, TX.
90. December 13, 2018, Sure seems like this pesticide worked better before, Texas Turfgrass Association Winter Conference, San Antonio, TX.
91. December 13, 2018, How much water can my soil hold?, Texas Turfgrass Association Winter Conference, San Antonio, TX.
92. January 10, 2019, Getting the most out of PGR applications on bentgrass, Arkansas Turfgrass Association Annual Conference, Hot Springs, AR.
93. January 11, 2019, Why are my pesticides becoming less effective?, Arkansas Turfgrass Association Annual Conference, Hot Springs, AR.
94. February 15, 2019, Turf management for West Texas, Texas A&M AgriLife Commercial Turf and Ornamental Workshop, Lubbock, TX.
95. February 28, 2019, Master Gardener's Education: Turf selection and management, Master Gardener Training, Lubbock, TX.

96. April 8, 2019, Water Requirements of turfgrass, Texas Nursery and Landscape Association, Webinar
97. June 25, 2019, Introduction to putting green soil surfactant research trial, West Texas Golf Course Superintendent Association, Lubbock, TX.
98. October 9, 2019, Urban water conservation to reduce turf pests, Target Specialty Products CEU Class, Richardson, TX.
99. October 9, 2019, Sustainable weed management for urban landscapes, Target Specialty Products CEU Class, Richardson, TX.
100. October 30, 2019, Distinguishing water requirements for common turfgrass species, West Texas Golf Course Superintendent Association Irrigation Class, Lubbock, TX.
101. October 30, 2019, Drones in precision agriculture, West Texas Golf Course Superintendent Association Irrigation Class, Lubbock, TX.
102. October 31, 2019, Ethical principles in setting up scientific experiments and communicating results, Christ the King High School, Lubbock, TX.
103. November 11, 2019, Turfgrass science: A future perspective on managing turfgrass. Crop Science Society of America Conference, San Antonio, TX.
104. November 22, 2019, Turfgrass weed control: Residential and commercial lawns, Big Tex CEU Education, San Angelo, TX.
105. December 10, 2019, Turfgrass soil fertility management, Texas Certified Professional Turfgrass Manager Exam preparation, Corpus Christi, TX.
106. December 10, 2019, Math for the Turfgrass Professional, Texas Certified Professional Turfgrass Manager Exam preparation, Corpus Christi, TX.
107. December 10, 2019, Taking turfgrass management to the sky and beyond, Texas Turfgrass Association Winter Conference, Corpus Christi, TX.
108. December 11, 2019, Managing healthier turf during droughts, Texas Turfgrass Association Winter Conference, Corpus Christi, TX.
109. January 28, 2020, Data Driven Irrigation Management, Golf Course Superintendents Association of America, Orlando, FL (B. Wherley Texas A&M)
110. February 21, 2020, Are grubs grubbing in your lawn?, Lubbock Applicators CEU seminar for Lubbock Horticulture Extension, Lubbock, TX.
111. March 23, 2020, Salinity Management in Golf Course Fairways, Campus del Césped, Spain and other Spanish Speaking Countries.
112. July 9, 2020, Variability in soil physical properties influences plant available water in fairways, Golf Course Superintendents Association of America Webinar, Virtual Learning
113. August 4, 2020, Pesticide calibration techniques for landscape managers, Texas Nursery and Landscape Association, Virtual Learning
114. August 22, 2020, Master Gardener Education: Sustainable Turfgrass Management, Lubbock County Master Gardener Intern Education, Virtual Learning
115. October 8, 2020, Effect of water penetrating and retaining surfactants on putting green surface characteristics. Crop Science Society of America Abstract, Virtual Conference

116. October 14, 2020, Turfgrass weed management for West Texas, Big Tex CEU Education, Virtual Learning.
117. October 16, 2020, How carbon sequestration improves your turfgrass, Texas Nursery and Landscape Association, Recorded Webinar.
118. October 28, 2020, How variability in soil properties can influence turfgrass irrigation requirements, West Texas GCSA Irrigators Conference, Virtual Learning.
119. December 1, 2020, Carbon sequestration and microbial populations in turfgrass landscapes, Texas Turfgrass Association, Frisco, TX.
120. January 29, 2021, Managing White Grubs in Residential Lawns: Slimy and Dissatisfying, Texas A&M AgriLife, Lubbock, TX.
121. February 2, 2021, Data Driven Irrigation Management, Golf Course Superintendents Association of America, Virtual (B. Wherley Texas A&M).
122. February 26, 2021, Challenging Turf Weed Battles In West Texas, Pro Chem Sales CEU Education, Amarillo, TX.
123. March 16, 2021, Turf Physiology, Texas A&M Turfgrass Short Course, Virtual
124. April 8, 2021, What Lies Beneath "your turfgrass landscape"?, Green Aggies Chat, Virtual
125. April 15, 2021, Data Driven Irrigation Management for Golf Fairways, Florida Golf Course Superintendents Association, Naples, FL.
126. April 15, 2021, How Variability in Soil Physical Properties Influences Turfgrass Irrigation Requirements, Florida Golf Course Superintendents Association, Naples, FL.
127. May 14, 2021, Optimizing Irrigation Scheduling and Delivery in Urban Landscapes, Texas Nursery and Landscape Association, Virtual.
128. July 19, 2021, Quantifying Reduced Turfgrass Irrigation Requirements in Shade, Texas Turfgrass Association Summer Conference, Horseshoe Bay, TX
129. July 27, 2021, Turf Weed Control Programs for the Texas Panhandle, Pro-Chem Sales CEU Education, Amarillo, TX.
130. August 5, 2021, Water Conserving Landscape Design and Management, Texas Nursery and Landscape Association Expo, San Antonio, TX.
131. August 5, 2021, What Lies Beneath: Understanding the Role of Microbes in your Landscape, Texas Nursery and Landscape Association Expo, San Antonio, TX.
132. October 15, 2021, Water Conserving Landscape Design and Management for West Texas, Texas Nursery and Landscape Association Regional Meeting, Alpine, TX.
133. October 26, 2021, Pesticide Calibration Techniques for Turfgrass Professionals, West Texas Golf Course Superintendents Association, Lubbock, TX.
134. October 27, 2021, Getting the Most out of your Water Resources in Turfgrass Management, West Texas Golf Course Superintendents Association, Lubbock, TX.
135. November 3, 2021, Getting the most bang for your buck out of your TDR, Brightview Golf, Virtual Webinar.
136. November 9, 2021, Optimizing Irrigation Scheduling for Landscapes in Texas, Texas Irrigation Association, Recorded for February 2022 Conference.
137. November 15, 2021, Poor Water Quality may be Affecting More than your Soils and Turf, Central Texas Golf Course Superintendents Association, San Antonio, TX.

138. November 15, 2021, Hitting the Mark in More Ways than One, Central Texas Golf Course Superintendents Association, San Antonio, TX.
139. November 19, 2021, Ornamental Turf Weed Control for West Texas, Bes-Tex Applicators CEU Education, San Angelo, TX.
140. November 19, 2021, Ornamental Turf Weed Control for Structural Applicators, Bes-Tex Applicators CEU Education, San Angelo, TX.
141. February 18, 2022, Pesticide Calibration Techniques for Landscape Managers, Texas A&M AgriLife, Lubbock, TX.
142. February 18, 2022, Adjuvants to Enhancing Pesticide Efficacy with Poor Water Quality, Texas A&M AgriLife, Lubbock, TX.
143. February 28, 2022, Turf Physiology, Texas A&M Turfgrass Short Course, Dallas, TX.
144. March 8, 2022, Building Excitement for STEM Education through Everyday Connections, Science by the Glass, Virtual.
145. August 10, 2022, What lies beneath: Understanding the role of microbes in your landscape, Texas Nursery and Landscape Association, San Antonio, TX.
146. August 16, 2022, Data Driven Management: Tools of the Trade, West Texas GCSA, Canyon, TX.
147. September 22, 2022, Turfgrass Selection and Management, Master Gardener Internship Class, Lubbock, TX.
148. September 29, 2022, Proper landscape management practices in IPM, Texas Pest Control Association, Lubbock, TX.
149. September 29, 2022, Seasonal weed control for turf and ornamental care, Texas Pest Control Association, Lubbock, TX.
150. October 6, 2022, Turfgrass management and effects on trees, Amarillo Park and Recreation Department, Amarillo, TX.
151. October 13, 2022, Taking the guess work out of irrigation decisions, Peaks and Prairies GCSA, Billings, MT.
152. October 14, 2022, Plant selection and landscape design to minimize water usage, Texas Irrigators Association, Virtual.
153. October 25, 2022, Adjuvants to enhance pesticide efficacy with poor water quality, West Texas GCSA Winter Conference, Lubbock, TX.
154. October 27, 2022, Managing turfgrass landscapes in the fall, Texas A&M AgriLife, Plainview, TX.
155. November 18, 2022, Weed management in turfgrass systems, Bes-Tex CEU Education, San Angelo, TX.
156. November 18, 2022, Weed management in turfgrass systems for Structural Applicators, Bes-Tex CEU Education, San Angelo, TX.
157. December 6, 2022, Landscape design and management for West Texas, Texas A&M AgriLife, Midland, TX.
158. December 6, 2022, Seasonal weed control strategies for the Permian Basin region of Texas, Texas A&M AgriLife, Midland, TX.

159. December 12, 2022, Turfgrass soils and fertility management, Texas Certified Professional Turfgrass Managers Exam Education, Denton, TX.
160. December 13, 2022, Managing turfgrass in the shade, Texas Turfgrass Association Winter Conference, Denton, TX.
161. December 20, 2022, Landscape design and management for Texas, Texas Pest Control Association Last Chance CEUs, Virtual.
162. February 6, 2023, Effective use of drone technology to scout your property, Golf Course Superintendents Association of America, Orlando, FL (Juan Cantu, PhD student co-presenter).
163. February 27, 2023, Turf management projections in 2023, Texas A&M AgriLife, Lubbock, TX.
164. March 1, 2023, Spring turfgrass management for lawns, Texas A&M AgriLife, Midland, TX (Virtual).
165. March 7, 2023, Review your bentgrass greens management plan, GLAGS Canadian Golf Course Superintendents, Virtual
166. March 9, 2023, Master Gardener Education – Lawncare, Texas A&M AgriLife, Abilene, TX (Virtual).
167. June 28, 2023, Bentgrass Putting Green Management, GCSAA Webinar, Virtual.
168. July 27, 2023, How to Teach Turfgrass Management, Agriculture Teachers Association of Texas, Dallas, TX.
169. August 8, 2023, Gaining Confidence in your Calibration Skills, Gulf Coast GCSA Education, Virtual
170. September 21, 2023, Turfgrass Selection and Management, Lubbock County Master Gardeners, Lubbock, TX.
171. September 28, 2023, Weed control programs for turf and ornamentals, Texas Pest Control Association, Lubbock, TX.
172. September 28, 2023, Drift Away, Texas Pest Control Association, Lubbock, TX.
173. October 3, 2023, Precision Turfgrass Management – A tool for greater sustainability, Idaho GCSA, Pocatello, ID.
174. October 3, 2023, Soil moisture mapping in golf course fairways using GPS-enabled TDR technology, Idaho GCSA, Pocatello, ID.
175. October 9, 2023, Turfgrass Management and Selection, Osher Lifelong Learning Institute, Lubbock, TX.
176. October 25, 2023, Turfgrass Management and Selection to Conserve Water, Texas Recreation and Parks, Abilene, TX.
177. November 15, 2023, Managing Weeds in Turfgrass Landscapes, Bes-Tex CEU Education, San Angelo, TX.
178. December 7, 2023, Turfgrass Weed Control, Texas A&M AgriLife CEU Education, Fredericksburg, TX.
179. December 12, 2023, Turfgrass Soil Fertility Management, Certified Professional Turfgrass Managers of Texas Exam Prep, Dallas, TX.
180. December 12, 2023, Turfgrass IPM – Disease and Insect Management, Certified Professional Turfgrass Managers of Texas Exam Prep, Dallas, TX.

181. December 13, 2023, What's new in weed control for golf courses, Texas Turfgrass Association Winter Conference, Dallas, TX.
182. January 29, 2024, Data Driven Irrigation Management, Golf Course Superintendents Association of America, Phoenix, AZ (B. Wherley Texas A&M).
183. March 7, 2024, Turfgrass Selection and Management for Permian Basin Landscapes, Texas A&M AgriLife, Midland, TX.
184. April 4, 2024, Professional Development Centered Around Teaching Turfgrass Science, USDA-NIFA Project Directors Meeting, Kansas City, KS.
185. July 27, 2023, How to Teach Turfgrass Management, Agriculture Teachers Association of Texas, Dallas, TX
186. September 11, 2024, Turfgrass Morphology and Identification, Christ the King High School Turfgrass Management, Lubbock, TX
187. September 16, 2024, Dealing with Salts in Golf Course Management, Southern California GCSA, Camarillo, CA.
188. September 16, 2024, Precision Applications Require Precise Measurements, Southern California GCSA, Camarillo, CA.
189. September 26, 2024, Turfgrass Selection and Management, Texas Pest Control Association, Lubbock, TX.
190. September 26, 2024, Turfgrass Weed Control, Texas Pest Control Association, Lubbock, TX.
191. October 29, 2024, Precision Applications Require Precise Measurements, West Texas GCSA Conference, Lubbock, TX.
192. November 13, 2024, Building Awareness of Turfgrass Science at the High School Level, Crop Science Society of America Conference, San Antonio, TX.
193. November 22, 2024, Walking through a Pesticide Label, Bes-Tex CEU Education, San Angelo, TX
194. December 17, 2024, Turfgrass IPM: Disease and Insect Management, Texas Turfgrass Association CPTM Exam Preparation, Corpus Christi, TX.
195. December 17, 2024, Turfgrass Soil Fertility and Management, Texas Turfgrass Association CPTM Exam Preparation, Corpus Christi, TX.
196. December 17, 2024, Cutting through the Marketing of Commercial Herbicides, Texas Turfgrass Association Winter Conference, Corpus Christi, TX.

GRADUATE STUDENT COMMITTEES:

Completed:

Chaired: total of 15

M.S.

1. Prativa Gautam Completed in 2015. Long-term carbon sequestration and budget from golf courses managing warm-season turfgrass in West Texas.

2. Li Li Completed May 2017. Incorporating cultivation practices and products to reduce salinity parameters from poor quality irrigation water on golf course fairways.
3. Cole Watts Completed May 2017. Distance Horticulture Student (no thesis)
4. Ramzi White Completed December 2017 Suppression of shoot growth and improved putting green performance traits with use of plant growth regulators.
5. Jason Grams Completed May 2018 Distance Horticulture Student (no thesis)
6. Jonathan Lancaster December 2018 Distance Horticulture Student (no thesis)
7. Travis Culpepper August 2019 Determine crop coefficients for irrigating turf species adapted for growth in West Texas.
8. Manish Sapkota December 2019 Soil characteristics common with home age assist in irrigation recommendations
9. Jose L. Gradilla December 2020 Horticulture Distance (non-thesis)
10. Kyle Lauterbach May 2023 Horticulture Distance (Non-thesis MS)
11. Haynes Lafferty August 2024 Evaluation of water treatment products to overcome poor irrigation water quality effects in golf course fairways.
12. Eduardo Escamilla December 2024 Optimizing sensor technology to identify drought stress on golf course fairways using unmanned aerial systems
13. Juan Cantu December 2024 Using spectral sensors on unmanned aerial systems to identify drought stress in agriculture production
14. Christina Butcher December 2024 Horticulture Distance (non-thesis)

Ph.D.

1. Vikram Baliga December 2020 Evaluation of water conservation practices and acceptance in residential landscapes.

Co-Chaired: total of <u>0</u>

Committee member of: total of <u>19</u>

M.S.

1. Chris Belt Completed in 2014. Distance M.S. Student (no thesis) Dr. Ritchie
2. Kelley Rawlsky Completed in 2015. Distance M.S. Student (no thesis) Dr. Sharma
3. Jason Grams Completed in 2018. Distance M.S. Student (no thesis) Dr. Montague
4. Johnathan Lancaster Completed in 2018. Distance M.S. Student (no thesis) Dr. Montague
5. Elizabeth Allen Completed in May 2020. Distance M.S. Student (no thesis) Dr. Montague
6. Kurt Voigt Completed in May 2020. Distance M.S. Student (no thesis) Dr. Montague
7. Spencer Cox Completed in May 2021. Distance M.S. Student (no thesis) Dr. Guo
8. Caleb Tomlinson Completed in Dec 2021. Distance M.S. Student (no thesis) Dr. Longing
9. Makenzie Salyer Completed Dec. 2022. Distance M.S. Student (no thesis) Dr. Simpson.
10. Shelby Crysler Completed Dec. 2022. Distance M.S. Student (no thesis) Dr. Coldren.

11. Grant Gerald Completed Dec. 2022. Distance M.S. Student (no thesis) Dr. Simpson.
12. Sorrell Kropt Completed May 2023 Distance M.S. Student (no thesis) Dr. Slaughter
13. Max Hyde Completed May 2023. Distance M.S. Student (no thesis) Dr. Shim
14. Michael Gonzales Completed May 2023. Distance M.S. Student (no thesis) Dr. Simpson
15. Zachary Patton Completed May 2023 Professional Science Masters in NRM Dr. Griffis-Kyle
16. Tania Kean Galeno May 2024 Distance M.S. Student (no thesis) Dr. Reyes

Ph.D.

1. Madhav Dhakal May 2019 Effects of alfalfa density and growth type on forage production, quality and water use in native grass pasture.
2. Samuel Discua May 2021 Patterns of bee diversity and abundance across different land use types on the Southern High Plains.
3. Kaniz Farzana Dr. Coldren December 2023 Ecological Modelling and EDYS model in coastal Texas

In progress:
M.S.
Chair: Total of 4

1. Alexander Rodriguez May 2025 Non-thesis MS
2. Connor Davidson December 2025 Non-thesis MS
3. Chance Aldridge May 2026 Non-thesis MS
4. James Avery August 2026 Thesis Title TBD

Ph.D.
Chair: total of 0

Committee member of: total of 0

M.S.
Ph.D.

UNDERGRADUATE ADVISING:

Advise all undergraduate students specializing in Horticulture and Turfgrass that focus on turfgrass to enter the golf, sports turf, or lawn care sectors. Began advising some horticulture majors in 2016

2013 15 undergraduate students
2014 13 undergraduate students
2015 12 undergraduate students
2016 15 undergraduate students
2017 21 undergraduate students
2018 21 undergraduate students
2019 20 undergraduate students
2020 20 undergraduate students
2021 28 undergraduate students

2022 28 undergraduate students
2023 26 undergraduate students

TEACHING RESPONSIBILITIES:

1. Fall Semester PSS 3309-001 and 3309-501 *Introduction to Turfgrass Science Lecture and Lab*. Basic turfgrass management course focusing on turf identification, proper management, and common pests of turfgrass.
2. Spring Semester PSS 4316/5318-001 *Landscape Ecology and Water Conservation*. Capstone turfgrass management course that teaches students how environmental stress and maintenance practices effect the physiological health of turfgrass, ecological strategies to manage healthier turf, and how water quantity and quality issues can be overcome in turf management.
3. Spring Semester PSS 4316/5318-D01 *Landscape Ecology and Water Conservation (Distance)*. Capstone turfgrass management course that teaches students how environmental stress and maintenance practices effect the physiological health of turfgrass, ecological strategies to manage healthier turf, and how water quantity and quality issues can be overcome in turf management.
4. Even Year Spring Semester PSS 4318-001 *Landscape Pest Management*. Advanced turfgrass management course that focuses on common turf pest (weeds, diseases, and insects) identification and management.
5. Summer Semester PSS 4318/5314-D01 *Landscape Pest Management (Distance)*. Advanced turfgrass management course that focuses on common turf pest (weeds, diseases, and insects) identification and management.
6. Summer Semester PSS 3309-D01 *Introduction to Turfgrass Science (Distance)*. Basic turfgrass management course focusing on turf identification, proper management, and common pests of turfgrass.
7. PSS 1100-001 and D01 *Freshman and Transfer Seminar.* Basic introduction to Texas Tech Campus and Departmental Faculty. Required class for all students to initiate E-portfolios for Communication Literacy Program requirement (Co-teach)

FIVE YEAR SUMMARY OF TEACHING EVALUATIONS
Dr. Joseph Young

NEW EVALUATION FORM:

Term/Class	Number of Students	Course Objectives (Ques #1) Mean	Instructor Overall (Ques #2) Mean	Course/Valuable Learning Exper (Ques #3) Mean
Fall 2024				
PSS 3309-001	17	4.88	4.88	4.88
Summer 2024				
PSS 3309-D01	37	4.86	4.86	4.71
PSS 4318-D01	11	5.00	5.00	5.00
PSS 5314-D01	5	5.00	5.00	5.00
Spring 2024				
PSS4316-001	10	4.33	4.67	4.67
PSS 4316-D01	38	4.83	4.78	4.72
PSS 4318-001	20	5.00	5.00	5.00
PSS 5318-001	2	--	--	--
PSS 5318-D01	6	4.75	5.00	5.00
Fall 2023				
PSS 3309-001	18	5.00	5.00	5.00
PSS 1100-001	29	4.40	4.30	3.70
PSS 1100-D01	44	4.30	4.00	3.60
Summer 2023				
PSS 3309-D01	38	4.90	4.90	4.70
PSS 4318-D01	11	4.90	4.90	4.90
PSS 5314-D01	4	--	--	--
Spring 2023				
PSS 4316-001	22	5.00	4.90	4.90
PSS 4316-D01	19	5.00	4.90	4.80
PSS 5318-001	2	--	--	--
PSS 5318-D01	6	5.00	5.00	5.00
Fall 2022				
PSS 3309-001	14	5.00	5.00	5.00
Summer 2022				
PSS 3309-D01	35	4.90	4.90	4.80
PSS 4318-D01	13	5.00	5.00	5.00
PSS 5314-D01	11	4.70	4.80	4.60
Spring 2022				
PSS4316-001	16	4.60	4.50	4.50
PSS 4316-D01	32	5.00	5.00	5.00
PSS 4318-001	15	5.00	5.00	5.00
PSS 5318-001	3			
PSS 5318-D01	14	4.70	4.70	4.60
Fall 2021				
PSS 1100-001	40	4.60	4.50	3.80
PSS 1100-D01	32	4.70	4.70	4.20
PSS 3309-001	17	4.80	4.80	4.80
Summer 2021				
PSS 3309-D01	29	5.00	5.00	4.90
PSS 4318-D01	9	4.80	4.80	4.80
PSS 5314-D01	8	4.70	4.60	4.60
Spring 2021				
PSS 4316-001	16	5.00	5.00	5.00

PSS 4316-D01	12	4.80	4.80	4.80
PSS 5318-D01	5	4.70	4.70	5.00
Fall 2020				
PSS 3309-001	8	5.00	5.00	5.00
Summer 2020				
PSS 3309-D01	16	4.80	4.70	4.70
PSS 4318-D01	8	4.80	5.00	5.00
PSS 5314-D01	9	5.00	5.00	5.00
Spring 2020				
PSS 4316-001	12	4.80	4.70	4.70
PSS 4316-D01	23	4.90	4.90	4.90
PSS 4318-001	10	4.70	4.80	4.70
PSS Average	**--**	**4.60**	**4.40**	**4.40**
CASNR Average	**--**	**4.50**	**4.40**	**4.40**
TTU Average	**--**	**4.50**	**4.30**	**4.30**

Other Teaching Responsibilities

Turf Club Advisor (2013-present)

Turf Bowl preparation for GCSAA conference (2013-present) 10 hours in Fall

GRANTS AND AWARDS: total funded $735,037

Funded: 1,392,330 ($578,184)

2013 $17,450 ($17,450)

1. PI, Growth suppression of creeping bentgrass putting greens using combination plant growth regulators, Turfgrass Research Education and Extension Endowment $4,800, ($4,800).
2. PI, Evaluate A11825A + A9180A for turf enhancement and growth regulation, Syngenta, $12,650, ($12,650).

2014 $77,979 ($48,420.50)

1. PI, Evaluation of Specticle pre-emerge herbicide efficacy in bermudagrass lawns based on formulation, Bayer Crop Science, $2,500, ($2,500).
2. PI, Test A11825A + A9180A for turf enhancement and growth regulation, Syngenta, $10,350 ($10,350).
3. Co-PI, Suppression of shoot growth and improved putting green performance traits with plant growth regulators, United States Golf Association $10,000 ($5,000).
4. PI, Incorporation of cultivation practices and products to reduce salinity parameters from poor water quality on golf course fairways, United States Golf Association, $29,559 ($15,000).
5. PI, Evaluation of QualiPro Enclave alone and in combination with QP Strobe 50WG fungicide for spring dead spot control in bermudagrass, QualiPro, $5,571, ($5,571).
6. PI, Incorporating cultivation practices and products to reduce salinity parameters from poor quality irrigation water on golf course fairways, Golf Course Superintendents Association of America, $19,999, ($9,999.50).

2015 $179,925 ($34,881)

1. Co-PI, Moore-Kucera, J., Evaluation of VitAg organic sulfur-based fertilizer to reduce chlorosis of Kentucky bluegrass, VitAg Corporation (Anuvia Plant Nutrients), $21,477 ($12,886.20).

2. Co-PI, Williams, R., Economic analysis of residential irrigation habits and landscape design to reduce outdoor water usage, High Plains Underground Water District, $3,000 ($1,500)
3. PI, Evaluation of water retention products for residential lawns, Texas Research Education and Extension Endowment, $3,000 ($3,000)
4. PI, Selecting bermudagrass cultivars to overcome environmental challenges in Texas, Texas Research Education and Extension Endowment $2,500, ($2,500)
5. Co-PI, Klein, C., Y. Luo, C. Casanova, C. McKenney, D. Montague, D. Lawver, Xeric Landscape Design Studio; Initial Inception and Implementation Plan, USDA-NIFA Cooperative State Research Ed Extension Service, $149,948 ($14,994.80)

2016 $31,470 ($19,400)

1. PI, Montague, D. Physiological impact of chronic water stress on common residential lawn turf species, Texas Research Education and Extension Endowment, $5,470 ($2,400).
2. PI Evaluation of overseeded ryegrasses on golf course fairways, National Turfgrass Evaluation Program, $16,000 ($16,000).
3. Co-PI, Klein, C., Y. Luo, C. Casanova, C. McKenney, D. Montague, D. Lawver, GRI Xeric Landscape Design Studio; Initial Inception and Implementation Plan, USDA-NIFA Cooperative State Research Ed Extension Service, $10,000 ($1,000)

2017 $182,240 ($101,056)

1. PI, G. Ritchie, W. Guo, S. Deb, D. Weindorf, E. Bernard, R. Williams, and D. McCall, Enhancing water conservation through remote sensing from unmanned systems, Ogallala Aquifer Program $86,622 ($53,247).
2. PI, S. Deb, G. Ritchie, and W. Guo, Enhancing water conservation through remote sensing on golf courses, United States Golf Association, $95,618 ($47,809).

2018 $7,173 ($4,303.80)

1. PI, L. Slaughter, C. Coldren, and V. Acosta-Martinez, Soil health variability among residential landscapes impact urban water conservation, High Plains Underground Water District, $7,173 (4,303.80)

2019 $151,438 ($59,922.38)

1. PI, S. Deb, and D. Karcher (University of Arkansas), Playing surface effects of surfactants on creeping bentgrass putting greens, Golf Course Superintendents Association of America and Texas GCSA Chapters, $40,000 ($32,000)
2. PI, Young, J., D.T. Montague, and V. Baliga. Effect of shade on growth, water use, and photosynthetic rate of common turfgrass species, High Plains Underground Water District, $7,391 ($5,912.80).
3. Co-PI, Longing, S., V. Baliga, and J. Young. A demonstration garden to promote pollinators, urban water conservation and community outreach, High Plains Underground Water District, $9,232 ($3,046.58).
4. Co-PI, Dwyer, J., J. Young, L. Slaughter, R. Hite, J. White, and J. Rayfield. Traveling laboratories: Inspiring female and minority rural students to excel in STEM, USDA-NIFA Cooperative State Research Ed & Extension Service, $94,815 ($18,963).

2020 $36,918 ($36,918)

1. PI, Young, J. and C. Straw (TAMU). Expanding TDR350 Golf Course Fairway Mapping to Include Salinity. Texas Research Education and Extension Endowment, $4,000 ($4,000)

2. PI, Young, J., T. Goebel, and L. Slaughter. Curbing Ogallala Aquifer withdrawals to golf course fairways by eliminating leaching irrigation requirements, Ogallala Aquifer Program, $32,918 ($32,918).

2021 $425,000 ($170,000)

1. PI, Young, J., R. Ritz, E. Irlbeck, and C. Segars. Professional Development for Agricultural and STEM Educators Centered Around Turfgrass Science, USDA-EWD, $425,000 ($170,000).

2022 $26,737 ($25,072)

1. PI, Young, J., L. Slaughter, and C. Straw. Identifying a Reliable Field-Based EC Measuring Device for Golf Fairways. Texas A&M University TREE Endowment, $4,207 ($2,542).
2. PI, Young, J., S. Longing, and C. Simpson. Essential Oils as Biopesticide for Greenhouse Production Systems, Davis College Undergraduate Research Support, $2,000 ($2,000).
3. Subaward, Young, J. Water-Efficient Turfgrass for Texas, Texas Department of Agriculture, $20,530 ($20,530).

2023 $256,000 ($60,690)

1. PI, Young, J., B. Kelly, and C. Straw. Developing Machine Learning Tool for Turfgrass Management Professionals, $6,000 ($3,000)
2. Co-PI, Jagadish, SV, L. Slaughter, J. Young, S. Deb, R. Saini, I. Somayanda, G. Ritchie, A. Norris, C. Coldren, C. Cooper-Norris, W. Crossland, D. McCallister, A. Boren, R. Ritz, and M. Monsur. A collaborative, trans-disciplinary network for exploring novel ideas and developing next generation workforce for water conservation, Davis College Catalyst Grant, $250,000 ($57,690)

2024

1. PI, Young, J. B. Kelly, S. Deb, G. Ritchie, C. Portillo Quintero, W. Guo, I. Pabuayon. Evaluating Tools to monitor water use and water conservation in drought-prone urban landscapes, Davis College Planning Grant, $50,000.
2. Co-PI, Jagadish, SV., D. McCallister, W. Guo, J. Young, A. Hardberger, Sustainable Irrigation and Climate Adaptation in Southern High Plains: A Satellite-Enabled and Peer-Led Model, USDA, $1,870,802 (187,080)

Pending:

2024

1. Co-PI, Jagadish, SV., W. Guo, J. Young, I. Somayanda, and J. Rayfield, An interactive online climate adaptation platform to accelerate agricultural water conservation in the southern Ogallala region, USDA, $999,555
2. PI, Young, J. and J. Rayfield, Developing advanced technological skills to implement precision applications in turfgrass systems. USDA-NIFA Cooperative State Research Ed & Extension Service, $250,000.

Rejected:

2013

1. PI, Moore-Kucera, J. Long-term carbon sequestration and budget from golf courses managing warm-season turfgrass in West Texas, United States Golf Association, $55,348.

2014

1. PI, Evaluating bermudagrass cultivars for use on athletic fields in Lubbock, TX, Texas Tech Alumni Association, $9,889.
2. PI, Cox, R., C. McKenney, D. Montague, J. Moore-Kucera, G. Perry, G. Ritchie, J. Sharma, T. Udeigwe, and R. Williams, Increasing agricultural water availability through enhanced urban landscape design and sustainable management practices, USDA-NIFA Water for Agriculture $4,797,784

2015

1. PI, Longing, S., C. McKenney, V. Baliga, R. Wallace, and E. Bernard, Pollinator Ecology Conservation in Urban Landscapes Influence on Specialty Crop Production in Major Urban-Agriculture Nexus, USDA-SCRI Pre-proposal, $2,499,231.

2016

1. PI, Vanos, J., C. McKenney, and D. Montague, Demonstration Landscapes to Optimize Ecosystem Services of Urban Communities in Lubbock, TX, CH Foundation, $49,880
2. PI, Vanos, J., C. McKenney, and D. Montague, Optimizing Landscape Designs to Conserve Water and Maximize Environmental Ecosystem Services, Texas Department of Agriculture Specialty Crop Block Grant Program, $60,243
3. PI, Carrillo, M. Reducing water consumption on golf courses with canopy temperature sensors. United States Golf Association, $45,095.
4. PI, Weindorf, D. Effectiveness of PXRF gun to measure spatial variability on golf course fairways. United States Golf Association, $51,922.
5. PI, Carrillo, M. Optimum canopy temperature establishment for golf course turf species, Golf Course Superintendent Association of America and Lone Star Golf Association, $20,000.
6. Co-PI, Hite, R., J. Young, E. Midobuche, J. Gottlieb, A. Benavides, and J. Dwyer, Life-STEM Latina STEM after-school program, National Science Foundation, Advancing Informal STEM Learning (AISL), $261,480.
7. PI, C. McKenney, T. Montague, E. Bernard, M. Baker, R. Williams, and T. Davis, Desirable, Adaptive, Resilient Landscapes for Urban Land Cover in Semiarid Regions, TTU Integrated SEED Grant, $150,000.

2017

1. Co-PI, J. Dwyer, R. Hite, J. Rayfield, D. Weindorf, and H. Coats, Becoming agricultural scientists through innovative curriculum (BASIC): An educative model for rural students, USDA-WAMS, $99,997.
2. Co-PI, Hite, R., J. Dwyer, and J. Young. Agrifutures at Texas Tech University, CH Foundation, $25,000.
3. PI, J. Booker, and L. Slaughter, Soil health variability among residential landscapes impact urban water conservation, Texas Research Education and Extension Endowment, $6,399

2018

1. PI, J. Booker, and L. Slaughter, Soil health variability among residential landscapes impact urban water conservation, The Lawn Institute, $13,407

2. PI, Radio Advertising for TTU Turf program, Texas Tech Alumni Association Excellence Grant, $9,900.
3. PI, C. Coldren, and K. Rainwater, EDYS model to determine surface water quality under golf course management. Water Research Foundation, $39,914
4. PI, C. Coldren, and K. Rainwater, EDYS model to determine surface water quality under golf course management, United States Golf Association, $95,720

2019

1. PI, W. Guo, and G. Ritchie, Calibrating thermal sensors to identify drought stress on common lawn turf species, The Lawn Institute, $23,487
2. Pre-proposal Co-PI, Reducing lawn turfgrass irrigation with affordable remote sensing technology, USDA Specialty Crop Research Initiative CAP Grant, $4,993,696.
3. Co-PI, Dwyer, J., P. Smith, S. Lim, G. Williams, B. Moskal, S. Shin, and J. Young. Digitizing Agriculture on the West Texas Prairie: STEM Computing in Rural High Schools, National Science Foundation, $1,052,435 ($157,865).
4. PI, Young, J., L. Slaughter, K. Rainwater, R. Lascano, and T. Goebel. Assessing and overcoming soil salinity variability in golf course fairways, Golf Course Superintendent Association of America, Arcis Golf, and SimPlot Partners, $60,000 ($36,000).
5. PI, Young, J., S. Longing, D. Montague, V. Baliga, and R. Plowman. Water Conserving, Perennial Landscape Plants for Pollinator and Personal Attraction, Horticultural Research Institute, $21,526 ($7,318.84).
6. Co-PI, Griffis-Kyle, K., S. Longing, and J. Young. Enhancing golf course support of bird biodiversity in a semiarid grassland, United States Golf Association, $61,072 ($12,214.40).
7. Co-PI, Slaughter, L., J. Young, and K. Griffis-Kyle. Low-input management of golf course natural areas to enhance weed suppression and soil ecosystem services, United States Golf Association, $108,393 (35,769.69).
8. PI, Young, J., L. Slaughter, S. Deb, and S. Longing. Characterizing soil microbial communities and arthropods in urban parks, The Lawn Institute, $19,822 ($5,947)

2020

1. PI, Young, J. and S. Deb. Effect of nitrogen fertility and surfactant on bermudagrass performance while conserving water resources, High Plains Underground Water District, $7,881.
2. Co-PI, Deb, S. and J. Young. Evaluating Spatial Variability of Soil Hydraulic Properties to Characterize the Retention and Transport of Water in Soils under Different Land Uses, High Plains Underground Water District, $10,060.
3. PI, Young, J., L. Slaughter, M. Siebecker, and J. Aitkenhead-Peterson. Tradeoffs of irrigation water quality on soil health parameters, USDA-NIFA Foundational and Applied Science, $478,378.
4. PI, Young, J., T. Goebel, and L. Slaughter. Curbing Ogallala Aquifer withdrawals to golf course fairways by eliminating leaching irrigation requirements, Ogallala Aquifer Program, $66,296.
5. PI, Young, J., T. Goebel, and L. Slaughter. Assessing and overcoming soil salinity in golf course fairways, United States Golf Association, $94,955.
6. PI, Young, J., R. Plowman, and V. Baliga. Conquering sustainability hurdles in golf course native areas, United States Golf Association, $107,664.

2021

1. PI, Young, J., R. Ritz, and S. Shin. Building a Framework for Place-Based Informal STEM Learning at Golf Courses, National Science Foundation, $299,912.
2. PI, Young, J. and V. Baliga. Reducing residential outdoor water usage through irrigation delivery modifications and WaterMyYard App, $7,839.
3. PI, Young, J., L. Slaughter, M. Siebecker, R. Bowling, and J. Howe. Tradeoffs of irrigation water quality on soil health parameters, USDA-NIFA Foundational and Applied Science, $749,996.
4. Co-PI, Straw, C., J. Howe, B. Wyatt, and J. Young, Precision Turfgrass Management on Golf Course Fairways to Reduce Inputs and Environmental Impacts, USDA-NIFA Foundational and Applied Science, $33,639.
5. PI, Young, J., L. Slaughter, and M. Siebecker. Remediating soil salinity through water treatment products to benefit soil health, United States Golf Association, $18,338.
6. PI, Young, J., E. Bernard, D. Doerfert, M. Farmer, and V. Baliga. Capacity Building in Urban Landscape Water Conservation: The Missing Link to a Global Water Conserving Initiative. USDA Non-Land Grant Capacity Building, $149,999.

2022

1. PI, Young, J., L. Slaughter, and S. Deb. Enhancing Water Use Efficiency of Turfgrass Systems through Compost Application, Texas Department of Agriculture Specialty Crop Research Block Grant, $84,783.
2. PI, Young, J. and L. Slaughter. Assessing Microbial Population Dynamics from Bermudagrass Golf Fairways, VPR Proposal Assistance Program, $3,500
3. PI, Young, J. and L. Slaughter. Uncovering the soil microbiome associated with irrigated bermudagrass fairways, United States Golf Association, $144,979
4. PI, Young, J., R. Plowman, and V. Baliga, Enhancing Community Engagement and Education in the TTU Horticultural Gardens, CH Foundation, $120,000.
5. PI, Young, J., R. Plowman, and V. Baliga, Enhancing Community Engagement and Education in the TTU Horticultural Gardens, Helen Jones Foundation, $120,000
6. Co-PI, Jagadish, K., J. Young, R. Ritz, G. Ritchie, L. Slaughter, T. Wang, D. McCallister, G. Patil, C. Cooper, and A. Norris, Demonstrating climate-smart forage-livestock systems through integrated water-nitrogen-greenhouse gas management in the Southern High Plains, USDA-NIFA Cooperative State Research Ed & Extension Service, 3,997,419.

2023

1. Co-PI, Singh, S. and J. Young. Evaluating water productivity of various urban landscapes involving turfgrass and vegetable production. High Plains Water District, $50,418.
2. Co-PI, Ritchie, G., J. Young, L. Howell, P. Ferrero. Combining Research and Education for Water-Smart Plant Systems. $111,665.
3. Co-PI, Young, J. Optimizing investment, environmental impact, and user health of community level sports fields. USDA-SCRI CAP, 249,997
4. PI, Young, J. Tackling the complex interactions of water quality challenges in putting greens. United States Golf Association, $19,788
5. PI, Young, J., and D. McCallister. Optimizing golf course irrigation through temperature measuring cameras, United States Golf Association, $125,242.
6. PI, Young, J. and B. Kelly. Building a Drought Monitoring Machine Learning Tool for Golf Course Management, United States Golf Association, $110,558

7. Co-PI, Jagadish, SV., D. McCallister, W. Guo, and J. Young. Satellite to Sustainable Water Management – Strategizing Transitions from Irrigated to Rainfed Production and Promoting Peer-Led Adaptation, USDA, $1,860,587
8. Co-PI, Jagadish, SV, W. Guo, J. Young, and I. Somayanda. An interactive online climate adaptation platform to accelerate agricultural water conservation in the southern Ogallala region, USDA-NIFA Cooperative State Research Ed and Extension, $999,487

2024

1. PI, Young, J., V. Baliga, SV. Jagadish, and L. Fischer. Establishing an outreach framework for long-term urban water resiliency in secondary cities. USDA-NIFA Capacity Building for Non-Land Grant Agricultural Institutions, $149,997.
2. Co-PI, Jagadish, SV, A. Norris, C. Cooper, I. Somayanda, J. Young, G. Ritchie, W. Guo, Y. Che, and L. Slaughter, Livestock integration and precision irrigation management to develop economically and environmentally sustainable organic cotton production. USDA-OAREI, $2,000,000.
3. Co-PI, Jagadish, SV, G. Patil, I. Somayanda, J. Young, and A. Eubanks, Collaborative Research: NSF-DBT:RESEARCH-PGR: Comparative genomics and phenomics approach to enhance pre- and post-fertilization heat resilience in rice and sorghum. NSF-DBT-PGRP, $1,499,363.
4. PI, Young, J., B. Kelly, G. Ritchie, S. Deb, C. Portillo Quintero, W. Guo, and I. Pabuayon, Turfgrass selection and management to reduce water needs at high or low budget golf courses. GCSAA, $100,000
5. PI, Young, J., W. Guo, and J. Burke, Establishing Electrical Conductivity Spatial Variability Components with Veris-U3 Instrument. Texas A&M Turfgrass Research, Education, Extension Endowment, $11,781.

<u>Cash and Gifts-in-Kind:</u> total funded <u>$156,853</u>

Funded:

2013 ($8,000)

1. PI, Coated tall fescue establishment from seed, Aquatrols, $2,500
2. PI, Wetting agents and surfactants to improve establishment of creeping bentgrass with reduced irrigation, Aquatrols, $2,500
3. PI, Installation of an irrigation frequency system on sand-based rootzone putting greens, Texas Turfgrass Association $3,000; Rainbird Corp (8 valves and 150 spray head bodies worth $286.84).

2014 ($24,300)

1. PI, Equipment to manage grasses installed on subsurface drip system, High Plains Underground Water District, $6,000
2. PI, Evaluating Specticle Flo and G for use in native areas on golf courses, $5,000
3. PI, Evaluating wetting agents at different irrigation levels, $2,500
4. PI, Evaluating Oars Original and Oars HS at different irrigation levels on creeping bentgrass putting greens, AquaAid, $500
5. PI, Evaluating sodium removal with use of Verde-Cal G and AcidipHlow applications to bermudagrass, AquaAid, $1,000

6. PI, Herbicide evaluation for post-emergent control of khakiweed in bermudagrass, PBI Gordon, $1,800
7. PI, Herbicide evaluation for post-emergent control of khakiweed in bermudagrass, QualiPro, $1,500
8. PI, Coated tall fescue seed establishment from seed, Aquatrols, $2,500
9. PI, Salinity movement through creeping bentgrass putting greens on sand-based rootzones, Aquatrols, $3,500

2015 ($14,450)

1. PI, Contribution to research efforts evaluating cultivation practices and products to alleviate salinity stress on golf fairways, Aquatrols, $8,000
2. PI, Evaluation of water conservation products for home lawn application, Revive Fertilizer, $1,800
3. PI, Evaluation of water conservation products for home lawn application, AquaSmart, $1,200
4. PI, Company donations to support and fund the Texas Tech Turf Field Day, Multiple company sponsors, $3,450

2016 ($40,860)

1. Evaluation of Residential Water Retention Products – Year 2 $4,000
2. Evaluation of bermudagrass varieties for West Texas – Irrigation parts from Rainbird $1,029
3. Azomite micro-nutrient application to improve hybrid bermudagrass golf course fairways $5,981
4. GreenActivator as component of creeping bentgrass putting green fertility program $3,000
5. PBI Gordon experimental herbicide trial for Field Bindweed control $2,800
6. PBI Gordon experimental herbicide trial for khakiweed control $5,000
7. Seeded bermudagrass cultivar evaluation: Year 3 for Pure Seed Testing $3,750
8. Syngenta experimental fungicide trial for summer patch $5,500
9. Bayer experimental fungicide trial for summer patch $1,800
10. Anuvia Plant Nutrients application to prevent summer chlorosis of Kentucky bluegrass – Year 2 $5,000
11. PI, Company donations to support and fund the Texas Tech Turf Field Day, Multiple company sponsors, $3,000

2017 ($17,200)

1. Evaluate possible premix combinations for improved turf quality under normal stress conditions in fairway bermudagrass, Syngenta, $6,000
2. Effectiveness of seed coating on germination and growth of turf-type tall fescue, Rosen, $4,000
3. PI, Company donations to support and fund the Texas Tech Turf Field Day, Multiple company sponsors, $3,700

2018 ($14,533)

1. Annual ryegrass overseed evaluation, Barenbrug, $3,000
2. Evaluation of wetting agent surfactant on bermudagrass fairways, Aquatrols, $2,500
3. Kentucky Bluegrass Variety trial at Amarillo Country Club, Pure Seed Testing, $4,500
4. PI, Company donations to support and fund the Texas Tech Turf Field Day, Multiple company sponsors, $3,700

5. Evaluation of athletic field conditions for player safety, Sports Turf Managers Association SAFE Foundation, $2,500 ($833)

2019 ($11,500)

1. Precision laboratories surfactant evaluation, Precisions Labs, $4,500
2. Scott's bermudagrass safety evaluation, Scott's, $7,000

2020 ($4,200)

1. Goosegrass herbicide efficacy trial, PBI Gordon, $2,200
2. Khakiweed herbicide efficacy trial, PBI Gordon, $2,000

2021 ($7,000)

1. Evaluation of UGA Zoysiagrass Lines, University of Georgia, $2,000
2. Hardy Root Bermudagrass Establishment, Hardy Root, $5,000

2022 ($11,560)

1. Crabgrass Emergence Trial, Bayer Crop Science, $2,000
2. Sandbur Non-selective Control, PBI Gordon, $2,900
3. Sandbur Selective Post-emerge Control, PBI Gordon, $2,000
4. Evaluation of UGA Zoysiagrass Lines, University of Georgia, $4,660

2023 ($7,450)

1. Evaluation of UGA Zoysiagrass Lines, University of Georgia, $2,450.
2. Khakiweed control, PBI Gordon, $2,500
3. Old world bluestem control, PBI Gordon, $2,500

SERVICE TO PROFESSIONAL ORGANIZATIONS

National:

1. USDA- NIFA – Federal Grant Peer Review Panelist – Women and Minorities in Science, Technology (2023)
2. USDA- NIFA – Federal Grant Peer Review Panelist – Food, Agricultural, Natural Resources, and Human Sciences Grant Programs (2021)
3. Crop Science Society of America (Member since 2009)
    a. C-5 Division Chris Stiegler Travel Grant Selection Committee (2013)
    b. C-5 Division Chris Stiegler Travel Grant Selection Committee Chair (2014-2015)
    c. C-5 Graduate Student Oral Session Moderator (2014)
    d. C-5 Oral Session Moderator (2015)
    e. C-5 Division Stiegler Endowment Fundraiser Golf Tournament Committee (2016)
    f. C-5 Secretary (2017-2019)
    g. CSSA Grad Student Competition Development Committee (2019-2020)
    h. CSSA Grad Student Competition Committee Chair (2021)
    i. Social Media Editor for Crop Science (July 2020 – Sept. 2021)
    j. Peer Review Mentor (October 2024-Current
4. Golf Course Superintendents Association of America (Member since 2003)
    a. Collected and grew turf weed material for turf bowl exam in San Antonio (2015 & 2018)
    b. Moderated Agronomic Session on Water Conservation in San Diego (2016)
5. Sports Turf Managers Association (Member since 2014)
    a. Technical Editor for SportsTurf Magazine (2015-2019)
    b. Grew turf weeds for student competition in Ft. Worth (2018)

Regional:

1. Southeast Region SERA48: Turf (IEG-16) working group (Formerly SERA25)

2. Western Region WERA-11: Turf Research working group

State:

1. Texas Turfgrass Association
    a. Educational representative on Board (2013-present)
    b. Educational committee finding speakers for commercial turf mgmt. seminars
    c. Content update for Certified Professional Turf Manager (CPTM) Exam
2. West Texas Golf Course Superintendents Association (Member since 2013)
    a. Board member (2013-present)
    b. Serve on educational committee to develop conference program and speakers
3. Texas Sports Turf Managers Association
    a. Board member (2014-2019)
    b. Hosted field day in West Texas region (2015)

OTHER PROFESSIONAL SERVICE:
CONSULTING ACTIVITIES:

1. Water and turf management plan for city of Lovington, NM (2015)
2. City of Lubbock Water Conservation and Turf Selection (2017)
3. Burl-Huffman Soccer Complex Renovation (2019)
4. City of Wolfforth Watering Ordinance Revisions (2020)
5. Chamizal Park Turfgrass Installation Problems (2020)
6. Promotion and Tenure Packet Review for Dr. Leslie Beck at NMSU (2020)
7. Hatch Proposal Review for Dr. Ryan Goss at NMSU (2020)
8. Alcove Farms Turf Sod Farm (2021-2023)
9. Golf Course inquiry from Jai, NM (2021)
10. iCEV Professional Turfgrass Managers Certification Program Curriculum (2023)

SERVICE TO:

UNIVERSITY:

1. Dean's Representative for Ph.D. Defense of Rachel Jackson, Ag Ed and Comm, 2015
2. Texas Tech STEM-CORE Affiliate (2015-2016)
3. Texas Tech STEM-CORE Member (2017-present)
4. Texas Tech STEM-CORE Outreach Committee (2017-2024)
5. Texas Tech Core and Multicultural Curriculum Committee (2017-present)
6. Texas Tech STEM-CORE Director (2018-2024)
7. Dean's Representative for Ph.D. Defense of Peng Lu, Ag Ed and Comm, 2019
8. Dean's Representative for Ph.D. Defense of Ben Kasl, Animal and Food Sci, 2020
9. Graduate Program Review, Chemical Engineering, 2020
10. Dean's Representative for Ph.D. Defense of Loren Gross, Ag Ed and Comm, 2022
11. Outreach and Engagement Promotion and Tenure Committee, 2022-2023
12. Dean's Representative for Ph.D. Defense of Afsana Sharmin, Land Management and Planning, 2024

COLLEGE:

1. CASNR Marketing Committee (2014-2018)
    a. Assisted with guest speaker for Ag. Awareness week (2015)

    b. Coordinated daily radio interviews for CASNR Faculty on KFYO during Ag Awareness Week (2015)
    c. Chair 2016-2018
    d. Rebranding committee duties to more closely reflect Marketing and Outreach engagement through coordinating video productions
2. CASNR Defining Excellence Committee – PSS Representative (2018-2019)
3. CASNR Subcommittee for Teaching Strategic Plan Goals – Reviewer (2019)

DEPARTMENT:

1. Conduct and organize Turf and Ornamental Field Day at Quaker Farm (2014-2018)
    a. Approximately 130 attendees each year
    b. Graduate students, invited guests, and I provide educational talks and demonstrations.
2. Chair of the Communication/website committee (2015-2018)
    a. Work with Robby to ensure website materials are updated
    b. Coordinated weekly radio interviews on KFYO of faculty and grad students (2015)
    c. Coordinated radio broadcast scripts from faculty for KTTZ Advertising (2017-2018)
3. Serve on the following PSS Committees (2015-2020): Curriculum, Distance Education, Awards, Social, and Scholarships
4. Chair of Farm Committee, Awards Committee, and Distance Education Committee (2020 – present).
5. Departmental Manuscript Review
    a. Grubbs, R.A., C.B. McKenney, D.T. Montague, and S.J. Oswalt. Understanding Salinity Tolerance of *Anisacanthus quadrifidus* in a Hydroponics Setting.
6. Guest Lectures
    a. Dr. Longings Integrated Pest Management Course (2014-2018 even Springs)
    b. Dr. Sharma's Principles of Horticulture Course (2015)
    c. Dr. Kelly's Freshman/Transfer Course (2016)
7. Departmental Search Committees
    a. Urban Soils (2016)
    b. Sustainable Vegetable Production (2017)
    c. Rockwell Professor of Horticulture (2018)
    d. Horticulture Instructor Position (2020)
8. Judged Departmental Grad Student Oral Competition (2021)
9. Advising Assistance in Mrs. Merriman's Medical Leave (2021)
    a. Removed holds and added permit for students registering
    b. Fielded registration questions from students and advisors
10. Judged Departmental Undergraduate Student Poster Competition (2022)

COMMUNITY:

1. Lubbock Arboretum Water-wise Landscape Tour—Turf Expert (2013-2014)
2. Wolfforth Water Expo – Speaker on turf water conservation practices
3. Master Gardener Internship Education 2015, 2016, 2017, 2019, and 2022.
4. Christ the King Science Fair projects (middle and high school)

a. 2016-2017
    i. Water conservation product evaluation on established bermudagrass with monthly irrigation (State Science Fair Qualifier)
    ii. Polymer coated sand to reduce water at establishment of seed or sprigs (State Science Fair Qualifier)
b. 2017-2018
    i. Turf response to surfactants and fertilizers under weekly irrigation (State Science Fair Qualifier)
    ii. Establishment of bermudagrass sod with polymer coated sand (International Science Fair Qualifier)
c. 2018-2019
    i. Quantifying turf recovery from Jackrabbit damage using fertilizers (State Science Fair Qualifier)
    ii. Athletic field safety assessment throughout Southern High Plains (International Science Fair Qualifier)
    iii. Water conservation strategies for greenhouse tomato production (International Science Fair Qualifier and manuscript preparation)
d. 2019-2020
    i. Bermudagrass drought response with surfactant and fertilizer application (State Science Fair Qualifier)
    ii. Surfactant and fertilizer effect on surface hardness and canopy temperature with reducing irrigation (International Science Fair Qualifier)
e. 2020-2021
    i. Residential irrigation audit: Distribution uniformity and precipitation rate
    ii. Reducing weed encroachment with landscape fabric and mulch
f. 2021-2022
    i. Spatial variability mapping of salinity in golf course fairways (International Science Fair Qualifier)
    ii. Evaluation of water conditioning products applied to golf course fairways for alleviating soil salinity concerns (State Science Fair Qualifier)
g. 2022-2023
    i. Mapping spatial variability of soil salinity using GPS-enabled soil moisture sensors (3rd Place Plant Science Div. State Science Fair)
h. 2023-2024
    i. Chemical treatments to address irrigation water quality concerns

5. Christ the King Science Fair Judge for High School Projects 2017, 2018, 2021, 2022 and 2023.
6. Initiated Turf, Ornamental, and Pollinator Field Day in 2017 and continued 2018
    a. Collaboration with faculty in PSS that conduct research related to homeowner needs
    b. Attendance doubled from 2017(33) to 2018 (74), and look to continue growth
7. OL Slaton Middle School visit to Rawls Golf Course hosted by STEM-Core 2022
8. Cavazos Middle School AgriSTEM Career Introduction: Turfgrass Management 2024

INDUSTRY:

1. Conduct cooperative research for numerous companies

2. Field day sponsors allowed to show off equipment and promote products

OTHER:

1. Run the Turf Club Fundraiser Golf Tournament at Meadowbrook Golf Club (2013-2016)
2. Distance education demonstration for Sao Paulo visitors to PSS Department
3. Radio (Double T 104.3) and TV (Fox 34) interview on “Tee to Green”
4. Utilize social media platforms to provide outreach to the public and colleagues of research.
5. Initiated radio advertisement on Double T 97.3 Radio and Online Stream to promote our undergraduate turf program to a broader audience