

**CIRRICULUM VITAE
TANNER J. MACHADO**

Department of Animal Science and Veterinary Technology
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EDUCATION

Doctor of Philosophy; Animal & Rangeland Sciences—emphasis Meat Science; South Dakota State University, 2009

Dissertation Title: Dietary management to influence adipose deposition and beef palatability in finishing steers. Major Professor: Duane M. Wulf

Master of Science; Animal Science—emphasis Meat Science; Colorado State University, 2005

Thesis Title: Supplementation of fed steers with a Biovance Technologies, Inc. anionic compound to improve beef tenderness. Major Professor: Keith E. Belk

Bachelor of Science; Animal Science, Concentration of Science, Minor in Ag Business; Colorado State University, 2002

EMPLOYMENT

Professor, Department of Animal Science and Veterinary Technology, Texas A&M University-Kingsville, Kingsville, TX, May 2024-present.

Associate Professor, Department of Animal Science and Veterinary Technology, Texas A&M University-Kingsville, Kingsville, TX, August 2019-May 2024.

Associate Professor, Department of Animal, Rangeland, and Wildlife Sciences, Texas A&M University-Kingsville, Kingsville, TX, August 2016-August 2019.

Assistant Professor, Department of Animal, Rangeland, and Wildlife Sciences, Texas A&M University-Kingsville, Kingsville, TX, January 2010-August 2016.

Research Associate, Department of Animal and Rangeland Sciences, South Dakota State University, Brookings, SD, September 2009-December 2009.

Research Assistant, Department of Animal and Rangeland Sciences, South Dakota State University, Brookings, SD, September 2005-September 2009.

Research Assistant, Department of Animal Science, Colorado State University, Fort Collins, CO, January 2003-September 2005.

Student Worker/Student Research Technician, Department of Animal Science, Colorado State University, Fort Collins, CO, 2000-2002.

Student Worker, Department of Pathology, Colorado State University, Fort Collins, CO 1998-2000.

COURSES TAUGHT

ANSC 1211: Preparation for Animal Ag. Fall 2016-2022; Spring 2024. Texas A&M University-Kingsville.

ANSC 1211: Emerging Issues & Opportunities in Animal Science. Fall 2015. Texas A&M University-Kingsville.

ANSC 1419: Introduction to Animal Science. Summer 2010, Fall 2011, 2012, 2013, and 2014. Texas A&M University-Kingsville.

ANSC 1419-Lab: Introduction to Animal Science. Fall 2020. Texas A&M University-Kingsville.

ANSC 2310: Livestock Management Techniques. Fall 2010, lab Fall 2016. Texas A&M University-Kingsville.

ANSC 3305: Market Classes and Grades of Livestock. Spring 2012-2022; Spring 2024. Texas A&M University-Kingsville.

ANSC 3309: Meat Preparation and Evaluation. Spring & Fall 2010, 2011, & 2012; Spring 2013-2024. Texas A&M University-Kingsville.

ANSC 3310: Processed Meats. Fall 2023-2024. Texas A&M University-Kingsville.

ANSC 3390: Processed Meats. Fall 2011, 2013-2019, 2021-2022. Texas A&M University-Kingsville.

ANSC 3390: Livestock and Meat Market Grade. Fall 2023-2024. Texas A&M University-Kingsville.

ANSC 5390: Graduate Meat Science. Spring 2011, Fall 2014, and Fall 2023. Texas A&M University-Kingsville.

AGRI 4171: Senior Seminar. Fall 2011. Texas A&M University-Kingsville.

UNIV 1201: Learning in Global Context. Fall 2024-two sections. Texas A&M University-Kingsville.

AS101-Lab: Introduction to Animal Science Lab. 2005-2008. South Dakota State University.

COMPLETED GRADUATE STUDENT THESIS PROJECTS—Chair of Committee

Mr. Cristian Rivas, M.S. Effects of air flow in conjunction with acetic acid spray on microbial load of pork. Summer 2022.

Ms. Clarissa Guerrero, M.S. Alternative method for assessing cattle temperament. December 2019.

Mr. Gustavo Faz, M.S. Determining if sulfur content in market lamb diets influence ground lamb flavor. December 2018.

Mr. Travis Trevino, M.S. Influence of sweet sorghum syrup as a sweetener in fresh pork sausage patties on oxidation during retail display compared to corn syrup. December 2015.

Ms. Krystal Montemayor, M.S. The correlation of residual feed intake on carcass characteristics of Brahman X Hereford steers. December 2014.

Ms. Cassandra Albert, M.S. The effect of dietary leucine on blood plasma and adipose mRNA in feeder cattle. December 2014.

COMPLETED GRADUATE STUDENT PROJECTS—Chair of Committee

Mr. Karl Richard C. Gibson II, M.S. Predicting beef flavor utilizing raw steak and purge characteristics. May 2024.

COMPLETED COURSE-ONLY GRADUATE STUDENTS--Advisor

Mr. Gabriel Vera, May 2022

Mr. Dustin Trevino, December 2019

Ms. Maria Cantu, December 2019

COMMITTEE MEMBER-GRADUATE STUDENTS

Mr. Travis Rocha, M.S. Effect of Prostaglandin F_{2α} at Initiation of 7-d Co-Synch + CIDR Protocol on Estrus and Conception Rates in a Split-time Artificial Insemination Program. May 2018.

Ms. Cheryl Jordan, M.S. Evaluation of nilgai palatability characteristics. May 2013.

CURRENT GRADUATE STUDENT PROJECTS

Mr. Efren Hernandez. Determining the influence of carcass composition and anatomical location on palatability of beef inside skirt steaks. Expected graduation May 2025.

Mr. Miguel Cobarrubias. Determining if landscape ecology models are effective in determining quality grades in beef instrument grading images. Expected graduation May 2025.

Ms. Ashley Garza. Retail case audit of poultry. Expected graduation May 2025.

Mr. Edgar Cortez. TBD. Expected graduation May 2026.

Ms. Gabriella Ruiz. TBD. Expected graduation May 2026.

UNDERGRADUATE RESEARCH PROJECTS

Kassandra Rodriguez (2024). Determining pork purge characteristics during cold storage.

Amado Moreno (Su 2023). Determining factors that maximize the speed of smoke generation in a commercial smoker.

Amberly Zaragoza (Sp 2021). Utilizing computer software to take body measurements of market swine to predict body composition.

Gisel Mireles (2019). Predicting cooked color of chicken breasts.

Gabriel Vera (2018). Effect of aging venison meat on texture of venison sausage.

Nina Lazaro (2018). Creating a smoke ring with sawdust.

Maria Cantu (2016-2017). Assessing liver damage of cattle fed distillers grains during the stocker phase.

Ana Chavez (2016). A new cold smoke method to provide smoke flavor to sausages.

Zach Arnold (2015). Assessing liver damage of cattle fed distillers grains during the stocker phase.

Dustin Trevino (2015). Determining if water temperature impacts frequency of water consumption by goats.

Heather Gleason (2014). Determining the effect of shade and water tank color on water temperature and algae growth in livestock water tanks.

Gerardo Vela (2013-2014). Cooking yields and color of nilgai patties with different sources of fat.

Charles Martinez (2013). Alternative smoke application to sausages.

Baldomero Ozuna, Abel Pena, and Clay Stephens (2011). Carcass yields and muscle profiling for tenderness in nilgai carcasses.

PUBLICATIONS

Refereed Journal Articles

Machado, T.J., K.L. Montemayor, F.M. Rouquette Jr., R. Reuter, J.C. Paschal, and R.D. Randel. 2024. The correlation of residual feed intake, residual average daily gain, and residual intake and gain to carcass and steak characteristics of Hereford x Brahman steers. *Applied Animal Science* 40:167-175. <https://doi.org/10.15232/aas.2023-02445>

Rouquette, F.M., Jr., R.D. Randel, J. Paschal, T.J. Machado, C.R. Long, and D.G. Riley. 2023. Relationships of residual feed intake and residual average daily gain with carcass traits and growth of Brahman steers. *Applied Animal Science* 39:178-185 <https://doi.org/10.15232/aas.2022-02372>

Trevino, T.D., and **T.J. Machado**. 2022. Use of sweet sorghum syrup as an antioxidant in fresh pork sausage. *Subtropical Agriculture and Environments* 73:9-16.2022.

Smith, W.B., J.P. Banta, J.L. Foster, L.A. Redmon, **T.J. Machado**, L.O. Tedeschi, and F.M. Rouquette Jr. 2021. Effects of supplementation of dried distillers grains with solubles to beef steers grazing Coastal bermudagrass on performance on pasture and in feedlot, and carcass characteristics. *Applied Animal Science* 37(2):155-165. <https://doi.org/10.15232/aas.2020-02120>.

Smith, W.B., J.P. Banta, J.L. Foster, L.A. Redmon, **T.J. Machado**, L.O. Tedeschi, and F.M. Rouquette Jr. 2020. Evaluation of growth performance and carcass characteristics of beef stocker cattle grazing Tifton 85 bermudagrass supplemented with dried distillers grains with solubles then finished in the feedlot. *Applied Animal Science* 36(3):308-319. <https://doi.org/10.15232/aas.2019-01907>.

Martinez, C.C., and **T.J. Machado**. 2016. Consumer evaluation of cold smoked fat in beef sausages. *International Food Research Journal* 23(4): 1782-1786.

Jordan, C.L., C.M. Albert, and **T.J. Machado**. 2015. Cooking properties of Nilgai Antelope steaks, and patties with beef or pork fat inclusion. *International Food Research Journal* 22(4):1564-1570.

Machado, T.J., C.M. Albert, M.J. Schnupp, and D.G. Hewitt. 2014. Characteristics of Nilgai Antelope carcasses and meat quality. *Texas Journal of Agriculture and Natural Resources* 27:73-83.

Reuter, R.R., M.D. Childs, K.E. Belk, T.J. Machado, and J.T. Biermacher. 2011. Effects of USDA feeder cattle frame and muscle grades on stocker and feeder cattle performance and profitability. *Professional Animal Scientist*. 27:525-534.

Refereed Journal Articles In Draft

Machado, T.J., and G. Faz. Determining the Sulfur Content in Market Lamb Diets on Animal Growth and Ground Lamb Palatability. Texas Journal of Agriculture and Natural Resources.

Non-refereed Articles

Machado, T.J., S.D. Nelson, R. Stanko and C. Donato. 2018. To increase qualified Hispanic student enrollment in Pathways Program through a Natural Resources Career Development Program. Final Report to USDA-NRCS by the Department of Animal, Rangeland, and Wildlife Sciences, Texas A&M University-Kingsville, Kingsville, TX 78363.

Machado, T.J. 2016. SGBI Steer Feedout. Final Report to Santa Gertrudis Breeders International by the Department of Animal, Rangeland, and Wildlife Sciences, Texas A&M University-Kingsville, Kingsville, TX 78363.

Machado, T.J., S.D. Nelson, and C. Donato. 2014. Natural Resources Career Development Program (NRCDP) Career Development Event at Texas A&M University-Kingsville. Final Report to USDA-NRCS by the Department of Animal, Rangeland, and Wildlife Sciences, Texas A&M University-Kingsville, Kingsville, TX 78363.

Machado, T.J. and C.M. Albert. 2013. Determining if dietary leucine will influence leptin circulation in cattle. Final Research Report to Kemin Industries, Inc. and Kemin Agrifoods North America, Inc by the Department of Animal, Rangeland & Wildlife Sciences, Texas A&M University-Kingsville, Kingsville, TX 78363.

Machado, T.J., D. M. Wulf, and R. H. Pritchard. 2009. The effect of dietary protein levels in feedlot diets on plasma metabolites and hormones to understand changes in adipose deposition. Final Research Report to South Dakota Beef Industry Council by the Department of Animal & Range Sciences, South Dakota State University, Brookings 57007.

Wulf, D.M., **T.J. Machado**, R.H. Pritchard, and K.W. Bruns. 2008. Timed protein restrictions in feedlot diets to alter adipose deposition with the goal to increase marbling in beef carcasses. Final Research Report to National Cattlemen's Beef Association and South Dakota Beef Industry Council by the Department of Animal & Range Sciences, South Dakota State University, Brookings 57007.

Wulf, D.M., R.H. Pritchard, and **T.J. Machado**. 2007. Comparing three types of beef feedlot facilities and their effect on meat quality. Final Research Report to South Dakota Beef Industry Council by the Department of Animal & Range Sciences, South Dakota State University, Brookings 57007.

Pritchard, R.H., D.M. Wulf, and **T.J. Machado**. 2007. Determining if altering feeding program could improve marbling, flavor, and tenderness in beef. Final Research Report to South Dakota Beef Industry Council by the Department of Animal & Range Sciences, South Dakota State University, Brookings 57007.

Machado, T., L. Muench, C. Hand, A. Everts, A. Everts, D. Wulf, and R. Maddock. 2006. National Beef Ground Beef Caselife Study. Final Research Report to BPI Technology Inc. by the Department of Animal & Range Sciences, South Dakota State University, Brookings 57007.

Machado, T., A. Everts, T. Nath, A. Everts, and D. Wulf. 2006. Comparison of three types of gas grills on cooking and eating quality characteristics. Final Research Report to Charbroil, Inc. by the Department of Animal & Range Sciences, South Dakota State University, Brookings 57007.

Machado, T.J., K.E. Belk, T.E. Engle, J.A. Scanga, J.D. Tatum, and G.C. Smith. 2005. Supplementation of fed steers with a Biovance Technologies, Inc. anionic compound to improve beef tenderness. Final Research Report to National Cattlemen's Beef Association by the Department of Animal Sciences, Colorado State University, Fort Collins 80523-1171.

Machado, T.J., S.L. Gruber, D.J. Vote, W.J. Platter, K.E. Belk, J.D. Tatum, J.A. Scanga, and G.C. Smith. 2004. Determining Profitability and Performance Differences Caused by Variation in Frame Size and Muscular Level in Stocker Cattle. Final Research Report to The Samuel Roberts Noble Foundation by the Department of Animal Sciences, Colorado State University, Fort Collins 80523-1171.

Machado, T.J., S.L. Gruber, D.J. Vote, W.J. Platter, K.E. Belk, J.D. Tatum, J.A. Scanga, G.C. Smith. 2004. Effects of Using Alternative Stocker-Phase Feeding Programs on Cattle Performance and Carcass Merit. Final Research Report to The Samuel Roberts Noble Foundation by the Department of Animal Sciences, Colorado State University, Fort Collins 80523-1171.

Machado, T.J., K.E. Belk, T.E. Engle, J.A. Scanga, J.D. Tatum, and G.C. Smith. 2003. Effects on beef tenderness by supplementing Bio-Chlor to feedlot cattle. Final Research Report to Biovance Technologies, Inc. by the Department of Animal Sciences, Colorado State University, Fort Collins 80523-1171.

Refereed Abstracts

Machado, T.J. and J. Apple. Manager education and agriculture technical skills workforce. Panel: *Investing in Equity & Agriculture: USDA-funded Collaborations at Hispanic-Serving Institutions*. A Community on Ecosystem Services (ACES) Conference. Austin, TX. Dec. 9-12, 2024 (Invited).

Nelson, S.D., R.L. Stanko, C. Donato-Molina, **T. Machado**, S. Chumbley, D. Sotomayor, K. Jayachandran, and M. Bhat. Getting occupational student training in agricultural research

through novel workshops. Panel: *Investing in Equity & Agriculture: USDA-funded Collaborations at Hispanic-Serving Institutions*. A Community on Ecosystem Services (ACES) Conference. Austin, TX. Dec. 9-12, 2024 (Invited).

DiSilvestro, A.N., L.T. Wesolowski, B.D. Williams, P.L. Semanchik, J.L. Simons, C.P. Guy, A.L. Earnhardt-San, D.G. Riley, G.A. Perry, C.R. Long, **T.J. Machado**, R.D. Randel, T.H. Welsh, Jr., and S.H. White-Springer. 2024. Relationships between serum IGF1 and cortisol in growing steers to beef production and palatability. ASAS Abstract

Wesolowski, L.T., P.L. Semanchik, J.L. Simons, C.P. Guy, A.L. Earnhardt-San, D.G. Riley, G.A. Perry, C.R. Long, **T.J. Machado**, R.D. Randel, T.H. Welsh, Jr., S.H. White-Springer. 2023. Live animal longissimus thoracis mitochondrial capacities at 10, 13, and 18 months of age are related to post-harvest meat quality in Angus and Brahman steers. ASAS Abstract ID: 1538443

Tack, A.R., C.R. Kerth, J.D. Deden, L.T. Wesolowsky, J.L. Simons, A.L. Earnhardt, P.L. Semanchik, **T.J. Machado**, C.R. Long, G.A. Perry, R.D. Randel, T.H. Welsh, and S.H. White-Springer. 2022. Metabolomics differ by temperament in Brahman steers and may be related to product quality. Muscle and Lipid Biology and Biochemistry. AMSA2022-1119.

Semanchik, P.L., L.T. Wesolowski, J.L. Simons, C. Guy, A.L. Earnhardt, G.A. Perry, C.R. Long, D. Law, D.A. Neuendorff, R.D. Randel, **T. Machado**, T.H. Welsh, and S.H. White-Springer. 2022. Live animal mitochondrial markers during the feedlot phase are related to meat quality in Angus but not Brahman steers. J. Anim. Sci. 100 (Supplement 3):128.

Guerrero, C. and **T.J. Machado**. 2019. Alternative method of assessing cattle temperament. Subtropical Agriculture and Environments Conference Proceedings. SAES Journal.

Lazaro, N., and **T.J. Machado**. 2019. Addition of sodium nitrite to sawdust used for smoke generation when smoking meat products increased the depth of the smoke ring in beef steaks. Subtropical Agriculture and Environments Conference Proceedings. SAES Journal.

Rocha, T.C., J. Ramirez, B.B. Carpenter, C. Howell, J. King, **T.J. Machado** and R.L. Stanko. 2017. Prostaglandin at initiation of 7-d CO-Synch + CIDR protocol improves estrus response but not pregnancy rate in a modified split-time AI program. J. Anim. Sci. 95(Supplement 1):36.

Nelson, S.D., R. Stanko, **T. Machado**, G. Schuster, and C. Donato-Molina. 2016. Finding balance in undergraduate research for graduate school and career preparation in Agricultural sciences. NACTA Journal 60(Suppl. 1): 16.

Stanko, R.L., S. D. Nelson, **T.J. Machado**, G.L. Schuster, C. Donato-Molina, and S. Lukefahr. 2016. STEP UP to USDA Career Success Program Participation Increased Graduation Rates and Final GPA of Undergraduate Agriculture Students from South Texas. NACTA Journal 60(Suppl. 1): 105.

Smith, W.B., F.M. Rouquette, J.L. Kerby, L.O. Tedeschi, J.L. Foster, J.P. Banta, K.C. McCuiston, and **T.J. Machado**. 2015. Performance of *Bos indicus* versus *Bos taurus* stocker cattle grazing 'Costal' bermudagrass supplemented with distillers dried grains. American Society of Animal Science Meeting, 2015. Orlando, Florida. J. Anim. Sci. 93(Suppl. S3):207

Smith, W.B., F.M. Rouquette, J.L. Kerby, L.O. Tedeschi, J.L. Foster, J.P. Banta, K.C. McCuiston and **T.J. Machado**. 2015. Performance of stocker cattle grazing "Tifton 85" bermudagrass supplemented with distillers dried grains. J. Anim. Sci. 93(Suppl. E1).

Stanko, R.L., S.D. Nelson, **T.J. Machado**, G.L. Schuster, and C. Donato-Molina. 2015. Opportunities for underrepresented agriculture students in obtaining USDA job training in the STEP UP to USDA Career Success program. 61st Annual NACTA Conference. NACTA Journal 59(Suppl. 1)

Trevino, T.D., H. Avila, Jr., and **T.J. Machado**. 2015. Influence of sorghum syrup as a sweetener in fresh pork sausage patties on oxidation during retail display compared to corn syrup. 68th Annual Reciprocal Meat Conference, 2015. Lincoln, Nebraska. Meat Science 112:126

Stanko, R.L., S.D. Nelson, **T.J. Machado**, G.L. Schuster, and C. Donato-Molina. 2014. Engaging underrepresented agriculture students through research and job training in the STEP UP to USDA career success program. 60th Annual NACRA Conference. NACTA Journal 58(Suppl. 1): 74.

Donato, C., S.D. Nelson, G. Schuster, R.L. Stanko, and **T. Machado**. 2014. Preparing Hispanic students to be leaders in their communities. 60th Annual NACTA Conference. NACTA Journal 58(Suppl. 1): 48.

Trevino, T.D., G. Vela, and **T.J. Machado**. Cooking loss, cooking time, patty shrink and color of Nilgai Antelope patties with beef or pork fat inclusion. 67th Annual Reciprocal Meat Conference, 2014. Madison, Wisconsin. Meat Science 101:119.

Machado, T.J., C.L. Jordan, and C.M. Albert. Tenderness and palatability of Nilgai Antelope meat. 66th Annual Reciprocal Meat Conference, 2013. Auburn, Alabama. Meat Science 96:465.

Nelson, S.D., R. Stanko, **T. Machado**, and G. Shuster. Providing Underrepresented Agriculture Students a STEP UP to USDA Career Success. 2013 NACTA Abstracts. NACTA Journal 57:S(1).

McCuiston, K., D. Kinkel, S. Lukefahr, M. Garcia, S. Henke, **T. Machado**, R. Stanko, Z. Lopez, and A. Coronado. Improving student success through professional development opportunities. 2013 NACTA Abstracts. NACTA Journal 57:S(1).

Machado, T.J., A.A. Pena, C.A. Stephens, B.J. Ozuna, and C.M. Albert. Characteristics of Nilgai Antelope carcasses and meat quality. 65th Annual Reciprocal Meat Conference, 2012. Fargo, North Dakota. Meat Science 93:17.

Behrens, J.W., R.K. Miller, J.C. Bailey, J.T. Walter, A.N. Hafla, E.D. Mendes, D.S. Hale, **T. Machado**, L.O. Tedeschi, and G.E. Carstens. Effects of temperament classification and breed type on carcass characteristics, tenderness and carcass value in feedlot heifers. 64th Annual Reciprocal Meat Conference, 2011. Manhattan, Kansas. Meat Science 89:349.

Non-refereed Abstracts

Lazaro, N., and **T.J. Machado**. Addition of sodium nitrite to sawdust used for smoke generation when smoking meat products increased the depth of the smoke ring in beef steaks. Javelina Undergraduate and Graduate Research Symposium, 2018, Kingsville, TX.

Smith, W.B., **T.J. Machado**, L.O. Tedeschi, J.P. Banta, J.L. Foster, K.C. McCuiston, C.R. Long and F.M. Rouquette, Jr. Effects of level of DDG supplemented on pasture to performance in feedlot and carcass traits. Plains Nutrition Council, 2015, San Antonio, TX.

Gleason, H., and **T.J. Machado**. Effect of shading and color of goat water tanks on water temperature. 69th Annual Meeting of the Subtropical Agriculture and Environments Society, 2015, Weslaco, TX.

Vela, G., and **T.J. Machado**. Effect of beef and pork fat inclusion on color of raw and cooked Nilgai Antelope patties. Trevino, T.D., and T.J. Machado. Cooking time, cooking loss and patty shrink of Nilgai Antelope patties that include beef or pork fat. 68th Annual Meeting of the Subtropical Agriculture and Environments Society, 2014, Weslaco, TX.

Trevino, T.D., and **T.J. Machado**. Cooking time, cooking loss and patty shrink of Nilgai Antelope patties that include beef or pork fat. 68th Annual Meeting of the Subtropical Agriculture and Environments Society, 2014, Weslaco, TX.

Montemayor, K., **T. Machado**, K. McCuiston, M. Rouquette, and J. Paschal. The correlation of residual feed intake on carcass characteristics of Brahman and Brahman influenced steers. 68th Annual Meeting of the Subtropical Agriculture and Environments Society, 2014, Weslaco, TX.

Montemayor, K., **T. Machado**, K. McCuiston, M. Rouquette, and J. Paschal. The correlation of residual feed intake on carcass characteristics of Brahman and Brahman influenced steers. Center for Education and Training in Agricultural and Related Sciences Symposium, 2013. Puerto Rico.

Donato, C., S.D. Nelson, G. Schuster, R.L. Stanko, and **T. Machado**. Preparing Hispanic students to be leaders in their communities. Center for Education and Training in Agricultural and Related Sciences Symposium, 2013. Puerto Rico.

Nelson, S.D., R. Stanko, **T. Machado**, M. Persans, J. Halcomb, D. Villalon, and A. Duarte. STEP UP to USDA Career Success: A Bridge Model for 2- & 4-yr Institutions. Center for Education and Training in Agricultural and Related Sciences Symposium, 2013. Puerto Rico.

Albert, C.M., M. Garcia, K. McCuiston, and **T.J. Machado**. The effect of leucine supplementation on leptin in blood plasma serum. 2013. Texas A&M University System Pathways Symposium.

Rouquette, F.M., Jr., R.D. Randel, J. Paschal, **T.J. Machado**, C.R. Long. Relationship between carcass traits and tenderness with residual feed intake and residual average daily gain of Brahman steers. American Society of Animal Science Meeting, 2012. Phoenix, Arizona.

Machado, T.J., D.M. Wulf, and R.H. Pritchard. Dietary protein levels in feedlot diets altered adipose deposition and plasma urea nitrogen with little influence on plasma glucose and insulin. 62nd Annual Reciprocal Meat Conference, 2009. Rogers, Arkansas.

Machado, T.J., D.M. Wulf, R.H. Pritchard and K.W. Bruns. Timed protein restrictions in feedlot diets to alter adipose deposition with the goal to increase marbling in beef carcasses. 61st Annual Reciprocal Meat Conference, 2008. Gainesville, Florida.

Nath, T.M., C.D. Nath, **T.J. Machado**, A.D. Weaver, and D.M. Wulf. The use of electrical impedance to rapidly predict beef tenderness. 61st Annual Reciprocal Meat Conference, 2008. Gainesville, Florida.

Machado, T.J. and D.M. Wulf. Comparing three types of beef feedlot facilities and their effect on meat quality. 60th Annual Reciprocal Meat Conference, 2007. Brookings, South Dakota.

Machado, T.J., L.K. Muench, C.M. Hand, A.K.R. Everts, A.J. Everts, D.M. Wulf, and R.J. Maddock. Quality and retail display life of ground beef produced using novel grinding technology. 59th Annual Reciprocal Meat Conference, 2006. Champaign-Urbana, Illinois.

Everts, A.J., D.M. Wulf, T.M. Nath, A.K.R. Everts, **T.J. Machado**, and R.J. Maddock. Effects of pH-enhancement on chunked and formed hams processed from pale, average, and dark colored muscles. 59th Annual Reciprocal Meat Conference, 2006. Champaign-Urbana, Illinois.

Machado, T.J., K.E. Belk, T.E. Engle, J.A. Scanga, J.D. Tatum, and G.C. Smith. Supplementation of fed steers with a Biovance Technologies, Inc. anionic compound to improve beef tenderness. 51st Annual International Congress of Meat Science and Technology and 58th Annual Reciprocal Meat Conference, 2005. Baltimore, Maryland.

PRESENTATIONS

International

Machado, T.J. 2018. Carcass evaluation and carcass economics. Brahman Beef Seminar, Loma Plata, Paraguay, 11 June 2018.

Machado, T.J. 2018. How beef carcasses are fabricated in the U.S. and Paraguay, and factors that impact consumer eating experience. Brahman Beef Seminar, Loma Plata, Paraguay, 12 June 2018.

National

Machado, T.J. 2024. Workshop: Improving your grant applications, a discussion of successful proposals and the review process. American Meat Science Association Reciprocal Meat Conference, Oklahoma City, OK, 19 June 2024.

Machado, T.J. 2023. MEAT'S Workforce. USDA-HSI Project Director Meeting, Austin, TX, 28 September 2023.

Machado, T.J. 2019. Processed and Fresh Meats: Sweet sorghum syrup in processed meats and dietary sulfur's impact on Dorper ground lamb flavor. 73rd Annual Meeting of the Subtropical Agriculture and Environments Society, Weslaco, TX, 8 February 2019.

Guerrero, C. and **T.J. Machado.** 2019. Alternative method of assessing cattle temperament. 73rd Annual Meeting of the Subtropical Agriculture and Environments Society, Weslaco, TX, 8 February 2019.

Lazaro, N., and **T.J. Machado.** 2019. Addition of sodium nitrite to sawdust used for smoke generation when smoking meat products increased the depth of the smoke ring in beef steaks. 73rd Annual Meeting of the Subtropical Agriculture and Environments Society, Weslaco, TX, 8 February 2019.

Machado, T.J. 2018. Beef grading, carcass value, and carcass fabrication. Short course for Hilton Chefs sponsored by the Texas Beef Council, Kingsville, Texas, 23-25 May 2018.

Machado, T.J. 2017. What the Santa Gertrudis Breed Offers. Santa Gertrudis Breeders International Carcass Quality Round Table, Fort Worth, Texas, 14 January 2017.

Nelson, S.D., R. Stanko, **T. Machado**, G. Schuster, and C. Donato-Molina. 2016. Finding balance in undergraduate research for graduate school and career preparation in Agricultural sciences. 62nd Annual NACTA Conference, Honolulu, Hawaii, 22-24 June 2016.

Smith, W.B., F.M. Rouquette, J.L. Kerby, L.O. Tedeschi, J.L. Foster, J.P. Banta, K.C. McCuiston, and **T.J. Machado.** 2015. Performance of *Bos indicus* versus *Bos taurus*

stocker cattle grazing 'Costal' bermudagrass supplemented with distillers dried grains. American Society of Animal Science Meeting, 2015. Orlando, Florida, 12-16 July 2015.

Trevino, T.D., H. Avila, Jr., and **T.J. Machado**. 2015. Influence of sorghum syrup as a sweetener in fresh pork sausage patties on oxidation during retail display compared to corn syrup. 68th Annual Reciprocal Meat Conference, Lincoln, Nebraska, 14-17 June 2015.

Stanko, R.L., S.D. Nelson, **T.J. Machado**, G.L. Schuster, and C. Donato-Molina. 2015. Opportunities for underrepresented agriculture students in obtaining USDA job training in the STEP UP to USDA Career Success program. 61st Annual NACTA Conference, Athens, Georgia, 16-20 June 2015.

Stanko, R.L., S.D. Nelson, **T.J. Machado**, G.L. Schuster, and C. Donato-Molina. 2014. Engaging underrepresented agriculture students through research and job training in the STEP UP to USDA career success program. 60th Annual NACRA Conference. Bozeman, MT, 25-27 June 2014.

Donato, C., S.D. Nelson, G. Schuster, R.L. Stanko, and **T. Machado**. 2014. Preparing Hispanic students to be leaders in their communities. 60th Annual NACTA Conference. Bozeman, MT, 25-27 June 2014.

Trevino, T.D., G. Vela, and **T.J. Machado**. 2014. Cooking loss, cooking time, patty shrink and color of Nilgai Antelope patties with beef or pork fat inclusion. 67th Annual Reciprocal Meat Conference. Madison, Wisconsin, 14-18 June 2014.

Donato-Molina, Consuelo, Randy L. Stanko, Shad D. Nelson, **Tanner J. Machado**, and Greta L. Schuster. 2014. Engaging underrepresented students through Ag-related career and research training in the 'STEP UP to USDA Career Success' program. Agri-Science Education for the 21st Century: Diversity I Access I Success conference. Miami, FL, 15 October 2014.

Nelson, S.D., **T. Machado**, R. Stanko, E. Louzada, D. Ruppert, G. Schuster, M. Setamou, J. Melgar, M. Persans, D. Villalon, A. Duarte, J. Halcomb. 2014. STEP UP to USDA Career Success (Science, Technology & Environmental Programs for Undergraduate Preparation to USDA Career Success). NIFA-ARS HIS Grants Program New Project Directors' Training. Beltsville, MD, 9-10 January, 2014.

Machado, T.J., C.L. Jordan, and C.M. Albert. 2013. Tenderness and palatability of Nilgai Antelope meat. 66th Annual Reciprocal Meat Conference. Auburn, AL, June 2013.

Nelson, S.D., R. Stanko, **T. Machado**, and G. Shuster. 2013. Providing Underrepresented Agriculture Students a STEP UP to USDA Career Success. North American Colleges & Teachers of Agriculture Conference. Blacksburg, VA, June 2013.

McCuistion, K., D. Kinkel, S. Lukefahr, M. Garcia, S. Henke, **T. Machado**, R. Stanko, Z. Lopez, and A. Coronado. 2013. Improving student success through professional

development opportunities. North American Colleges & Teachers of Agriculture Conference. Blacksburg, VA, June 2013.

Montemayor, K., **T. Machado**, K. McCuiston, M. Rouquette, and J. Paschal. 2013. The correlation of residual feed intake on carcass characteristics of Brahman and Brahman influenced steers. Center for Education and Training in Agricultural and Related Sciences Symposium. Puerto Rico.

Donato, C., S.D. Nelson, G. Schuster, R.L. Stanko, and **T. Machado**. 2013. Preparing Hispanic students to be leaders in their communities. Center for Education and Training in Agricultural and Related Sciences Symposium. Puerto Rico.

Nelson, S.D., R. Stanko, **T. Machado**, M. Persans, J. Halcomb, D. Villalon, and A. Duarte. 2013. STEP UP to USDA Career Success: A Bridge Model for 2- & 4-yr Institutions. Center for Education and Training in Agricultural and Related Sciences Symposium. Puerto Rico.

Machado, T.J., A.A. Pena, C.A. Stephens, B.J. Ozuna, and C.M. Albert. Characteristics of Nilgai Antelope carcasses and meat quality. 2012. 65th Annual Reciprocal Meat Conference. Fargo, ND, June 2012.

Rouquette, F.M., Jr., R.D. Randel, J. Paschal, **T.J. Machado**, and C.R. Long. 2012. Relationship between carcass traits and tenderness with residual feed intake and residual average daily gain of Brahman steers. American Society of Animal Science Meeting. Phoenix, AZ.

Behrens, J.W., R.K. Miller, J.C. Bailey, J.T. Walter, A.N. Hafla, E.D. Mendes, D.S. Hale, **T. Machado**, L.O. Tedeschi, and G.E. Carstens. 2011. Effects of temperament classification and breed type on carcass characteristics, tenderness and carcass value in feedlot heifers. 64th Annual Reciprocal Meat Conference. Manhattan, KS, June 2011.

State

Machado, T.J. 2024. Meat Economics and Beef Carcass Fabrication, South Texas Ranch Brigade, Freer, TX, 23 June 2024.

Machado, T.J. 2023. Swine Carcass Fabrication, Texas 4-H Livestock Ambassador Short Course, Kingsville, TX, 26 June 2023.

Machado, T.J. 2023. Beef Carcass Fabrication, Texas 4-H Livestock Ambassador Short Course, Kingsville, TX, 26 June 2023.

Machado, T.J. 2023. Meat Economics and Beef Carcass Fabrication, South Texas Ranch Brigade, Freer, TX, 27 June 2023.

Machado, T.J. 2022. Beef Grading and Fabrication, Texas Beef Council Rio Grande Valley Beef 706, Kingsville, TX, 14 October 2022.

Machado, T.J. 2022. South Texas Brahman Association Annual Meeting & Symposium Round Table Discussion, Floresville, TX, 1 October 2022.

Machado, T.J. 2022. Swine Carcass Fabrication, Texas 4-H Livestock Ambassador Short Course, Kingsville, TX, 20 June 2022.

Machado, T.J. 2022. Beef Carcass Fabrication, Texas 4-H Livestock Ambassador Short Course, Kingsville, TX, 21 June 2022.

Machado, T.J. 2022. Meat Economics and Beef Carcass Fabrication, South Texas Ranch Brigade, Freer, TX, 28 June 2022.

Machado, T.J. 2022. Feeder Calf Evaluation, Texas Beef Council Rio Grande Valley Beef 706, 26 March 2022.

Machado, T.J. 2020. Meat (Beef) Production Basics. Benavides, TX, 13 February 2020.

Machado, T.J. 2019. Today's Beef. Texas Beef Council Pasture to Plate Event for Dietitians, Houston, TX, 6 September 2019.

Machado, T.J. 2019. Swine Carcass Value & Beef Value, Texas 4-H Livestock Ambassador Short Course, Kingsville, TX, 17-20th June 2019.

Machado, T.J. 2019. Today's Beef. Texas Beef Council Pasture to Plate Event for Dietitians, Houston, TX, 1 May 2019.

T.J. Machado. 2018. What is Meat Science. 4-H Prestige Leadership Conference for Texas A&M AgriLife Extension, Kingsville, TX, 17 July 2018.

T.J. Machado. 2018. Feedlot production, carcass evaluation and fabrication. Texas Youth Cattle Conference, Kingsville, TX, 19-20 June 2018.

Machado, T.J. 2018. Helping students secure internships and external mentors. High Impact Practices in Higher Education Conference, Kingsville, TX, 13 April 2018.

Machado, T.J. 2018. Beef Production. A recorded webinar for the Texas Beef Council. February 2018.

Machado, T.J. 2016. Today's Beef. Texas Beef Council Farm to Fork Event for Dietitians, Denton, TX, 7 October 2016.

Machado, T.J. 2016. Today's Beef. Texas Beef Council Farm to Fork Event for Dietitians, Lubbock, TX, 26 September 2016.

T.J. Machado. 2016. Carcass evaluation and taste panel. Texas Youth Cattle Conference, Kingsville, TX, 14 June 2016.

Machado, T.J. 2015. Today's Beef. Texas Beef Council Farm to Fork Event for Dietitians, Dallas, TX, 6 November 2015.

Machado, T.J. 2015. HSIs Education Grants Program. NIFA Grants Workshop in Texas, San Marcus, TX, 27 August 2015.

Machado, T.J. 2015. Goat Meat Production and Goat Hide Uses. Texas Goat Raisers Association Workshop, Mt. Pleasant, TX, 25 April 2015.

Albert, C.M., M. Garcia, K. McCuiston, and **T.J. Machado.** 2013. The effect of leucine supplementation on leptin in blood plasma serum. Texas A&M University System Pathways Symposium. Kingsville, TX.

Machado, T.J. Sodium in Processed Meats, The Texas Beef Council "The Ranch", June 3, 2011

Machado, T.J. Meat Industry & Consumer Demands, "Pasture to Plate" Beef Marketing Seminar, Zapata, TX, July 16, 2010

Regional

Machado, T.J. 2023. History of Beef Grading, Use of Ultrasound for Grading, and Marbling Variation. South Texas Brahman Breeders Association's Spring Meeting, Kingsville, TX, 29 April 2023.

Machado, T.J. 2019. Grilling 101 Training with Texas Beef Council. South Region Ag & FCH Program Workshop, Helotes, TX, 11 September 2019.

Machado, T.J. 2019. Key components of palatability, quality grading and branded beef programs. Texas Beef Council Caribbean Team, Kingsville, TX, 12 August 2019.

Machado, T.J. 2019. Food Safety. Texas Beef Council Caribbean Team, Kingsville, TX, 12 August 2019.

Machado, T.J. 2018. Today's Beef. Texas Beef Council Farm to Fork Event for Dietitians, Lubbock, TX, 21 September 2018.

Machado, T.J. 2017. Eating Appeal of Beef. Rio Grande Valley Beef 706-Session 3, Kingsville, TX, 21 October 2017.

Hale, D., and **T.J. Machado**. 2016. Eating Appeal of Beef. South Texas Beef 706-Session 3, Kingsville, TX, 2 November 2016.

Machado, T.J. 2016. Beef Grading. South Texas Beef 706-Session 3, Kingsville, TX, 1 November 2016.

Machado, T.J. 2016. Feeder Calve Evaluation. South Texas Beef 706-Session 1, Alice, TX, 23 May 2016.

Gleason, H., and **T.J. Machado**. 2015. Effect of shading and color of goat water tanks on water temperature. 69th Annual Meeting of the Subtropical Agriculture and Environments Society, Weslaco, TX, 6 February 2015.

Vela, G., and **T.J. Machado**. 2014. Effect of beef and pork fat inclusion on color of raw and cooked Nilgai Antelope patties. 68th Annual Meeting of the Subtropical Agriculture and Environments Society, Weslaco, TX, 21 February 2014.

Trevino, T.D., and **T.J. Machado**. 2014. Cooking time, cooking loss and patty shrink of Nilgai Antelope patties that include beef or pork fat. 68th Annual Meeting of the Subtropical Agriculture and Environments Society, 2014, Weslaco, TX, 21 February 2014.

Montemayor, K., **T. Machado**, **K. McCuistion**, M. Rouquette, and J. Paschal. 2014. The correlation of residual feed intake on carcass characteristics of Brahman and Brahman influenced steers. 68th Annual Meeting of the Subtropical Agriculture and Environments Society. Weslaco, TX, 21 February 2014.

Machado, T.J. 2014. Goat Meat Production and Goat Hide Uses. Meat Goat Production, Marketing and Land Use Workshop. Texas A&M AgriLife Extension Service, Weslaco, TX, 12 July 2014.

Machado, T.J. Country of Origin Labeling, Rio Grande Valley Livestock Show, Inc. International Day, March 19, 2010

Local

Machado, T.J. Improving the Value of Your Calf's Carcass, Texas A&M AgriLife Extension, Jim Wells County, Oct. 4, 2018.

Machado, T.J. Facts and Myths on the Safety of our Food Supply, Texas A&M AgriLife Extension, Jim Wells County, Dec. 9, 2015.

Machado, T.J. Female Replacement Evaluation, Texas A&M AgriLife Extension, Ranch and Range Field Day, Sept. 12, 2015.

Machado, T.J. Beef Quality Assurance, Universidad Autónoma de Chapingo Agri-Industry Seminar, Jan. 25, 2011

Machado, T.J. Beef Quality Assurance, Universidad Autónoma de Chapingo Agri-Industry Seminar, Feb. 1, 2010

RESEARCH AND CREATIVE ACTIVITIES

Funded Grants

Machado, T., C. Donato, S. Dattamudi, and R. Stanko. Expanding Natural Resource Career Development Program. U.S. Department of Agriculture-Natural Resources Conservation Service (2023-2025), \$150,000.

Machado, T., J. Apple, and T. Chumbley. Workforce TEAM (Training, Experience About Meat). USDA-AFRI (2023-2026), \$650,000.

Machado, T., J. Apple, S. Nelson, and T. Chumbley. Manager Education and Agriculture Technical Skills (MEAT'S) Workforce. USDA-HSI (2023-2027), \$950,000.

Machado, T., C. Donato, R. Stanko, and S. Nelson. Natural Resource Career Development Program and NRCS Tour. U.S. Department of Agriculture-Natural Resources Conservation Service (2022-2024), \$150,000.

Machado, T., C. Donato, R. Stanko, and S. Nelson. Natural Resource Career Development Program and NRCS Educational Tours. U.S. Department of Agriculture-Natural Resources Conservation Service (2021-2023), \$150,000.

Machado, T., C. Donato, R. Stanko, M. Garcia, J. Apple, and S. Nelson. Multicultural-Scholars Pre-Vet Experiential Agriculture Learning (M-SPEAL). USDA-NIFA (2021-2025), \$200,000.

Stanko, R., S. Nelson, G. Martinez, D. Sotomayor-Ramirez, **T.J. Machado,** K. Jayachandaran, C. Donato, G. Schuster, M.G. Bhat, S. Chumbley, and A. Bhandari. GO START NOW: Getting Occupational Student Training in Agricultural Research Through NOvel Workshops. USDA-NIFA-HSI (2021-2025), \$975,314.

Hernandez-Velez, M., **T.J. Machado,** C. Donato and S. Nelson. AgriCULTURE: Agriculture Connections to USDA: Lifestyle and Training of Undergraduates thru Real world Experiences in Puerto Rico. USDA-NIFA-HSI (2020-2023), \$275,000.

Machado, T., C. Donato, S. Nelson, and R. Stanko. NRCS: On-Site Training and Career Opportunities for Hispanic and Other Students. U.S. Department of Agriculture-Natural Resources Conservation Service (2019-2021; NR193A750027C010), \$150,000.

Bell, N.L., **T. Machado**, and R. Stanko. Evaluating the effect of electrolyzed reduced water on the rumen microbiome and ruminal fermentation parameters in steers consuming forage or concentrate ration. HerdX, Inc. (2018-2019), \$14,263.66.

Machado, T., C. Donato, S. Nelson, and R. Stanko. Provide NRCS educational tours, internships and career opportunities for Hispanic and other students. U.S. Department of Agriculture-Natural Resources Conservation Service (2018-2020; NR183A750015C004), \$155,000.

McCouston, K., N. Bell, and **T.J. Machado**. Advancing LEADERS 2 the Doctorate (LEADERS: Learning, Enhancing, and Developing Experiential Research Skills). U.S. Department of Agriculture-NIFA-HSI (2017-2021), \$1,000,000.

Machado, T., R. Stanko, G. Schuster, and S. Nelson. Natural Resources Career Development Program. U.S. Department of Agriculture-Natural Resources Conservation Service (2017-2018), \$100,000.

Nelson, S., D. Ruppert, R. Stanko, G. Schuster, and **T. Machado**. START NOW: Student Training in Agricultural Research Techniques by Novel Occupational Workshops. U.S. Department of Agriculture-NIFA-HSI (2016-2020), \$1,500,000.

Machado, T., S. Nelson, and R. Stanko. Increase Qualified Hispanic Student Enrollment in Pathways Programs through Natural Resources Career Development Program. U.S. Department of Agriculture-Natural Resources Conservation Service (2016-2017; #69-3A75-16-915), \$61,600.

TAMUK Subcontract \$440,000, Lead—UT El Paso \$2,000,000. Wheels of Change: A Consortium to Develop Leaders in Agriculture in the Areas of Sustainable Energy and Natural Resources. USDA-NIFA HSI (2015-2019). TAMUK Subcontract: S. Nelson (PD), R. Stanko, **T.J. Machado**, and G. Schuster.

TAMUK Subcontract \$388,000, Lead—UT Pan American \$1,000,000. STEP 2 USDA Research Success: South Texas Excellence Program to Research Success. USDA-NIFA HSI (2015-2019). TAMUK Subcontract: R. Stanko (PD), S. Nelson, **T.J. Machado**, and G. Schuster.

Machado, T.J., S. Nelson, and C. Donato. Preparing underrepresented students for careers in NRCS. U.S. Department of Agriculture-Natural Resource Conservation Service (2015), \$33,000.

Machado, T.J. Determining if water temperature impacts frequency of water consumption by goats. TAMUK-TCUR 2014-2015 Undergraduate Research Award. \$2,460.

Machado, T.J. and S.D. Nelson. Texas A&M University-Kingsville's support of an NRCS Career Development Program (NRCDP) by planning and implementing an NRCDP event

assisting students in developing their skills to compete for Pathways opportunities at NRCS. U.S. Department of Agriculture-Natural Resources Conservation Service (2014), \$5,000.

Machado, T.J., K.C. McCuiston, M. R. Garcia, and C.M. Albert. Confirming that dietary leucine influences leptin in cattle. Kemin Industries, Inc., Kemin Agrifoods North America, Inc. (2013), \$3,656.

Rouquette, Jr., F.M., J.L. Foster, L.O., Tedeschi, K.C. McCuiston and **T.J. Machado**. Estimates and prediction of efficiency of stocker production when supplemented with levels of DDG on pastures in humid and semi-arid regions of Texas. Texas A&M AgriLife Research (2014-2015), \$137,000 (\$2,000 to TAMUK for collaborative work).

McCuiston, K.C. and C. Loest. The LEADERS Program: Learning, Enhancing, and Developing Experiential Research Skills. USDA HSI (2013-2017), \$800,000. (Collaborator: Machado).

Machado, T.J. Alternative smoke application to sausages. TAMUK-TCUR 2012-2013 Undergraduate Research Award. \$3,000, (Author & Research hypothesis: Machado).

S.D. Nelson, R. Stanko, Louzada, Ruppert, **Machado**, Schuster, Setamou, Melgar. STEP UP to USDA Career Success: Science, Technology and Environmental Programs for Undergraduate Preparation to USDA Career Success. USDA-NIFA HIS (2011-2015), \$4,400,000. The grant was funded for \$800,000 each year for four years = \$3,200,000, (Authors: Nelson and Stanko).

Machado, T.J., K.C. McCuiston, and M.R. Garcia. Determining if dietary leucine will influence leptin circulation in cattle. Texas A&M University-Kingsville Research Awards (2010), \$10,000, (Author & Research hypothesis: Machado).

K. McCuiston, D. Kinkel, S. Lukefahr, M. Garcia, S. Henke, **T. Machado**, and R. Stanko. Improving student success through professional development opportunities. USDA National Institute of Food and Agriculture (2010-2013), \$290,000, (Authors: McCuiston and Kinkel).

Machado, T.J., D.M. Wulf, and R.H. Pritchard. The effect of dietary protein levels in feedlot diets on plasma metabolites and hormones to understand changes in adipose deposition. South Dakota Beef Industry Council (2008), \$22,492, (Author: Machado, Research hypothesis of Machado).

Wulf, D.M., **T.J. Machado**, and R.H. Pritchard. Timed protein restrictions in feedlot diets to alter adipose deposition with the goal to increase marbling in beef carcasses. National Cattlemen's Beef Association and South Dakota Beef Industry Council (Jan 1, 2007-May 31, 2008), \$92,260, (Author: Machado, Research hypothesis of Wulf and Machado).

Pritchard, R.H, D.M. Wulf, and **T.J. Machado**. Determining if altering feeding program could improve marbling, flavor, and tenderness in beef. South Dakota Beef Industry Council (2005), \$41,500, (Author: Machado, Research hypothesis of Pritchard)

Wulf, D.M., R.H. Pritchard, and **T.J. Machado**. Comparing three types of beef feedlot facilities and their effect on meat quality. South Dakota Beef Industry Council (2005), \$38,660, (Author: Machado, Research hypothesis of Pritchard and Wulf)

Proposals Submitted but not Funded

Nelson, S. et al. (including **T. Machado**). PIPELINE for HSI ACES. USDA-AFRI (2023-2027), \$20,000,000.

Kinman, L.A. et al. (including **T. Machado**). Cultivating diversity in tomorrow's FANH workforce by engaging, educating, and empowering underrepresented students. USDA-AFRI (2023-2027), \$10,000,000.

Apple, J., **T. Machado**, and R. Laughlin. SAFE (Student And Food-safety Experience) with Meat. USDA-HSI (2023-2027), \$950,000.

Alam, S., **T. Machado**, A. Rajib, C. Donato, and R. Stanko. Preparing undergraduate students for research, higher studies and careers in agricultural and environmental engineering. USDA-AFRI (2023-2028), \$749,745.97.

Kerth, C., S. White-Springer, T. Welsh, J. Cooper, G. Perry, and **T. Machado**. Metabolomics of beef quality: Identification of metabolites related to beef tenderness factors. Foundation for Meat and Poultry Research (2023), \$74,100.

Kerth, C. S. White, T. Welsh, J. Cooper, G. Perry, and T. Machado. Metabolomics of beef production: identification of pre-harvest metabolites related to post-harvest meat quality attributes. National Cattlemen's Beef Association (2023) \$69,104. **Machado as a Collaborator.**

Kerth, C. S. White, T. Welsh, J. Cooper, G. Perry, and T. Machado. Metabolomics of beef production: identification of pre-harvest metabolites related to post-harvest meat quality attributes. USDA-AFRI (2023) \$297,744. **Machado as a Collaborator.**

Long, C.R., F.M. Rouquette, Jr., A. Somenahally, T.H. Welsh, Jr., V. Corriher-Olson, K. Pohler, J. Dubeux. Sustainability and Productivity of Forage Based Beef Cattle Production Systems in Southeastern United States. USDA-NIFA-AFRI (2020-2025), \$9,999,924, **TAMUK Sub-contract \$50,000.**

Machado, T.J. Determining a novel method of predicting the eating experience of fresh beef. Texas Beef Council (2019), \$12,500.

Hernandez-Valez, M., S. Nelson, and **T.J. Machado**. AgriCULTURE: Agriculture Connections to USDA: Lifestyle and Training of Undergraduates thru Real world Experiences in Puerto Rico. USDA-NIFA-HSI (2019-2022), \$275,000.

Machado, T.J. Effect of aging venison meat on texture of venison sausage. TAMUK-TCUR 2017-2018 Undergraduate Research Award. \$3,000.

Ruppert, D., **T. Machado**, and R. Stanko. Development of novel tools to aid the productivity of smallholder farmers. USDA-NRCS (2016-2019), \$148,690.

Chumbley, S., B. Turner, **T. Machado**, S. Nelson, D. Ruppert, and G. Schuster. Reaching Underrepresented Students in Agriculture Through Research Projects. U.S. Department of Agriculture-NIFA-HEC (2016-2018), \$149,829.

Machado, T.J., N. Bell, B. Turner, T. Phoenix, and W. Kuvlesky. Improving Hispanic Undergraduate Retention by Preparing Parents as Advocates for College Success in Agricultural and Human Sciences Academic Disciplines. USDA-NIFA-HSI (2016-2020), \$275,000.

Machado, T., R. Stanko, N. Bell, and C. Daigle. Determining if a Range Finder can be a suitable tool for quantifying cattle temperament to enhance cattle management. Texas Cattle Feeders Association (2016), \$10,000.

Machado, T., R. Stanko, and N. Bell. Determining if a Range Finder can be a suitable cattle temperament selection tool for beef producers. Texas Beef Council (2016), \$10,000.

Rhoades, R., B. Turner, S. Nelson, G. Schuster, D. Ruppert, and **T. Machado**. Developing the Next Generation of Leaders in Agriculture. USDA-NIFA HSI (2015-2019), \$150,000.

TAMUK Subcontract \$700,000, Lead—CalPoly Pomona \$2,000,000. IMPACTS: Increasing Minority Presence in Agriculture Centered Technologies and Sciences. USDA-NIFA HSI (2015-2019). TAMUK Subcontract: **T.J. Machado (PD)**, R. Stanko, S. Nelson, and G. Schuster.

Rhoades, R., B. Turner, D. Ruppert, **T. Machado**, S. Nelson, and G. Schuster. CULTURE of Leadership Skills: Cultivating Underrepresented Leaders Through Undergraduate Refinement of Leadership Skills. USDA-NIFA HSI (2015-2019), \$275,000.

Machado, T.J., and N.M. Rodriguez. Understanding economic impacts of fresh meat storage in rural communities. USDA-AFRI-Agriculture Economics and Rural Communities (2015-2016), \$190,700.

Schuster, G.L., D.G. Hewitt, R.W. DeYoung, A.J. Ortega, **T. Machado**, D. Wester, P. DeLeon, A. Adlberto, J.A. Goolsby, R.J. Miller, P. Teel, R. Stanko, A. Cantu, K. VerCauteren, and L. Alejandro. Pathogenic landscapes—mitigating transboundary disease

threats to livestock from free-ranging native and invasive species of wildlife. USDA-AFRI-Food Security (2015-2020), \$7,203,700.

Machado, T.J., T. Schmidt, C. Carr, K. McCuistion, and M. Brown. An assessment of United States cattle temperament to determine the impact managing temperament would have on animal health and product losses. USDA-NIFA AFRI (2014-2017), \$841,124.

Machado, T.J. Sorghum syrup as an alternative sweetener in meat products. Untied Sorghum Checkoff Program (2013), \$28,989.

Stanko, R., **T.J. Machado**, D. Hale, and K. McCuistion. Understanding how beef carcass fatty acids change over the finishing period when feeding distillers' grains and how it impacts shelf-life of beef products destined for overseas export. Texas A&M Agrilife Research (2013), \$100,000, (Author: Machado, Research hypothesis of Machado).

Machado, T.J., G.L. Shuster, J.R. Anciso, N. Rodriguez, and D.S. Hale. Increasing food security by understanding how individuals with low food access store fresh food. USDA-NIFA AFRI (2013), \$90,180. (Author: Machado, Research hypothesis of Machado).

PROFESSIONAL GROWTH ACTIVITIES

Membership in Professional Societies

American Meat Science Association (2001-Present)
American Society of Animal Science (2011-Present)
Subtropical Agriculture and Environments Society (2018-Present)
Texas & Southwestern Cattle Raisers Association (2019-Present)
American Registry of Professional Animal Scientists (2022-Present)
LEAD21-Leadership for the 21st Century (2014-2016)

Leadership Roles in Professional Societies

Director of Animal Science for the Subtropical Agriculture and Environments Society (2018-Present)
Associate Editor for Animal Science of the Subtropical Agriculture and Environments Society (2021-Present)
President for the Subtropical Agriculture and Environments Society (2023-2024)
President Elect for the Subtropical Agriculture and Environments Society (2022-2023)
Secretary of the Subtropical Agriculture and Environments Society (2021)
Intercollegiate Meat Coaches Association Executive Committee (2012-2015; 2018-2020)
Intercollegiate Meat Coaches Association "A Division Task Force" (2019-Present)
Intercollegiate Meat Coaches Association "Virtual Meat Judging Committee (2020)
LEAD21—Member of the Board of Directors (2014-2016)
LEAD21—Member of the Recruitment & Application Committee (2015-2016)
LEAD21—Member of the Evaluation Committee (2015-2016)

Intercollegiate Meat Coaches Association Past President (2015-2016)
Intercollegiate Meat Coaches Association President (2014-2015)
Intercollegiate Meat Coaches Association President Elect (2013-2014)
Reciprocal Meat Conference Host Committee (2015)
Reciprocal Meat Conference Planning Committee (2015)
Reciprocal Meat Conference Host Committee (2007)

Attendance at Meetings of Professional Societies

Annual Meeting of the Subtropical Agriculture and Environments Society (2014, 2015, & 2018-2024)
Reciprocal Meat Conference (2001, 2003-2015, 2017-2019, 2021, 2022, 2024)
USDA 2501 Symposium (2023)
Attended the new PD meeting for the USDA-MSP grant that I received (virtual meeting; April 19-21, 2023).
Texas Council of Faculty Senates (2021)
Intercollegiate Meat Judging Clinic (2012, 2015, 2017-2019)
Southwest Meat Association Annual Convention (2010, 2011, 2013, & 2018)
Texas Hispanic Farmer and Rancher Conference (2017-2018)
High Impact Practices in Higher Education Conference (2018)
Texas Association of Meat Processors Convention (2016)
North American Colleges & Teachers of Agriculture Conference (2013, 2014 & 2016)
LEAD21-Leadership for the 21st Century Board Meeting (2015 & 2016)
USMEF International Markets and Opportunities Overview (2015)
American Association of Meat Processors Convention (2014)
Latinos in Agriculture Leaders Conference (2013)
Texas A&M Beef Cattle Short Course (2012)
Industry Leaders Day for the Brush Country Bulls and Allied Genetic Resources (2012)
Texas and Southwestern Cattle Raisers Association (TSCRA) Convention (2011)
Southern Association of Agricultural Scientists (2011)
Texas Beef Council Board Meeting (2010)
Forage & Beef Workgroup (2010)

Professional Service Activities

Journals Reviewed

- Reviewer for the Livestock Science Journal: 1 manuscript (Effect of decreasing roughage NDF in diets with high inclusion of DDGS on performance, ingestive behavior, and ruminal parameters in Nellore bulls [LIVSCI-D-23-00659]).
- Reviewer for the Subtropical Agriculture and Environments Subtropical Agriculture and Environments Society: 1 manuscript (Nilgai, *Boselaphus tragocamelus* and white-tailed deer, *Odocoileus virginianus* use of water troughs with and without remotely operated field sprayers for potential treatment of cattle fever ticks [SAE 10-2023]).

- Reviewer for the Livestock Science: 1 manuscript (Effect of decreasing roughage NDF in diets with high inclusion of DDGS on performance, ingestive behavior, and ruminal parameters in Nellore bulls [LIVSCI-D-23-00659]).
- Reviewer for the Texas Journal of Agriculture and Natural Resources: 1 manuscript (The effect of brine temperature on smokehouse yield, sensory characteristics, and color scores of bacon.[2021-09-19])
- Reviewer for the Subtropical Agriculture and Environments Subtropical Agriculture and Environments Society: 1 manuscript (SAE 2019-3).
- Reviewer for the Subtropical Agriculture and Environments Subtropical Agriculture and Environments Society: 1 manuscript (SAE 2017-1).
- Reviewer for the African Journal of Wildlife Research: 1 manuscript (SAWMA-D-15-00023).
- Reviewer for the Texas Journal of Agricultural and Natural Resources: 1 manuscript (TJANR-2015-03).
- Reviewer for the Journal of Animal Science: 1 manuscript (E-2011-5010.R1).
- Reviewer for 10th WRSA-World Rabbit Congress: 1 manuscript (WRC2012-ME018).

Other Activities

2010-present: Actively provided resources and knowledge to Texas A&M University-College Station researchers at the commercial packing plant in Corpus Christi (South Texas Beef).

2024

- Coordinated and participated in collecting carcass data and collecting meat samples for Dr. Duane Wulf from the University of Arizona at STX Beef (July 16 and 18).
- Coordinated and participated in collecting carcass data and collecting meat samples for Dr. Chad Carr from the University of Florida at STX Beef (May 15 and July 10).
- Planned, coordinated and executed a student panel for USDA officials at the Citrus Center (May 22).
- Planned, coordinated and executed a USDA-NRCS Direct Hiring event on campus (May 2 and 3).
- Planned, coordinated and executed a USDA-NRCS Career Development event on campus (February 14 and 20).

2023

- Coordinated and participated in collecting carcass data and collecting meat samples for Dr. Todd Thrift from the University of Florida at STX Beef (March 23 and April 13).
- Coordinated and participated in collecting carcass data and collecting meat samples for Dr. Chad Carr from the University of Florida at STX Beef (May 11 and 25).

2022

- Organized, and executed a Beef 706 program on campus (Oct. 14, 2022)
- Planned, coordinated and executed a USDA-NRCS Career Development event on campus (Oct. 5, 2022).
- Coordinated and participated in collecting carcass data for Dr. Andy Herring at STX Beef (Sept. 23 and 26).
- Coordinated and participated in collecting carcass data for Dr. Rolando Cooke at STX Beef (April 26 and 28; May 2 and 4; May 24 and 26; June 20 and 22).
- Conducted Warner-Bratzler Shear Force evaluation on steaks for the American Brahman Breeders Association (February 7-18, 2022).

2021

- Coordinated and executed a NRCS Career Development Program hosted at TAMUK, October 21, 2021
- Collaborated and participated in collecting carcass data and steak samples for shear force for Dr. Sarah White-Springer (October 5, and November 2, 2021)
- Collaborated with Dr. Andy Herring with research cattle at STX Beef (Sept. 8th and Oct 6, 2021)
- Collaborated with Dr. Lauren Wottlin with USDA-ARS on collecting lymph node samples to test for salmonella (April 21, 2021)
- Coordinated and participated in collecting carcass data for ST Genetics April 20, 2021.
- Collaborated with Dr. Rolando Cooke with research cattle at STX Beef throughout the year (March 4, April 29, May 4, June 30, July 29, 2021).

2020

- Collaborated with College Station on a carcass composition study in College Station, August 9-13, 2020.
- USDA Cattle and Carcass Training Fall 2020 (Virtual)

2019

- Coordinated and executed a NRCS student learning event at the NRCS-Plant Material Center in Kingsville, TX, November 22, 2019.
- Coordinated and executed a NRCS Career Development Program hosted at TAMUK, November 18, 2019.
- Coordinated and executed a NRCS Career Development Program hosted at TAMUK, October 17, 2019.
- Attended the Holt Cat Symposium on Excellence in Ranch Management, Kingsville, TX, October 17-18, 2019.
- Coordinated and participated in NRCS educational tours in Texas, August 4-11, 2019.
- Coordinated and participated in NRCS educational tours in Puerto Rico, June 21-29, 2019.

- Provided an educational tour of the packing plant South Texas Beef for the Vocational Ag Teachers Association of Texas (VATAT), August 1, 2019.

2018

- Coordinated and executed a NRCS Career Development Program hosted at TAMUK, November 27, 2018.
- Coordinated and presented at the Prestige Leadership Conference 2018 for Texas A&M AgriLife Extension, July 17, 2018.
- Coordinated and presented at a Texas Beef Council Student Event hosted at TAMUK, June 19 & 20, 2018.
- Was a judge for the fed steer competition and carcass competition at the Brahman Beef Seminar, Loma Plata, Paraguay, June 10 & 12, 2018.
- Coordinated, executed, and presented at a Pasture to Plate event for Hilton Chefs hosted by TAMUK for the Texas Beef Council, May 23 & 24, 2018.
- Traveled to the Dominican Republic to provide guidance for a meat company, February 18-23, 2018.
- Created a webinar podcast about beef production for the Texas Beef Council, February, 2018.

2017

- Coordinated and executed a NRCS Career Development Program hosted at TAMUK, November 2, 2017.
- Coordinated the Rio Grande Valley Beef 706 Session 3 event that was hosted at TAMUK, and also presented educational material at the event, October 20-21, 2017.
- Collaborated and executed a beef carcass yield prediction project with Texas A&M University—College Station, Summer/Fall 2017.
- Presented at a Texas Beef Council Student Event hosted at TAMUK, June 14, 2017.
- Judge for the Best Butcher In Texas regional competition, sponsored by the Texas Beef Council, April 1, 2017.

2016

- Coordinated the South Texas Beef 706 Session 3 event that was hosted at TAMUK, and also presented educational material at the event, November 1-2, 2016.
- I was a judge for the Texas Association of Meat Processors Convention for their product show, August 6, 2016.
- Presented at a Junior Santa Gertrudis International event hosted at TAMUK, July 22, 2016.
- Presented at a Texas Beef Council Student Event hosted at TAMUK, June 14, 2016.
- Presented at the Beef 706 session 1.
- LEAD21-Leadership for the 21st Century Board Meeting in Washington, D.C.—2016.

2015

- LEAD21-Leadership for the 21st Century Board Meeting in Washington, D.C.—2015.

2014

- At the American Association of Meat Processors Convention (AAMP), I provided information at a meeting that developed a collegiate processed meats competition.
- At the national meat science conference (RMC), I provided my expertise in a working group event for which researchers, industry members, and government employees determined the top five research areas that the American Meat Science Association would prioritize in the upcoming year.
- Conducted research with Merck Animal Health at both a feedlot and at Sam Kane Beef Processors, Inc.

2011

- I got two undergraduates involved with the meat science program by taking them to a thermal processing workshop title “Bring the Heat”; College Station, TX—6/1-2/2011.
- I participated in a Webinar from Food Seminars International titled Sodium Reduction; Kingsville, TX—4/21/2011.
- I attended the Winds of Change 5th TAMUK Conference on the Scholarship of Teaching and Learning; Kingsville, TX—2/10-11/2011.

2010

- I attended the 2010 Systems Thinking Lectureship put on by the King Ranch Institute for Ranch Management.

SERVICE ACTIVITIES

Committee Assignments

College of Agriculture and Natural Resources

ASVT Faculty Search Committee (2022-2024)
MOA DVM Evaluation Committee (2017-Present)
Farm Advisory Committee (2024)
College General Scholarship Committee (2021-2023)
College Tenure Committee (2017, 2019, 2020 & 2021)
ASVT Chair Search Committee (2018-2019)
Ag Olympics Committee (2013-2016)
Vet Technology Veterinarian Search Committee (2015)
AGSC Search Committee (2014-2015)

Texas A&M University

GCR for Ms. Gloria Rodriguez’s Ed.D. program (2024)
Undergraduate Curriculum Committee (2016-Present)
Council Assessment Planning Committee (2021-Present)
Faculty Reinvestment Committee (2023-2024)
Faculty Senate President (2022-2023)
Faculty Senate President Elect (2021-2022)

Faculty Senate Executive Committee (2018-2023)
Faculty Senate Representative (2010-2012; 2017-2022)
Academic Advisory Council (2022-2023)
Emergency Management Team as Faculty Senate Representative (2022-2023)
Emergency Management Team for Howe Ag (2018-Present)
Director of Diversity, Equity and Inclusion Search Committee (2022)
Presidential Inauguration Planning Committee (2022)
Administrator Evaluation Committee (2021-2022)
Resolutions & By-Laws Committee (2021-2022)
Piper Award Committee (2017-2020)
Faculty Senate Ad Hoc Committee on Promotion and Tenure (2020)
General Education Committee (2014-2017)
Annual Faculty Lecture Committee (2010-2012; 2015-2016)
Committee on Committees Chair (2010-2013; 2017)
Faculty Handbook Committee (2010)

Leadership roles on committees is

Chair of ASVT Faculty Search Committee (2023-2024)
Chair of Departmental Promotion and Tenure Committee (2021)
Chair, Administrator Evaluation Committee (2021-2022)
Chair, Ag Olympics Committee (2013-2016)
Chair, Committee on Committees (2010-2013)

Student Organization-Advisor

TAMUK Meat Judging Team (Advisor and Coach; 2012-present)
Pre-Vet Club (2013-present)
Alpha Zeta (2015-2016)
Block & Bridle (2010-2015)

Other Services to the University

2024

- Participated in the TAMUK Faculty Conference (August 21, 2024).
- Participated in the University Convocation (August 21, 2024).
- I was a guest speaker for a summer course where I discussed Food Safety (June 7, 2024).
- Trained students from South Texas College about beef grading at STX Beef (April 26, 2024).
- Assisted with Ag Olympics (April 18, 2024).
- Attended the college awards banquet (April 16, 2024).
- Attended the university's Spring Fling (March 27, 2024).
- Collected carcass information for the San Antonio Stock Show for their steer competition (March 25, 2024).

- Had a Zoom recruitment event for a potential graduate student from Honduras (March 5, 2024).
- Attended Graduation (Fall and Spring).

2023

- I assisted in welcoming researchers from Brazil, and participated in discussing future collaborative efforts (July 12, 2023).
- I was a guest speaker for a summer course where I discussed Food Safety (June 6, 2023).
- Attended Graduation (Spring).
- I took the Pre-Vet Club to tour the Veterinary School in College Station (April 29, 2023).
- I attended the TAMUK Annual Faculty Lecture where Dr. Shipherd presented her research (April 18, 2023)
- Attended the College Awards program (April 6, 2023).
- Attended the visiting performance of Dr. Joel Pagan and Dr. Hermelindo Ruiz (Guitar and Viola Recital) (April 4, 2023).
- Assisted with a Javelina Preview Days (February 3, 2023).
- Participated in the student luncheon held by the College of AGNR (January 31, 2023).

2022

- Participated in the TAMUK Presidential Inauguration (Nov. 29, 2022).
- I spoke to the New Faculty Investment program about service to the university and ways they can get involved (Nov. 11, 2022).
- Attended the Sid Blanks Social Justice Symposium (Nov. 4, 2022).
- Attended the Fall Carnival (Oct. 27, 2022).
- Organized, and executed a Beef 706 program on campus (Oct. 14, 2022).
- Attended the College of AGNR Fall Bash (Sept. 22, 2022).
- Attended Graduation (Spring and Summer).
- I spoke to the New Faculty Investment program about the Faculty Senate (Aug. 17, 2022).
- Attended a development plan presentation for the Riviera School District (May 11, 2022).
- Attended the reception for the Barbra Collins receiving the Chancellor's Medallion for Diversity, Equity and Inclusion.
- Coordinated and executed an interactive session for students with USDA employees (April 8, 2022).
- Attended the Annual Faculty Lecture put on by the university for which Dr. Maribel Gonzalez-Garcia presented. (April 8, 2022).
- Collected carcass information for the San Antonio Stock Show for their steer competition (Feb. 25 and 28, 2022).

2021

- Participated in planning a South Texas Beef 706, Oct. 5, 2021.
- Participated in planning sessions for the South Texas Ranch Brigade June 22 and Oct. 28, 2021.
- Provided an educational session about meat science to students for the Ag Ambassadors, June, 2021.
- Attended Graduation (Spring and Fall).
- Planned, coordinated and executed a Virtual Hiring Event for USDA-NRCS (February 25, 2021).

2019

- Attended Graduation (Spring and Fall)
- Provided an educational session about meat science to students from Calallen High School, November 26, 2019.
- Presented information about the Animal Science program on campus for students from Texas State Technical College, Kingsville, TX—November 19, 2019.
- Provided an educational session about meat science to students from H.M. King High School, November 15, 2019.
- Assisted the Pre-Vet Club with Fall Carnival—10-16, 2019.
- Assisted with the student presentations for their Summer Career Experience—9-24-2019
- Presented information about the Animal Science program at a recruiting event at Texas State Technical College, Harlingen , TX and South Texas College, McAllen , TX—June 6, 2019.
- Assisted with students traveling to an internship with USDA in Beltsville, MD, June 1-3, 2019.
- Presented information about the Animal Science program at a recruiting event at Texas State Technical College, Harlingen , TX—4-26-2019.
- I organized volunteers and was the announcer at the Livestock Judging contest at the Area X Career Development Events—(over 100 students)—4/17/2019.
- I took Pre-Vet club members to the Veterinary School in College Station and a Texas Safari—3-30-2019.
- Presented information about the Animal Science program at a recruiting event at H.M. King High School, Kingsville, TX—3-7-2019.

2018

- Attended a recruiting event at James Madison High School in San Antonio, TX—11-16-2018.
- Attended a recruiting event at the Orange Grove High School—11-16-2018
- Attended Graduation (Spring and Fall)
- Participated in the College BBQ Cook-off—11-10-2018.
- Presented material on Pre-Vet and Meat Judging to UNIV courses—10/16-17/2018.

- Assisted with the student presentations for their Summer Career Experience—9-19-2018
- Spoke at the College's Freshman Welcome event—9-11-2018.
- Assisted with students traveling to an internship with USDA in Beltsville, MD, and had meetings with their research mentors, and the Director & Assistant Director of the USDA-ARS center at Beltsville—5/31 through June 4, 2018.
- I took Pre-Vet club members to a reptile refuge and the Veterinary School in College Station—4/21/2018.
- I organized volunteers and was the announcer at the Livestock Judging contest at the Area X Career Development Events—(over 100 students)—4/17/2018.
- Created a YouTube video for TAMUK titled "The Science Behind Fajitas"—3-28-2018.
- Assisted the Pre-Vet Club with Spring Fling—3-28-2018.
- Presented Meat Judging material to UNIV courses—2-5 & 6-2018.

2017

- Assisted the Pre-Vet Club with Fall Carnival—10-18-2017
- Participated in the College of ANRHS's BBQ competition—10-7-2017
- Assisted with the student presentations for their Summer Career Experience—9-20-2017
- Presented at a Javelina Preview Day—4/29/2017
- I took students to the North American Colleges and Teachers of Agriculture (NACTA) judging contests in Manhattan, KS—4/20-21/2017.
- I organized volunteers and was the announcer at the Livestock Judging contest at the Area X Career Development Events—(over 100 students)—4/12/2017
- Participated in the College of ANRHS's Ag Olympics—3/22/2017
- Attended Graduation (Spring and Fall)

2016

- Participated in the College of ANRHS's BBQ competition—10/1/2016
- Represented the university at the Kleberg County Adult Literacy Council's Scrabble Tournament—8/5/2016
- I organized volunteers and was the announcer at the Livestock Judging contest at the Area X Career Development Events—(over 100 students)—4/14/2016
- Attended Graduation (Spring and Fall)

2015

- Represented the university at the Kleberg County Adult Literacy Council's Scrabble Tournament—8/7/2015
- Organized a campus visit for potential graduate student (1 student)—8/3-5/2015
- Recruited graduate students at the national meat science conference (6 students)—6/13-17/2015
- Organized, developed and presented educational exercises, and was highly active in the daily aspects of the STEP-UP summer camp—5/28-29/2015

- Conducted a science demonstration for sixth-grade students from Three Rivers ISD—5/7/2015
- I organized volunteers and was the announcer at the Livestock Judging contest at the Area X Career Development Events—(over 100 students)—4/8/2015
- Participated in a student recruitment event—2/13/2015
- Presented at a Javelina Preview Day—1/31/2015
- Attended Graduation (Spring and Summer)

2014

- Presented at a Javelina Preview Day—11/15/2014
- Organized, developed and presented educational exercises, and was highly active in the daily aspects of the STEP-UP summer camp—6/4-6/2014
- I presented information to students from the Universidad Autónoma Chapingo about the Animal Science program at TAMUK—July 7/2014
- Conducted a science demonstration for sixth-grade students from Three Rivers ISD (45 students, 3 teachers, 1 principle).
- I was involved with the organization and execution of the College of AGNRHS Bar-B-Que Cook-Off.
- I organized volunteers and was the announcer at the Livestock Judging contest at the Area X Career Development Events (over 100 students)
- I was a judge for the Collegiate FFA's Costume Contest (10-28-2014)
- Developed and taught educational exercises for students in the Agriculture Math Camp
 - Attended the Math Camp Banquet
- Attended the Agriculture Career Fair (9-4-2014)
- Attended Ag Olympics
- Assisted with the collegiate soil judging contest that was hosted at TAMUK.
- Attended Graduation (Spring, Summer, and Fall)
- Attended the AgNRHS College Back-to-School Lawn Party
- Coordinated delivery of a product from Guerro Brand Inc. to Washington, D.C. for the Taste of the South. The event provided advertisement for both the meat company and TAMUK.

2013

- Attended TXAI/TAMUK Ag Science Teachers Alumni Reception
- Sponsor of an Ag Olympics team.
- I was involved with the organization and execution of the College of AGNRHS Bar-B-Que Cook-off.
- Assisted with the Freshman Fiesta Cook-off
- I organized volunteers and was the announcer at the Livestock Judging contest at the Area X Career Development Events
- I was a judge for the job interview contest for the Ag Consortium of Texas Conference
- Presented at three Javelina Preview Days—1/26, 2/8, 4/27

- Organized, developed and presented educational exercises, and was highly active in the daily aspects of the STEP-UP summer camp—6/6-8/2013
- Talked to students from the Universidad Autónoma Chapingo about the Animal Science program at TAMUK, and I also talked to students from Houston Community College

2012

- I gave a tour of the meat lab for a program called GEAR UP—April 13/2012
- Assisted with the Ag College Week—6/12/2012 & 6/26/2012
- I talked to students from the Universidad Autónoma Chapingo about the Animal Science program at TAMUK—July 23/2012
- Spoke at the Hoggie Preview Day—11/17/2012
- Participated in the Transculturation Program
- I was a sponsor for a team at Ag Olympics.
- I attended the Animal Science Tailgate.
- I was involved with the organization and execution of the College of AGNRHS Bar-B-Que Cook-Off.
- I was a part of a team for the Freshman Fiesta Cook-off—April 26/2012
- I helped cook nilgai burgers for the College's Block Party—7/6/2012
- Attended Alpha Tau Alpha's student induction ceremony.
- I organized volunteers and was the announcer at the Livestock Judging contest at the Area X Career Development Events—4/11/2012

2011

- Assisted with the ANSC Summer Camp—6/8-10/2011
- Went to Palo Alto College and talked to a class to recruit students to TAMUK—4/28/2011
- I was a sponsor for a team at Ag Olympics.
- I attended the Animal Science Tailgate.
- I provided my academic experience with the students of a Hoggie Day event this summer.
- I participated in the College of AGNRHS Bar-B-Que Cook-Off.

2010

- Judge for the Javelina Research Symposium Spring 2010 for both the Poster Presentation and Powerpoint Presentations
- Gave 2 one hour talks to junior high students involved with the "College for a Day" in September and November
- I was a sponsor for a team at Ag Olympics.
- I attended the President's Tailgate.
- I participated in the Javelina Ag Alumni and Student Cook-Off.
- I participated in the College of AGNRHS Bar-B-Que Cook-Off.
- I helped judge presentations that determined which students made it on the Academic Quadrathlon Team.

Service Activities Outside University

Each year area producers and breed associations contact me to get carcass data and to conduct Warner-Bratzler Shear Force on cattle they have. The producers and breed associations use the data to make progress in genetic selection. I provide this as a service and subsequently use the money raised to support the meat judging team.

2024

- Assisted an area meat business with water assessment.
- Assisted a consulting business that developed a Meat Processing Market Study for South Texas.
- Assisted local rancher with their locally sourced beef operation.
- I was a ringman for the Kleberg-Kenedy Country Fair Auction.

2023

- I was a judge for a FFA Public Speaking Competition in Raymondville, TX.
- I consulted for a regional Brahman breeder in regards to developing a new meat packing plant.
- I was a ringman for the Kleberg-Kenedy Country Fair Auction.

2022

- Collected tenderness data for the American Brahman Breeders Association.
- Taught local ranchers beef fabrication.
- Assisted local ranchers with their grass-fed beef business.

2021

- Assisted with a Ducks Unlimited event in Fort Worth Texas.
- Provided meat processing consultation to a hunting camp in Port Mansfield.
- Assisted with carcass data collection for the San Antonio Livestock Show and Houston Livestock Show and Rodeo.
- Collected tenderness data for the American Brahman Breeders Association.
- I was a ringman for the Kleberg-Kenedy Country Fair Auction.
- I announced the Kleberg-Kenedy County Fair.

2020

- Provided meat processing consultation to a hunting camp in Port Mansfield.
- Assisted with carcass data collection for the San Antonio Livestock Show.
- Collected tenderness data for the American Brahman Breeders Association.
- I was a ringman for the Kleberg-Kenedy Country Fair Auction.
- I announced the Kleberg-Kenedy County Fair.

2019

- Coordinated and provided my expertise in carcass data collection for a regional cattle producer.
- Assisted with carcass data collection for the San Antonio Livestock Show.
- Collected tenderness data for the American Brahman Breeders Association.
- I was a ringman for the Kleberg-Kenedy Country Fair Auction.
- I announced the Kleberg-Kenedy County Fair.

2018

- Coordinated and provided my expertise in carcass data collection for a regional cattle producer.
- Assisted with carcass data collection for the San Antonio Livestock Show.
- Collected tenderness data for the American Brahman Breeders Association.
- I was a ringman for the Kleberg-Kenedy Country Fair Auction.
- I announced the Kleberg-Kenedy County Fair.

2017

- I was the auctioneer for the Ducks Unlimited Banquet hosted at TAMUK.
- Coordinated and provided my expertise in carcass data collection for a regional cattle producer.
- Assisted with carcass data collection for the San Antonio Livestock Show.
- Consulted a rancher with a branded meat program. The rancher's name is Grant Vassberg.
- I announced the Kleberg-Kenedy County Fair.

2016

- Assisted with carcass data collection for the San Antonio Livestock Show.
- Consulted a rancher who is attempting to develop a branded meat program. The rancher's name is Grant Vassberg.
- Coordinated, and provided my expertise in carcass data collection and shear force evaluation for the Santa Gertrudis steer feed-out. Generated a report on feedlot performance and carcass characteristics for the producers.
- I announced the Kleberg-Kenedy County Fair.

2015

- Participated in a Kingsville's Next Generation event.
- Consulted a rancher who is attempting to develop a branded meat program. The rancher's name is Grant Vassberg.
- I announced the Kleberg-Kenedy County Fair.

2014

- I consulted Cisneros Packing Co., Inc. with a mold growth issue in their packages of dried beef.
- Consulted a rancher who is attempting to develop a branded meat program. The rancher's name is Grant Vassberg.
- I was a judge for Texas Farm Bureau's Discussion Meet Contest (12-6-2014).

- I was a judge for the Rio Grande Valley Commercial Female Pen Show
- I announced the Kleberg-Kenedy County Fair.

2013

- I trained workers of Stripes Convenience Stores on sanitation and food safety.
- I was a judge for the Rio Grande Valley Commercial Female Pen Show
- I was a judge for the Cowboy Classic prospect show in Mercedes, TX.
- I announced the Kleberg-Kenedy County Fair.

2012

- I announced the Kleberg-Kenedy County Fair
- I was a judge for the Rio Grande Valley Commercial Female Pen Show 2012

2011

- I announced the Kleberg-Kenedy County Fair
- I was a judge for the undergraduate presentations for the Academic Quadrathlon at the Southern Association of Agricultural Scientists; Corpus Christie, TX—2/8/2011
- I volunteered my time to teach success skills to Sophomore students at H.M. King High School. The success skills program is a part of the national group called Junior Achievement. The program entailed one hour instruction on success skills for seven weeks.

2010

- I judged the Commercial Female Pen Show at the Rio Grande Valley Livestock Show.
- I was a dog judge for the event called “Leash on Life” put on by MANRRS.

HONORS AND AWARDS

- Certificate of Completion for the TAMUK’s President’s Aspiring Leaders Program (2024)
- Senior Teaching Award Dept. of Animal Science and Veterinary Technology (2022)
- North American Colleges and Teachers of Agriculture Teaching Award of Merit (2016)
- President of the community group called Kingsville’s Next Generation (2013)
- AMSA Reciprocal Meat Conference Ph.D. Research Poster Competition (2008): 2nd Place