

- Research Responsibilities
 - Advise graduate and undergraduate students in research involving food science and food safety research
 - Conduct food safety research involving pre- and post-harvest food safety concerns and consumer knowledge and perceptions of food safety
 - Manage Food Safety Microbiology Laboratory

- Other Responsibilities
 - Faculty Advisor - Delta Tau Alpha
 - Faculty Advisor - Meat and Food Science Association
 - Departmental Webpage
 - Departmental Honor Student Advisor

Graduate Research Assistant – Food Microbiology

- Texas Tech University July 2004 – August 2007
- Assist with research involving both pre- and post-harvest food safety issues
- Give scientific presentations on post harvest food safety research
- Co-instructor for Food Sanitation Course
- Teaching Assistant for Food Microbiology lab
- Hazard Analysis & Critical Control Point implementation and management (HACCP) certified

Graduate Assistant – Animal Science Department

- Angelo State University September 2002 – June 2004
- Teaching Assistant for Anatomy and Physiology, Meats, and Genetics labs
- University Ranch – assisted in data collection for multiple research projects, perform tasks necessary in the daily operation of a ranch, reviewed journal articles and book chapter

Teaching

Angelo State University

- FSCI 1329 – Food Science
 - Teach fundamental information regarding the food industry, food safety, sanitation, processing and food quality

- FSCI 4345 – Food Microbiology
 - Cover information on the study of microorganisms important in food production, spoilage, preservation and illness.
 - Cover common laboratory procedures required to detect common food pathogens and spoilage organisms.

- FSCI 4344 – Food Safety and Sanitation
 - Taught the principles of sanitation and food safety in food service and food processing facilities with an emphasis on the chemical, physical and microbiological basis of sanitation
 - Developed PowerPoint presentations and method demonstrations to be incorporated into lecture.
 - Developed and graded assignments, quizzes and exams
 - Course provided ServSafe certification

- FSCI 4391 – Undergraduate Food Science Research
 - Supervise and assist undergraduate students with independent research projects including project design, data collection, data analysis and final reports

- FSCI 6329
 - Teach information regarding the food industry, food safety, sanitation, processing and food quality
 - Cover information on food chemistry, nutrition and the functional properties of various nutrients

- ASCI 3349 – Animal Anatomy and Physiology
 - Cover information on the study the function and interactions of the cells, tissues, organs and system of the body of farm animals.
 - Laboratory procedures cover major structures of livestock animals and their locations in the body

- ASCI 6391 – Graduate Research
 - Supervise and assist graduate students with independent research projects including project design, data collection, data analysis and final reports

Texas Tech University

- FDT 3303 - Food Sanitation (TEACH program) – Fall 2006 and Spring 2007
 - Taught the principles of sanitation and food safety in food service and food processing facilities with an emphasis on the chemical, physical and microbiological basis of sanitation
 - Developed PowerPoint presentations and method demonstrations to be incorporated into lecture.
 - Developed and graded assignments, quizzes and exams
 - Course provided ServSafe certification

- FDT 3301/5301 - Food Microbiology lab instructor
 - Primary lab instructor educating students in proper laboratory techniques used in culturing, detecting, enumerating, and identifying various food-borne bacterial pathogens
 - Graded student laboratory reports
 - Provided tutoring for students outside of lab
 - Presented lecture presentations in professors absence

- Other Teaching Experience
 - Guest lab instructor for Honors Meat Science class (ANSC4400)
 - Educated students in laboratory techniques used in culturing, detecting, and enumerating both antibiotic resistant and susceptible organisms found in ground meet products
 - Upward Bound Program – taught high school students the importance of food safety and basic food microbiology techniques

Angelo State University

- ASCI 3349 - Anatomy and Physiology lab instructor
 - Primary lab instructor educating students in skeletal identification, anatomy dissection, and general system function
 - Developed and scored tests and quizzes to measure students progress
 - Assisted in grading and administering lecture exams
 - Provided tutoring for students outside of lab

- ASCI 3443 - Animal Genetics lab instructor
 - Primary lab instructor presenting basic genetic mathematical procedures and concepts
 - Administered and graded lecture exams
 - Developed homework to supplement and measure student progress in lab
 - Provided tutoring and assistance to students outside of lab

- FSCI 4346 - Meat Science lab assistant
 - Developed and graded quizzes to measure students lab progress
 - Developed Retail Identification display to increase student performance on Retail Meat Identification
 - Assisted in lab instruction and provided student assistance outside of lab

- Other Teaching Experience
 - Supervisor undergraduate research - Provided supervision and assistance to an undergraduate with a microbiology/food safety research project dealing with microbial counts of fresh fruit
 - Elementary Science Fair Project - Provided supervision and assistance to 5th grader with a food safety science fair project

Research

My research interests include pre- and post-harvest food safety issues including antimicrobial resistance and pathogen control of commercially produced meat and wild game, as well as extension outreach methods used to educate the public and industry on food safety issues and prevention measures.

Dissertation/Thesis

- **Branham, L.A.** 2007. Antimicrobial Susceptibility of Generic *Escherichia coli* Following Administration of Subtherapeutic Antimicrobial Drugs to Feedlot Cattle. Ph.D. Dissertation, Texas Tech University
- **Branham, L.A.** 2004. *Escherichia coli* O157:H7 and *Salmonella* in White-tailed Deer and Livestock grazing the same rangeland. M.S. Thesis, Angelo State University

Refereed Publications

- **Branham, L.A.**, Platt, T.M., Loneragan, G.H., Engler, M.J., Thomson, D.U., Singer, R.S., and Brashears, M.M. 2007. Antimicrobial Susceptibility Patterns of Generic *Escherichia coli* Following Administration of Subtherapeutic Antimicrobial Drugs to Feedlot Cattle. (In Preparation).
- Stephens, T.P., Loneragan, G.H., Thompson, T.W., Sridhara, A., **Branham, L.A.**, Pitchiah, S., and Brashears, M.M. 2007. Distribution of *Escherichia coli* O157 and *Salmonella* spp. on Hide Surfaces, the Oral Cavity and Feces of Feedlot Cattle (J. Food Prot. 70: 1346–1349
- Stephens, T.P., Loneragan, G.H., **Branham, L.A.**, and Brashears, M.M. 2006. Enumeration of *Escherichia coli* O157 in Cattle Feces using Immunomagnetic Separation Combined with Most Probable Number Techniques Vol. 70 No. 5, pg 1072-1075.
- **Branham, L.A.**, Carr, M.A., Callaway, T.R., and Scott, C.B. 2005. *Escherichia coli* O157:H7 and *Salmonella* in White-tailed Deer and Livestock. Current Issues in Intestinal Microbiology. Vol. 6 pg. 25-29.
- Knutson, H.J., Carr, M.A., **Branham, L.A.**, Scott, C.B., and Callaway, T.R. 2005. Effects of Activated Charcoal on Binding *E. coli* O157:H7 and *Salmonella typhimurium* in Sheep. Small Ruminant Research. Vol. 65, Issue 1-2, pg.101-105.

Abstracts, Scientific Presentations, and Poster Sessions

- Platt, T.M., Loneragan, G.H., **Branham, L.A.**, Engler, M.J., Thomson, D.U., Singer, R. S., and Brashears, M.M. 2008. (Poster) Feedlot Production Practices and Their Impact on Pre- and Post-Harvest Antimicrobial Susceptibility Patterns of *Enterococcus* spp.
 - 95th International Association for Food Protection Annual Meeting
- **Branham, L.A.**, Platt, T.M., Loneragan, G.H., Engler, M.J., Thomson, D.U., Singer, R.S., and Brashears, M.M. 2007. (Poster) Impact of In-Feed Antimicrobial Drug Use on Antimicrobial Susceptibility Patterns of Generic *Escherichia coli*
 - 94th International Association for Food Protection Annual Meeting
- Laury, A., Loneragan, G.H., Platt, T.M., **Branham, L.A.**, Ives, S. Engler, M.J., Thomson, D.U., and Brashears, M.M. 2007 (Abstract) Changes in Indicator Populations due to Therapeutic Use of Injectable Antibiotics in Feedlot Cattle
 - 94th International Association for Food Protection Annual Meeting
- Platt, T.M., **Branham, L.A.**, Loneragan, G.H., Engler, M.J., Thomson, D.U., Singer, R.S., and Brashears, M.M. 2006. (Abstract) In-Feed Antimicrobial Drug Use and Susceptibility of *Enterococcus* spp. in Feedlot Cattle.
 - 2006 Conference of Research Workers in Animal Diseases
- **Branham, L.A.**, Platt, T.M., Loneragan, G.H., Engler, M.J., Thomson, D.U., Singer, R.S., and Brashears, M.M. 2006. (Presentation) Feedlot Production Practice and their Impact on Pre- and Post-Harvest Antimicrobial Susceptibility Patterns of Enteric Bacteria.
 - 11th International Symposium on Veterinary Epidemiology and Economics
- Echeverry, A., Loneragan, G. H., **Branham, L.A.**, and Brashears, M.M. 2006. (Abstract) Detection of *Escherichia coli* O157 in Bovine Fecal Pats by a Multiple Sampling Strategy.
 - 11th International Symposium on Veterinary Epidemiology and Economics
- **Branham, L.A.**, Killinger Mann, K.M., Mann, J.E., Brashears, M.M., and Loneragan, G.H. 2005. (Poster) Antibiotic Resistance Patterns in *Escherichia coli* O157 Isolates Collected from 2001-2004.
 - 92nd International Association for Food Protection Annual Meeting
- Echeverry, A., **Branham, L.A.**, Brashears, M.M., and Loneragan, G.H. 2005. (Abstract) Fecal Pat Sampling and Homogenation for Detection of *Escherichia coli* O157.
 - 92nd International Association for Food Protection Annual Meeting
- **Branham, L.A.**, Carr, M.A., Callaway, T.R., and Scott, C.B. 2004. (Poster) *Escherichia coli* O157:H7 and *Salmonella* spp. in White-tailed Deer and Livestock
 - 57th Reciprocal Meat Conference – Masters competition National Champion

Other

- Owens, D.M. and **Branham, L.A.** 2007. A Hunter's Guide to Food Safety. Extension pamphlet publication.

- **Branham, L.A.** and Brashears, M.M. 2004. Game Food Safety. Texas Tech University, Dept. of Animal and Food Sciences. Extension publication - The International Center for Food Industry Excellence. Available online at: www.orgs.ttu.edu/icfie/game%20foods.htm

- Moore, C., **Branham, L.A.**, and Carr, M.A 2004. MicroPure Treatment of Cantaloupe, Strawberries, and Grapes to Improve Shelf-life. Angelo State University 2004 Progress Report. Publication No. R-10.

Service

- Professional Organizations
 - American Meat Science Association
 - International Association for Food Protection
 - Institute of Food Technologist
 - American Society of Microbiologist

- Student Service Organizations / Honor Societies
 - Gamma Sigma Delta – The Honor Society of Agriculture - Texas Tech University
 - Graduate Student Association - Texas Tech University
 - Chapter Treasurer
 - Food Technology Club – Texas Tech University
 - Chapter Secretary
 - Delta Tau Alpha National Agriculture Honor Society – Angelo State University
 - Reporter (2001)
 - Graduate Student Advisor (2002-2004)
 - Alpha Chi National Honor Society – Angelo State University
 - Christian Campus Center – Angelo State University

- Volunteer Work / Community Service
 - Graduate Student Association
 - Ideal camps – science-based camps
 - Food Technology Club
 - Women's Shelter
 - Relay for Life
 - Food Science Extravaganza

- Delta Tau Alpha:
 - Hope House Children's Advocacy Center, three years
 - Kids for Christmas, two years
 - Meals for the Elderly, three years
 - Adopt-A-Highway, two years
 - Provided school supplies to financially challenged children
 - Valet parked for ASU Homecoming Alumni reception
 - Helped build Kid's Kingdom playground
- Christian Campus Center:
 - Christmas in April, two years
 - Sunday School Teacher, four years
 - Houston inner-city vacation bible school
- Personal Volunteer work:
 - Recruiter for Texas Tech University College of Agriculture Sciences and Natural Resources
 - DNA Days, lab tour guide
 - FFA poultry contest, class supervisor
 - FFA food science contest, judge
 - Help organized local 4-H project show, four years
 - 4-H and FFA livestock judging contest tabulator, two years
 - Angelo State University 4-H/FFA judging Clinic, two years
 - Assisted local 4-Hers with method demonstrations, three years
 - Judged 4-H county food show, three years
 - Little league baseball team photographer
 - Christmas at Old Fort Concho photographer, eight years
 - Farm Safety Day Camp photographer
 - Ag-In-A-Classroom beekeeping demonstration, four years
 - Ag Mechanics Contest Assistant-coordinator, San Angelo Stock Show and Rodeo, two years

Scholarships and Awards

- Outstanding Ph.D. Student of the Year, Department of Animal and Food Sciences, Texas Tech University, 2007
- Ph.D. Student of the Year, College of Agriculture Sciences and Natural Resources, Gamma Sigma Delta – The Honor Society of Agriculture - Texas Tech University, 2007
- Houston Livestock Show & Rodeo Graduate Fellowship recipient 2006-2007
- Texas Tech University TEACH Fellowship recipient 2006-2007
- Helen DeVitt Jones Graduate Fellowship recipient 2006-2007
- Texas Tech University Graduate Research Assistantship
- National Champion- Master's poster competition 2004

- American Meat Science Association
- Animal and Food Sciences Departmental Scholarship – Texas Tech University
- Graduate Achievement Award – ASU Graduate School
- Carr Graduate Scholarship – Angelo State University
- Carr Research Scholarship – Angelo State University
- Angelo State University Graduate Assistantship
- Concho Valley Cattlewomen’s Scholarship
- Senior Achievement Award – ASU Agriculture Department
- Texas 4-H Scholarship – San Antonio Livestock Exposition
- Carr Undergraduate Scholarship – Angelo State University
- National Merit Special Scholarship – Ethicon, Inc.