

Ryan Blake Williams, Ph.D.

Texas Tech University School of Veterinary Medicine
 7671 Evans Dr
 Amarillo, TX 79106
 Email: ryan.b.williams@ttu.edu
 ORCID: 0000-0001-5718-753X

EDUCATION

PhD · Economics · Texas Tech University	2009
MR · Economics · North Carolina State University	2005
BA · Economics · Emory University	1999

PROFESSIONAL APPOINTMENTS & POSITIONS

Associate Professor of Economics and Public Policy (12 month appointment) Assistant Academic Dean Texas Tech University ~ School of Veterinary Medicine	2020 - Present 2022 - 2024
One Health High-Level Expert Panel (OHHLEP) Term II Member Quadripartite Organizations (WHO, WOA, UNEP, and FAO)	2024 - Present
Economics Lead Texas Produced Water Consortium (TxPWC)	2023 - Present
Associate Professor (12 month appointment) Texas Tech University ~ Department of Agricultural & Applied Economics Texas A&M AgriLife Research at Lubbock (25% appointment)	2017 - 2020
Assistant Professor (12 month appointment) Texas Tech University ~ Department of Agricultural & Applied Economics Texas A&M AgriLife Research at Lubbock (25% appointment)	2015 - 2017
Assistant Professor Texas Tech University ~ Department of Agricultural & Applied Economics	2011 - 2015
Visiting Assistant Professor Texas Tech University ~ Department of Economics	2009 - 2011

INTERNATIONAL EXPERIENCE

Canada

2016 (Calgary). Two days. Met with the Executive Team at the Faculty of Veterinary Medicine, University of Calgary.

Denmark

2023 (Copenhagen). Six days. Attended intensive course, "Food and health policy analysis using home-scan data" at University of Copenhagen. Presented ongoing research and established collaborations with fellow participants and faculty of the host institution.

People's Republic of China

2017 (Wuhan). One week. Participated in the Second International Conference on Natural Resource Management and Public Policy. Invited keynote speaker. Presented research to, and spoke with, undergraduate students, graduate students, and faculty at Huazhong Agricultural University, and scholars from many countries.

Spain

2019, 2018, 2017 (Sevilla, Huelva, Bollullos del Condado, and Jabugo). One month. Led a study abroad course. Visited with Iberian pig farmers and a Jamon Ibérico Jabugo de Bellota curing facility (Montesierra). Visited a cooperative winery (Bodegas Privilegio del Condado and Cooperativa Vinícula).

Sultanate of Oman

2017 (Muscat and Nizwa). One week. Invited by Sultan Qaboos Cultural Center to meet with faculty of Sultan Qaboos University and Nizwa University, as well as the Secretary General of Sultan Qaboos Higher Center for Culture and Science, the Undersecretary of Agriculture at the Ministry of Agriculture and Fisheries, the Undersecretary of Water Resources at the Ministry of Regional Municipalities and Water Resources, and Director General of the Office of Conservation of the Environment.

HONORS & AWARDS

2019. Integrated Scholar, Texas Tech University.

2018. Faculty Development Leave with Full Salary, Texas Tech University.

2017. APEE Young Scholar Award, Association of Private Enterprise Education. \$1,000 travel grant and \$419 in reduced registration fees.

2016. Junior Faculty Award, College of Agricultural Sciences & Natural Resources, Texas Tech University. \$1,000 Honorarium.

2014. Outstanding Professor, College of Agricultural Sciences & Natural Resources, Texas Tech University. Recognized by the Student Agricultural Council.

2013. Outstanding Faculty Member, Department of Agricultural & Applied Economics, Texas Tech University. Recognized by the Agricultural Economics Association.

2008. Helen DeVitt Jones Outstanding Doctoral Graduate Part-Time Instructor, Texas Tech University. \$500 Honorarium.

PROFESSIONAL DEVELOPMENT

2022. Institute for Inclusive Excellence, Texas Tech University.

2022. Texas Tech University School of Veterinary Medicine Leadership Development Institute, Academic Impressions.

2021. President's Leadership Institute, Texas Tech University.

PUBLICATIONS (* student lead author, † lead/co-lead/senior author)**PEER-REVIEWED ARTICLES: 26**

1. Samper*, B.A., J.A. Rowe, and **R.B. Williams**†. IN PRESS 06/05/2023. "Companion animal cadaver donation for teaching purposes at veterinary medicine colleges: A discrete choice experiment." *Journal of Veterinary Medical Education*. [IF=1.00 Citations=NA]
2. Samper*, B.A., J.H. Koziol, and **R. Williams**†. 2024. "The Economics of Bovine Viral Diarrhea Virus Control in United States Cow-Calf Production." *Journal of Agricultural and Resource Economics* 49(2). [IF=1.40 Citations=NA] <https://doi.org/10.22004/ag.econ.339257>
3. Cardella, E., B. Depew, and **R. Williams**†. 2024. "Behavioral Responses of Mandatory Masking Within Social Interactions." *Public Choice*. [IF=1.60 Citations=NA] <https://doi.org/10.1007/s11127-024-01166-0>
4. Rahman*, M.K., **R.B. Williams**, S. Ajulo, G. Levent, G.H. Loneragan, and B. Awosile. 2024. "Predictive modeling of phenotypic antimicrobial susceptibility of selected beta-lactam antimicrobials from beta-lactamase resistance genes." *Antibiotics* 13(3):224. [IF=4.80 Citations=NA] <https://doi.org/10.3390/antibiotics13030224>
5. Awosile, B., M.K. Rahman, Y. Botero, S. Ajulo, R. Ojasanya, G. Levent, **R.B. Williams**, G. Loneragan. 2023. "Comparing individual antimicrobial resistant and multi-drug resistant *Salmonella enterica* across serotypes, surveillance programs, time periods, and food animal sources in the United States (2014-2018)." *Preventive Veterinary Medicine* 219:106008. [IF=2.60 Citations=NA] <https://doi.org/10.1016/j.prevetmed.2023.106008>
6. Neill, C.L., M.J. Salois, and **R.B. Williams**†. 2023. "The economics of veterinary medicine: Emerging challenges and opportunities for economists." *Choices* 38(1):1-9. [IF=NA Citations=0] <https://www.choicesmagazine.org/choices-magazine/submitted-articles/the-economics-of-veterinary-medicine-emerging-challenges-and-opportunities-for-economists>
7. Awosile, B., M.K. Rahman, **R.B. Williams**, and G.H. Loneragan. 2022. "Resistance to extended-spectrum cephalosporins in *Escherichia coli* and *Salmonella enterica* isolated from food-producing animals: Ecological study from selected national surveillance programs." *Preventive Veterinary Medicine* 206(2022):105710. [IF=2.60 Citations=1] <https://doi.org/10.1016/j.prevetmed.2022.105710>
8. Cardella, E., B.T. Ewing, and **R.B. Williams**†. 2022. "Green is Good – The Impact of Information Nudges on the Selection of Voluntary Green-Power Plans." *Energy Journal* 43(1). [IF=2.90 Citations=4] <https://doi.org/10.5547/01956574.43.1.ecar>
9. Mitchell-McCallister, D., P. Johnson, and **R.B. Williams**. 2021. "An economic analysis on the transition to rainfed production in deficit-irrigated cropping systems of the Texas High Plains." *Frontiers in Sustainable Food Systems* 5. [IF=5.01 Citations=3] <https://doi.org/10.3389/fsufs.2021.531601>
10. Jahan*, I., J.B. Pavlik, and **R.B. Williams**. 2020. "Is the devil in the shadow? The effect of institutional quality on income." *Review of Development Economics* 24(4):1463-1483. [IF=1.17 Citations=12] <https://doi.org/10.1111/rode.12691>
11. Mitchell-McCallister, D., **R.B. Williams**, J. Bordovsky, J. Mustian, G. Ritchie, and K. Lewis. 2020. "Maximizing profits via irrigation timing for capacity-constrained cotton production." *Agricultural Water Management* 229. [IF=4.52 Citations=17] <https://doi.org/10.1016/j.agwat.2019.105932>
12. Alqaisi, O., L. Moraes, O.A. Ndambi, and **R.B. Williams**. 2019. "Optimal dairy feed input selection under alternative feeds availability and relative prices." *Information Processing in Agriculture* 6(4):438-453. [IF=NA Citations=17] <https://doi.org/10.1016/j.inpa.2019.03.004>
13. Hohman, Z.P., D. Hudson, **R.B. Williams**, B.N. Harris, J.L. Alquist, D. Mitchell, E.M. Niedbala, and M. Price. 2019. "The impacts of stress on economic decisions." *Journal of Behavioral Economics for Policy* 3(1):30-36. [IF=0.20 Citations=0] <https://sabeconomics.org/jbep/jbep-3-1/>
14. Alqaisi, O., O.A. Ndambi, and **R.B. Williams**. 2017. "Time series livestock diet optimization: Cost-effective broiler feed substitution using the commodity price spread approach." *Agricultural and Food Economics* 5(25):1-19. [IF=3.90 Citations=29] <http://dx.doi.org/10.1186/s40100-017-0094-9>
15. Mitchell*, D., **R.B. Williams**, D. Hudson, and P. Johnson. 2017. "A Monte Carlo analysis on the impact of climate change on future crop choice and water use in Uzbekistan." *Food Security* 2017. [IF=2.97 Citations=0] <http://dx.doi.org/10.1007/s12571-017-0690-2>

16. **Williams, R.B.**, R. Al-Hmoud, E. Segarra, and D. Mitchell. 2017. "An estimate of the shadow price of water in the southern Ogallala Aquifer." *Journal of Water Resource and Protection* 9:289-304. [IF=NA Citations=4]
<http://dx.doi.org/10.4236/jwarp.2017.93019>
17. Cardella, E., B.T. Ewing, and **R.B. Williams**[†]. 2017. "Price volatility and residential electricity decisions: Experimental evidence on the convergence of energy generating sources." *Energy Economics* 62:428-437. [IF=3.91 Citations=30] <http://dx.doi.org/10.1016/j.eneco.2016.07.012>
18. Post, R., D. Hudson, D. Mitchell*, P. Bell, and **R.B. Williams**. 2016. "Rethinking the water-food-climate nexus and conflict: An opportunity cost approach." *Applied Economic Perspectives and Policy* 38(4):563-577. [IF=1.36 Citations=12] <http://dx.doi.org/10.1093/aep/pw027>
19. **Williams, R.B.**[†] and S. Zivkovic. 2016. "The external costs of wind farm development on the high plains: Are developers making an effort to minimize these costs?" *The Electricity Journal* 29(9):31-35. [IF=0.60 Citations=1] <http://dx.doi.org/10.1016/j.tej.2016.10.011>
20. Neill*, C.L. and **R.B. Williams**[†]. 2016. "Consumer preference for alternative milk packaging: The case of an inferred environmental attribute." *Journal of Agricultural and Applied Economics* 48(3):241-256. [IF=NA Citations=47] <http://dx.doi.org/10.1017/aae.2016.17>
21. Bian*, D., **R.B. Williams**, A. Benson, and E. Segarra. 2016. "The effects of policy implementation uncertainty on groundwater extraction." *Journal of Contemporary Water Research and Education* 158:34-45.
<http://ucowr.org/journal-issue-archives/158>
22. Neill*, C.L. and **R.B. Williams**[†]. 2015. "An economic valuation on the external cost of alternative milk packaging." *Journal of Food Distribution Research* 46(3):68-80. [IF=NA Citations=3]
<https://www.fdrsinc.org/wp-content/uploads/2015/11/5-112.pdf>
23. **Williams, R.B.** and R. Al-Hmoud. 2015. "Virtual water on the southern High Plains of Texas: The case of a nonrenewable blue water resource." *Natural Resources* 6(1):27-36. [IF=NA Citations=6]
<http://dx.doi.org/10.4236/nr.2015.61004>
24. Cukrowicz, K.C., D.R. Jahn, R.D. Graham, E.K. Poindexter, and **R.B. Williams**. 2013. "Suicide risk in older adults: Evaluating models of risk and predicting excess zeros in a primary care sample." *Journal of Abnormal Psychology* 122(4):1021-1030. [IF=4.97 Citations=126] <http://dx.doi.org/10.1037/a0034953>
25. Benson, A. and **R. Williams**. 2013. "Cost of early snowmelt in terms of reduced irrigation deliveries." *Journal of Natural Resources Policy Research* 5(2-3). [IF=NA Citations=1]
<http://dx.doi.org/10.1080/19390459.2013.811850>
26. Bian*, D., Benson, A., and **R.B. Williams**. 2013. "An estimation of the private value of aquifer recharge from ephemeral wetlands on the Texas High Plains." *Resources*, 2(3):286-302. [IF=NA Citations=3]
<http://dx.doi.org/10.3390/resources2030286>

BOOK CHAPTERS: 1

1. Mitchell*, D., D. Hudson, R. Post, P. Bell, and **R.B. Williams**. "Food security and conflict." *Food Security in an Uncertain World (Frontiers of Economics and Globalization, Volume 15)* Emerald Group Publishing Limited 15 (2015): 211-225. <http://dx.doi.org/10.1108/S1574-871520150000015022>

TECHNICAL REPORTS: 1

1. Gillum*, M.B., P. Johnson, D. Hudson, and **R. Williams**. "Fieldprint Calculator: A tool to evaluate the effects of management on physical sustainability." *Crops & Soils* 49(1):26-29. <http://dx.doi.org/10.2134/cs2016-49-1-7>

BOOK REVIEWS: 1

1. **Williams, R.B.** and D.M. Mitchell*. 2015. Water management and climate change: dealing with uncertainties. *Journal of Natural Resources Policy Research* 7(4):328-330. <http://dx.doi.org/10.1080/19390459.2015.1075738>

MANUSCRIPTS IN SUBMISSION

1. Gao, L., D. McCallister, and **R. Williams**. "Irrigated farmland price bubbles: An experimental economics approach to test an option value explanation." (Under Review: *American Journal of Agricultural Economics* - 04/15/2024). [IF=4.2 Citations=NA]

2. Samper*, B.A., B. Johnson, and **R. Williams**[†]. "The economic impact of syndromic surveillance for early detection in a simulated foot and mouth disease outbreak in the Texas panhandle." (Under Review: *American Journal of Agricultural Economics* - 04/18/2024). [IF=4.2 Citations=NA]
3. Samper*, B.A., A.B. Crocker*, and **R. Williams**[†]. "Grounded in your beef-liefs? Assessing the malleability of consumer beliefs and preferences for ground beef." (Under Review: *Food Policy* - 04/25/2024). [IF=6.5 Citations=NA]
4. Crocker*, A., B. Samper, and **R.B. Williams**[†], and S.C. Murphy. "Partnering to Deliver Community-based Education: A Case for Agency Theory." (Under Review: *The Journal of Agricultural Education & Extension: Competence for Rural Innovation and Transformation* - 05/02/2024). [IF=2.8 Citations=NA]

TEACHING

SCHEDULED TEACHING

Texas Tech University

School of Veterinary Medicine - One Health Sciences PhD

2023 - Present (Spring)	Applied One Health & Public Policy
2023 - Present (Fall)	Qualitative & Quantitative Statistics II
2023 - Present (Fall/Spring)	Advanced Special Problems: Teaching Practicum

School of Veterinary Medicine - DVM

2021 - Present (Fall)	The Profession & Professionalism
2023 - Present (Fall)	Business Skills & Workforce Preparation

Department of Agricultural & Applied Economics - Graduate

2022	(Summer)	Binary Response & Count Data Models: Frequentist & Bayesian Methods (Advanced Special Problems)
2022	(Spring)	One Health Statistics II (Advanced Special Problems)
2015 - 2020	(Spring)	Environmental Economics & Policy Analysis
2014	(Spring)	Environmental Policy and Valuation (Advanced Special Problems)
2013	(Spring)	Discrete Choice Models, Simulation in Matlab, & Bayesian Basics (Advanced Special Problems)

Department of Agricultural & Applied Economics - Undergraduate

2015 - 2020	(11 sections)	Agricultural Price Theory
2017 - 2019	(Summer)	Agribusiness Enterprise Management (Farm & Ranch Management)
2012 - 2019	(Fall)	Applied Optimization Methods
2011 - 2014	(8 sections)	Fundamentals of Agricultural & Applied Economics

Department of Economics - Undergraduate

2010	(Spring)	Managerial Economics
2009	(Fall)	Principles of Microeconomics – Honors
2006 - 2011	(12 sections)	Principles of Microeconomics
2006 - 2011	(10 sections)	Principles of Macroeconomics
2009	(2 sections)	Principles of Economics

GRADUATE STUDENT MENTORING

Doctoral (Advisor)

2022 - Present Boggan, SaraBeth. One Health Sciences. Texas Tech University. Anticipated Graduation: 2025.

2022 - Present Crocker, Andrew B. One Health Sciences. Texas Tech University. Anticipated Graduation: 2025.

2021 - Present Samper, Bailey. One Health Sciences. Texas Tech University. Anticipated Graduation: 2024.

- 2016 - 2021 Sun, Lianqun. (Co-Advisor B. Chidmi). Agricultural & Applied Economics. Texas Tech University.
Postdoctoral Fellow, Thad Cochran National Warmwater Aquaculture Center at the Delta
Research and Extension Center, Mississippi State University.
Dissertation: *A Review of Consumer Preferences for Eco-Labelled Products with a New
Empirical Industrial Organization Analysis of Household Cleaning Products.*
- 2016 - 2020 Musa, Anne O. (Co-Advisor C. Carpio). Agricultural & Applied Economics. Texas Tech University.
Sr. Market Intelligence Analyst, Pilgrim's.
Dissertation: *Essays on Food Security in The United States.*
- 2015 - 2020 Ugwuanyi, Blessing. (Co-Advisor S. Devadoss). Agricultural & Applied Economic. Texas Tech
University.
Assistant Professor, Southern Arkansas University.
Dissertation: *Essays on Trade and Domestic Farm Policies.*
- 2013 - 2016 Roberson, Michael. Agricultural & Applied Economics. Texas Tech University.
Economics Adjunct, Western Kentucky University - Glasgow.
Dissertation: *Price elasticity for smartphones in the United States: Results from three
methodological approaches.*

Masters - Thesis Option (Advisor)

- 2014 - 2016 Gao, Yang. Texas Tech University.
Thesis: *Cap and trade markets for groundwater: Efficiency and distributional effects of a permit
allocation mechanism.*
- 2013 - 2014 Neill, Clinton. Texas Tech University.
Ph.D. Oklahoma State University.
Thesis: *Consumer preference for alternative milk packaging.*

Doctoral (Committee Member)

- 2017 - 2024 Martin, Vikki. Plant & Soil Science. Texas Tech University.
- 2016 - 2021 White, C.D. Ray. Plant & Soil Science. Texas Tech University.
- 2015 - 2020 Baliga, Vikram. Plant & Soil Science. Texas Tech University.
- 2018 - 2020 Hinds, Zach. Plant & Soil Science. Texas Tech University.
- 2017 - 2019 McCullough, Rebecca. Agricultural & Applied Economics. Texas Tech University.
- 2015 - 2017 Asare, Eric. Agricultural & Applied Economics. Texas Tech University.
- 2014 - 2017 Acharya, Sanjit. Plant & Soil Science. Texas Tech University.
- 2013 - 2016 Shiroya, Michael. Agricultural & Applied Economics. Texas Tech University.
- 2013 - 2016 De-Silva, K. V. Nirodha Sudershini. Agricultural & Applied Economics. Texas Tech University.
- 2013 - 2015 Bian, Dacheng. Agricultural & Applied Economics. Texas Tech University.
- 2012 - 2014 Mitchell, Donna. Agricultural & Applied Economics. Texas Tech University.
- 2012 - 2014 Thapa, Janani. Agricultural & Applied Economics. Texas Tech University.
- 2012 - 2013 Liu, Bing. Agricultural & Applied Economics. Texas Tech University.

Masters - Thesis Option (Committee Member)

- 2019 - 2020 Sapkota, Pradip. Plant & Soil Science. Texas Tech University.
- 2019 - 2019 Brown, Rohan. Plant & Soil Science. Texas Tech University.
- 2016 - 2019 Young, Shelby. Plant & Soil Science. Texas Tech University.
- 2018 - 2019 Rumi, Shaida Sultana. Plant & Soil Science. Texas Tech University.
- 2017 - 2019 Macha, Nick. Plant & Soil Science. Texas Tech University.
- 2017 - 2018 Black, Taylor. Agricultural & Applied Economics. Texas Tech University.
- 2016 - 2018 Pabuayon, Irish. Plant & Soil Science. Texas Tech University.
- 2016 - 2018 Burke, Joseph. Plant & Soil Science. Texas Tech University.
- 2016 - 2017 Grant, James. Plant & Soil Science. Texas Tech University.
- 2014 - 2015 Gillum, Miranda. Agricultural & Applied Economics. Texas Tech University.
- 2014 - 2015 Stokes, Kelsey. Agricultural & Applied Economics. Texas Tech University.
- 2012 - 2015 Imel, R. Kelby. Plant & Soil Science. Texas Tech University.

- 2014 - 2015 Brunson, Kyle. Natural Resources Management. Texas Tech University.
 2013 - 2014 Abeyasinghe, Shayamalee. Plant & Soil Science. Texas Tech University.
 2012 - 2013 Liyanage, Sumedha. Plant & Soil Science. Texas Tech University.

Masters (Committee Member)

- 2021 - Present Patton, Zach. Professional Science Master's. Texas Tech University.
 2018 - 2022 Hamilton, Ashley (Chair). Agricultural & Applied Economics. Texas Tech University.
 2019 - 2020 Green, Glenn. Masters of Agribusiness. Texas Tech University.
 2019 - 2020 Worley, Lauren. Agricultural & Applied Economics. Texas Tech University.
 2018 - 2019 Crawl, Jennifer. (Chair). Masters of Agribusiness. Texas Tech University.
 2017 - 2019 Petry, Christy (Chair). Masters of Agribusiness. Texas Tech University.
 2016 - 2017 Gallington, Nick. Plant & Soil Science. Texas Tech University.
 2016 - 2017 House, Kelsey. Plant & Soil Science. Texas Tech University.
 2015 - 2016. Clarke, Deborah. (Chair). Agricultural & Applied Economics. Texas Tech University.
 2016 Hopkins, Mishon. Plant & Soil Science. Texas Tech University.
 2015 Kalina, Victoria. Masters of Agribusiness. Texas Tech University.
 2015 Langdon, Charles. Plant & Soil Science. Texas Tech University.
 2015 Bateman, Laney. Masters of Agribusiness. Texas Tech University.
 2014 Murphy, Ben. Plant & Soil Science. Texas Tech University.

FUNDED RESEARCH († lead/co-lead investigator)

Total Funding to Date: \$2,224,459 Share: \$630,000

1. *Comparing individual antimicrobial resistant and multi-drug resistant Salmonella enterica across serotypes, surveillance programs, time periods, and food animal sources in the United States (2014-2018).*
Texas Tech University Open Access Initiative. \$1,000 Total Award. 2023. Co-PIs include: B. Awosile, M.K. Rahman, Y. Botero, S. Ajulo, R. Ojasanya, G. Levent, G. Loneragan
2. *I Love West Texas: Assessing the Needs of Rural Communities, their Perceptions, and Challenges Across the South Plains.*
Grand Challenges Catalyst Grant Program - Texas Tech University Davis College of Agricultural Sciences & Natural Resources. \$180,176 Total Award. 2023 - 2025. Role: Contributor. Research Team: J. Headrick (PI), E. Irlbeck (Co-PI), K. Williams (Contributor).
3. *Professional Skill Bootcamp for Recent Graduates in Production Animal Medicine.*
National Institute of Food and Agriculture (NIFA)-USDA: Cooperative State Research Ed & Extension Service. \$231,337 Total Award. 2022-2025. Co-PIs: P. Gibbons (Lead), J. Koziol, B. Schilling, and N. Zimmerman.
4. †*Economic and Policy Implications of Underground Water Use in the Southern Ogallala Region.*
Ogallala Aquifer Program (OAP) - U.S. Department of Agriculture Agricultural Research Service. \$200,000 Total Award (\$2,200 share). 2022–2023. Co-PIs: L. Almas, D. McCallister, J. Benavidez, B. Guerrero, B. Golden, M. Vestal.
5. †*Economic and Policy Implications of Underground Water Use in the Southern Ogallala Region.*
Ogallala Aquifer Program (OAP) - U.S. Department of Agriculture Agricultural Research Service. \$90,000 (\$22,500 share). 2019–2020. Co-PIs: L. Almas, B. Guerrero, S. Park, B. Golden, M. Vestal.
6. *Testing of spineless prickly pear cactus for profitable forage production under dryland conditions.*
Ogallala Aquifer Program (OAP) - U.S. Department of Agriculture Agricultural Research Service. \$39,450 (\$3,000 share). 2019–2020. Co-PIs: M. Burow, G. Ritchie.
7. †*Economic and Policy Implications of Underground Water Use in the Southern Ogallala Region: Economic analysis of experimental results.*
Ogallala Aquifer Program (OAP) - U.S. Department of Agriculture Agricultural Research Service. \$180,000 Total Award (\$22,500 share). 2018-2019. Co-PIs include: Almas, L., Golden, B., Guerrero, B., Mitchell, D., and Park, S.

8. *Enhancing Water Conservation through Remote Sensing from Unmanned Systems.*
Ogallala Aquifer Program (OAP) - U.S. Department of Agriculture Agricultural Research Service. \$73,189 Total Award (\$12,000 share). 2018-2019. Co-PIs include: Young, J., Ritchie, G., Guo, W., Deb, S., Weindorf, D., Bernard, E., and McCall, D.
9. *Comprehensive Evaluation of Tillage and Crop Rotation Practices under Deficit Irrigated and Dryland Conditions in the Texas South Plains.*
Ogallala Aquifer Program (OAP) - U.S. Department of Agriculture Agricultural Research Service. \$64,546 Total Award (\$6,739 share). 2018-2019. Co-PIs include: Bordovsky, J., Lewis, K., and Porter, D.
10. *Testing of Management Practices and Advanced Guar Breeding Lines for Profitable Production under Dryland and Limited Irrigation Conditions.*
Ogallala Aquifer Program (OAP) - U.S. Department of Agriculture Agricultural Research Service. \$71,789 Total Award (\$3,500 share). 2018-2019. Co-PIs include: Burow, M., Trostle, C., and Angadi, S.
11. *Integrated Grain Sorghum Production in a Cotton/Sorghum Rotation: Irrigation, Tillage and Weed Management in the Southern High Plains of Texas.*
Texas Grain Sorghum Producers Board. \$10,000 Total Award (\$2,500 share). 2017-2018. Co-PIs include: Bordovsky, J.P., Keeling, W., and Lewis, K.
12. *Economic Decisions Under Stress.*
Texas Tech University Seed Grants for Interdisciplinary Research (TTU SGIR). \$114,000 Total Award. 2017-2018. Co-PIs include: Hudson, D., Harris, B., Alquist, J., and Mitchell, D.
13. [†]*Economic and Policy Implications of Underground Water Use in the Southern Ogallala Region: Economic impact of selected water conservation policies in Texas.*
Ogallala Aquifer Program (OAP) - U.S. Department of Agriculture Agricultural Research Service. \$200,000 Total Award (\$25,000 share). 2017-2018. Co-PIs include: Almas, L., Golden, B., Guerrero, B., Mitchell, D., and Park, S.
14. *A Monte Carlo analysis on the impact of climate change on future crop choice and water use in Uzbekistan.*
Texas Tech University Open Access Initiative. \$2,400 Total Award. 2017. Co-PIs include: Mitchell, D., Johnson, P., Hudson, D.
15. [†]*Rainwater Harvesting Economic Analysis.*
High Plains Underground Water Conservation District (HPWD). \$13,969 Total Award (\$3,232 share). 2016-2017. Co-PIs include: Howell, N.
16. [†]*Price volatility and residential electricity decisions: Experimental evidence on the convergence of energy generating sources.*
Texas Tech University Open Access Initiative. \$1,500 Total Award. 2016. Co-PIs include: Cardella, E. and Ewing, B.
17. [†]*Economic analysis of residential irrigation habits and landscape design to reduce outdoor water usage.*
High Plains Underground Water Conservation District (HPWD). \$3,000 Total Award (\$1,500 share). 2015-2016. Co-PIs include: Young, J.
18. [†]*Enhanced Education and Expanded Research Capabilities Through Experimental Economics Laboratories.*
National Institute of Food and Agriculture (NIFA)-USDA: Non-Land Grant Colleges of Agriculture Capacity Building. \$269,279 Total Award (\$191,000 share). 2015-2018. Co-PIs include: Hudson, D. and Wright, A.
19. [†]*Economic and Policy Implications of Underground Water Use in the Southern Ogallala Region: Updating economic policy analysis tools.*
Ogallala Aquifer Program (OAP) - U.S. Department of Agriculture Agricultural Research Service. \$200,000 Total Award (\$50,000 share). 2016-2017. Co-PIs include: Almas, L., Golden, B., Guerrero, B., and Park, S.
20. [†]*Economic and Policy Implications of Underground Water Use in the Southern Ogallala Region: Potential water market structures in the northern and southern sub-regions of the Southern Ogallala.*
Ogallala Aquifer Program (OAP) - U.S. Department of Agriculture Agricultural Research Service. \$220,000 Total Award (\$55,000 share). 2015-2016. Co-PIs include: Almas, L., Amosson, S., and Golden, B.
 Project management taken over from J. Johnson.

21. *Economic and Policy Implications of Underground Water Use in the Southern Ogallala Region: Existence value of groundwater resources.*
Ogallala Aquifer Program (OAP) - U.S. Department of Agriculture Agricultural Research Service.
\$240,000 Total Award (\$60,000 share). 2014-2015. Co-PIs include: Almas, L., Amosson, S., and Golden, B.
 Project management taken over from J. Johnson.

PRESENTATIONS

1. Invited Presentation. "There's an elephant in the exam room: Why industry, academic, and associate veterinarians need business management training." American Association of Veterinary Medical Colleges Community of Professional Competency Educators Monthly Meeting, Virtual, October 2022.
2. Selected Presentation. "Mannheim Steamrolling: Managing the bacteria commons of bovine respiratory disease." Agricultural and Applied Economics Association Annual Meeting, Austin, TX, August 2021.
3. Selected Presentation. "The tragedy of the common bacteria: Valuing the population of antibiotic-susceptible bacteria in feed cattle." Southern Agricultural Economics Association Annual Meeting, Birmingham, AL, February 2019.
4. Invited Panelist/Presentation. "Understanding the Complexities of Groundwater: Understanding the Economics I." Rethinking Texas Water Policy, College Station, TX, April 2018.
5. Selected Presentation. "Making Green Look Good - How information nudges influence residential electricity plan choice." Southern Agricultural Economics Association Annual Meeting, Jacksonville, FL, February 2018.
6. Invited Presentation. "Alternative Methods for Valuing and Managing Natural Resources." Huazhong Agricultural University, Wuhan, China, October 2017.
7. Selected Presentation. "The Potential for Groundwater Conservation Through Managing Expectations of Future Agricultural Technology Enhancements." The 2nd International Conference on Natural Resource Management and Public Policy, Wuhan, China, October 2017.
8. Invited Presentation. "Cap and trade markets for groundwater: Efficiency and distributional effects of the permit allocation mechanism." Ogallala Aquifer Program Workshop, Amarillo, TX, March 2016.
9. Attended Poster. "Impacts of agricultural productivity enhancements and time value of money on groundwater extraction." Ogallala Aquifer Program Workshop, Amarillo, TX, March 2016.
10. Campus Presentation. "Water economics." Sultan Qaboos Cultural Center (SQCC)/International Center for Arid & Semi-arid Land Studies (ICASALS) Agriculture in Arid Lands, Lubbock, TX, November 2015.
11. Invited Presentation. "Factors affecting student loan debt for students of veterinary medicine." American Veterinary Medical Association Economic Summit, Rosemont, IL, October 2015.
12. Selected Presentation. "Household willingness to pay for playa restoration." Southern Agricultural Economics Association Annual Meeting, Atlanta, GA, February 2015.
13. Selected Presentation. "An economic valuation of freshwater resources in hydraulic fracturing in West Texas." Fracturing Impacts and Technologies Conference, Lubbock, TX, September 2014.
14. Selected Presentation. "Per capita income and farmers' markets: Searching for an environmental Kuznets curve for environmental attributes." Western Agricultural Economics Association Annual Meeting, Monterey, CA, June 2013.
15. Selected Presentation. "The energy-water nexus: Evaluating the interstate trade of water resources through electricity." Universities Council on Water Resources / The National Institutes for Water Resources Annual Conference, Santa Fe, NM, July 2012.
16. Selected Presentation. "The external costs of wind farm development on the Great Plains: Are developers making an effort to minimize these costs?" Southern Agricultural Economics Association Annual Meeting, Birmingham, AL, February 2012.

17. Campus Presentation. "Evaluating the factors influencing wind energy development." Agricultural Economics Lecture Series, Department of Agricultural and Applied Economics, Texas Tech University, Lubbock, TX, January 2011.
18. Attended Poster. "Is there evidence that legislative ambition matches development? Evaluating the factors influencing wind energy development." Agricultural and Applied Economics Association Annual Meeting, Denver, CO, July 2009.

EXTENSION AND OUTREACH

1. Contributor, Water Stewardship Priority Area. Texas Panhandle Regional Accelerator & New Growth Engine (RANGE). Amarillo, TX, 2024 - Present.
2. Continuing Education. "Optimizing personal finances and on-the-job economic decision making for the recently graduated production animal medicine veterinarian." RACE-approved. *Professional Skills Bootcamp for the Recent Graduate Rural Practitioner*. Amarillo, TX, May 2023.
3. Member, Board of Directors. Lubbock Downtown Farmers Market, 2016 - 2017.
4. Presenter. "West Texas energy growth: What it means for the local economy and environment." West Texas Home Builders Association Membership Luncheon, Lubbock, TX, June 2014 (Presented with Michael Giberson).
5. Presenter. "West Texas energy growth: What it means for the local economy and environment." FirstBank & Trust Business Development Board, Lubbock, TX, June 2014 (Presented with Michael Giberson).

SERVICE

PROFESSIONAL SERVICE

- | | |
|-------------|--|
| 2019 | Chair, SAEA Outstanding Doctoral Dissertation Award Committee. |
| 2017 - 2019 | Member, SAEA Outstanding Doctoral Dissertation Award Committee. |
| 2016 - 2017 | Topic Co-Leader, AAEA Environmental and Nonmarket Valuation Section. |

Editorships

- Editorial Council, *Journal of Agricultural and Resource Economics*, 2018 - 2021.
 Guest Editor, *The Texas Water Journal*, 2017.

ad hoc Reviewer

- | | | |
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| <i>Land Use Policy</i> | (2) | 2021 - Present |
| <i>Journal of Agricultural and Resource Economics</i> | (9) | 2018 - Present |
| <i>Energy Economics</i> | (2) | 2017 - Present |
| <i>Journal of Agricultural and Applied Economics</i> | (8) | 2016 - Present |
| <i>The Texas Water Journal</i> | (3) | 2016 - Present |
| <i>Water Resources Management</i> | (5) | 2013 - Present |
| <i>Ecological Economics</i> | (1) | 2017 |
| <i>Western Economics Forum</i> | (3) | 2023 |
| <i>Farm Journal Foundation</i> | (1) | 2022 |
| <i>Journal of Regional Analysis and Policy</i> | (1) | 2022 |
| <i>Frontiers in Veterinary Science</i> | (1) | 2021 |
| <i>Society & Natural Resources</i> | (1) | 2021 |
| <i>Agrosystems, Geosciences, and Environment</i> | (1) | 2020 |
| <i>Journal of Benefit-Cost Analysis</i> | (1) | 2019 |
| <i>Journal of the American Water Resources Association</i> | (1) | 2018 |
| <i>Ergonomics</i> | (1) | 2012 |

Professional Meetings:

- | | |
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| 2020 | Reviewer, AAEA Annual Meeting abstracts. |
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2017	Reviewer, AAEA Annual Meeting abstracts.
2016	Reviewer, AAEA Annual Meeting abstracts.
2013	Reviewer, WAEA Annual Meeting abstracts.

Grant Review Panel

2024	Reviewer, Davis College of Agricultural Sciences & Natural Resources Catalyst Program.
2021	Panelist, USDA NIFA Program.
2018	Reviewer, Ogallala Aquifer Program.
2013	Panelist, USDA NIFA Program.

Textbook Reviews:

Perloff, J. (4th ed.). *Microeconomics: Theory and Application with Calculus*, New York, NY: Pearson Education.
 Perloff, J. (edits for 8th ed.). *Microeconomics*, New York, NY: Pearson Education.
 Rubb, S. & Sumner, S. B. (proposed). *Economics for Business and Society*, New York, NY: Worth Publishers.
 Allen, W. B., Weigelt, K., Doherty, N., & Mansfield, E. (2009). *Managerial Economics: Theory, Applications, and Cases* (7th ed.), New York, NY: W.W. Norton & Company, Inc.

DEPARTMENTAL/SCHOOL SERVICE

2024	Third-Year Review Committee - Anderson
2024	Third-Year Review Committee - Awosile
2024	Third-Year Review Committee - Fon Tacer
2024	Third-Year Review Committee - Garcia
2024	Third-Year Review Committee - Gibbons
2024	Third-Year Review Committee - Koziol
2022 - Present	Member, Executive Leadership Committee
2022 - Present	Member, One Health Sciences PhD Program Admissions Subcommittee
2022 - Present	Faculty Advisor, TTU SVM Chapter - Veterinary Business Management Association
2022 - Present	Member, Data Synthesis & Analysis Committee
2021 - Present	Member, Faculty Mentoring Committee: Dr. Pippa Gibbons.
2021 - Present	Member, Faculty Mentoring Committee: Dr. Marcelo Schmidt.
2021 - Present	Member, Promotion & Tenure Committee
2020 - Present	Member, Research Committee
2023	Initiated curriculum mapping for core of PhD in One Health Sciences
2021 - 2024	Member, Faculty Mentoring Committee: Dr. Gizem Levent.
2020 - 2022	Screeners, DVM Admissions
2021 - 2022	Member, Graduate Handbook ad hoc Committee
2020 - 2021	Member, Search Committee - Wildlife
2020 - 2021	Member, Scholarship & Awards Committee
2020 - 2021	Co-Chair, PhD Program Proposal ad hoc Committee
2019 - 2020	Coordinator, Master of Agribusiness Program
2019 - 2020	Internship Committee, member
2019 - 2020	Member, Search Committee - Big Data/AI
2016 - 2020	Graduate Comprehensive Exams Committee, member
2011 - 2020	Comprehensive Exam Question Contribution and Grading
2011 - 2020	Undergraduate Advising
2019	Third-Year Review Committee - Pavlik
2018	Faculty Advisor, Agricultural Economics Graduate Student Association
2017	Third-Year Review Committee - Martin
2011 - 2016	Graduate Programs Committee
2013 - 2014	Advisor, Ag Eco Association
2012 - 2013	Junior Advisor, Ag Eco Association
2011	Member, NSF-REU Ad-Hoc Committee, College of Agricultural Sciences & Natural Resources
2009 - 2010	Instructor, Graduate Student Teaching Workshop, Department of Economics, Texas Tech University

UNIVERSITY & COLLEGE SERVICE

2023 - Present	Member, Institute for One Health Innovation Committee
2023 - Present	Member, Institute for One Health Innovation Curriculum Subcommittee
2017 - Present	Member, Institutional Review Board
2023 - 2024	SVM Representative, One Health Sciences PhD - Pharmaceutical Sciences Articulation Agreement
2023 - 2024	SVM Representative, One Health Sciences PhD - Masters of Public Health Articulation Agreement
2019 - 2020	Chair, CASNR Marketing and Outreach Committee
2013 - 2020	Member, CASNR Marketing and Outreach Committee
2015 - 2020	Secretary/Treasurer, Gamma Sigma Delta - Texas Tech University Chapter
2017 - 2019	Member, Faculty Grievance Panel
2016 - 2019	Co-Author and Analyst, Texas Tech University School of Vet Medicine Business Case
2017	Member, CASNR Dean Search Committee
2017	Judge, Mr. CASNR.
2016	Member, Texas Tech University School of Vet Medicine Budget Study Committee
2015	Judge, 14th Annual Graduate School Poster Competition
2014 - 2015	President, Gamma Sigma Delta - Texas Tech University Chapter
2014 - 2015	Vice President, Gamma Sigma Delta - Texas Tech University Chapter

Graduate School Dean's Representative:

2018	Lyons, Veronica. Chemistry.
2016	Mbarga, Ange Abena. Civil Engineering.
2014	McDonald, Brendan. Psychology.
2012	Cupidon, Jean. Economics.
2012	McKenzie, Keisha. Technical Communications & Rhetoric.
2011	Zobel, Gregory. Technical Communications & Rhetoric.

COMMUNITY SERVICE

2017 - Present	Official, USA Swimming
2018 - 2020	Treasurer, Tech Terrace UNIT Neighborhood Association
2017 - 2018	Vice President, Tech Terrace UNIT Neighborhood Association
2017 - 2018	Reading Volunteer, 1st Grade, All Saints Episcopal School

CONSULTING

2016 - 2018	Statistical Analysis Consultant, Dr. Kelly Cukrowicz's American Foundation for Suicide Prevention Grant.
2015	Expert Witness (No deposition or trial testimony) - Sugar Contracts Dispute, Phillips-Lytle Law Firm.
2014 - 2015	Wage and Debt Analysis, American Veterinary Medical Association.
2013	Pro bono Economic Consultant - Guar Market Analysis, Archer Daniels Midland (ADM).
2012	Pro bono Economic Consultant - Conservation Banking, Texas Parks and Wildlife and Lesser Prairie-Chicken Interstate Working Group.

PROFESSIONAL AFFILIATIONS

Texas Veterinary Medical Association (member)	2021 - Present
Agricultural & Applied Economics Association (member)	2008 - Present
Western Agricultural Economics Association (member)	2008 - Present
Southern Agricultural Economics Association (member)	2011 - Present
Gamma Sigma Delta - Honor Society of Agriculture	2012 - Present