

Jason T. Sawyer

CONTACT INFORMATION:

Department of Animal Sciences
Auburn University
201C Upchurch Hall
Auburn, AL 36894
254-485-2992 (Mobile)
jts0109@auburn.edu (Email)

EDUCATION:

University of Arkansas	
Doctorate of Philosophy – Animal Science, emphasis Meat Science	2009
Oklahoma State University	
Master of Science – Animal Science, emphasis Meat Science	2003
Kansas State University	
Bachelor of Science – Animal Science	2000
Barton County Community College	
Associate of Science – Agriculture	1997

EMPLOYMENT EXPERIENCE:

Professor – Meat Science, October 1, 2024 to Present

Associate Professor - Meat Science, August 16, 2019 to September 31, 2024

Auburn University, Auburn, AL 36894

Department of Animal Sciences

- **Research (57% Appointment)**
 - Technology for increasing beef production through traditional and non-traditional growth platforms.
 - Factors influencing fresh and cooked color meat destined for retail and foodservice sectors.
 - Implications of packaging methodology and properties on meat products for retail and food service applications as bulk or consumer ready products.
 - Solution enhancement effects on postmortem muscle quality factors such as color (fresh and cooked), sensory taste, and shelf-life stability using conventional and non-conventional ingredients.
 - Food safety interventions for whole-muscle and value-added applications.
 - Ingredient technology for improving fresh and cooked shelf life stability of food service and consumer products.
 - Meat cookery methods of retail consumer meat cuts and implications on sensory profiles.
 - Production methods for increasing beef supplies from the pasture to consumer plates.

- **Master's Thesis Committee Chair**
 - Fresh characteristics of ground beef. (2021). Hunter Smith - ANSC
 - Thermoforming vs. PVC Steaks. (2022). Tristan Reyes - ANSC
 - Meat surface color after Freezing. (2022). Madison Wagoner - ANSC
 - Hempseed meal on goat characteristics. (2023). Elli Zorn - ANSC
 - Meat surface color of ground meats. (2023). Madison Coursen - ANSC
 - Meat packaging of fresh pork. (2024). Brooks Nichols - ANSC
 - Sous vide cooking of patties. (2024). Savannah Douglas - ANSC
 - Frozen meat color changes. (2024). Gabriella Bernardez-Morales - ANSC
 - Aging influence on chicken. (2026). Ricardo Barrazueta-Cordero - ANSC
 - Ground beef forming. (2026). Nina Gilmore - ANSC
- **Masters of Agriculture Committee Member**
 - Beef consumer awareness. (2020). Anna Grace Parnell – ANSC
 - Youth evaluation development. (2022). Brooke Zeleney – ANSC
- **Master's Thesis Committee Member**
 - Shelf life validation of chicken tenderloins. (2020). Jack Rehm - ANSC
 - Pet food manufacturing. (2021). Marc R. Presume – POSC
 - Consumer advocacy. (2022). Savannah Locke – ANSC
 - AGvocation of the agriculture industries. (2022). Samantha Bennett – ANSC
 - Broiler management techniques. (2022). Jorge Sandoval Escobar – POSC
 - Hempseed meal in Goats. (2023). Khim Ale – Tuskegee University – ANSC
 - Beef systems. (2025). Gabriella Johnson – ANSC
- **Doctoral Dissertation Committee**
 - Electronic sensory of beef and pork. (2026). Savannah Douglas
- **Doctoral Dissertation Committee Member**
 - Big data analytics. (2023). Aftab Siddique – POSC
- **Teaching (38% Appointment)**
 - ANSC 2720-The Meat We Eat
 - ANSC 3700-Muscle Foods
 - ANSC 4960-Special Problems
 - ANSC 7990-Research and Thesis
- **Service (5% Appointment)**
 - UNIV Teaching effectiveness committee member (2021-2023)
 - COA search committee member (AUFSI Director-2020)
 - ANSC High Impact Experience member (2019-2020)
 - ANSC search committee member (Meat Microbiology-2019 & 2020)
 - ANSC curriculum committee member (2020-present)
 - ANSC social committee member (2019-present)
 - ANSC graduate student affairs committee member (2020-2022)
 - ANSC nomination and awards committee member (2020-2023)
 - ANSC search committee member (Professor of Practice, Livestock-2020)
 - ANSC search committee chair (Meat Science-2022)

Associate Professor-Meat Science, January 10, 2010 to August 1, 2019
 Tarleton State University, Stephenville, TX 76402

- **Teaching (60% Appointment)**

- ANSC 1325-Livestock and Meat Evaluation
- ANSC 2308-Meat and Carcass Evaluation
- ANSC 3307-Market Animal Evaluation
- ANSC 3421-Meat Science
- ANSC 4300-Research and Writing
- ANSC 4312-Meat Processing and Merchandising
- ANSC 4486-Food and Meat Industry Tour
- ANSC 4806-Meat Industry Research
- ANSC 5688-Graduate Thesis

- **Research (30% Appointment)**

- Factors influencing fresh and cooked color meat destined for retail and foodservice sectors.
- Solution enhancement effects on postmortem muscle quality factors such as color (fresh and cooked), sensory taste, and shelf-life stability using conventional and non-conventional ingredients.
- Food safety interventions for whole-muscle and value-added applications.

- **Master's Thesis Committee Chair**

- Beef Carcass Value. (2017). Reagan Cauble
- Consumer Meat Purchasing. (2016). Rachelle Coble
- Branded Beef Characteristics. (2015). Lauren Adcock
- Value-added Ground Beef Formulations. (2015). Jase Ball
- Beef Round Mechanical Tenderness. (2014). Ross Wyatt
- Tenderized Round Steak Color. (2012). Crystal Ahrens
- Simulated Distribution Temperature. (2012). Samantha Greathouse

- **Master's Non-Thesis Committee Chair**

- Waygu Beef Value. (2016). Isaac Wenzel.

- **Master's Thesis and Non-Thesis Committee Member**

- Muscle type of Callipyge Sheep. (2015). Morgan McDuffie
- Breed Type influencing Sheep Growth. (2014). Brian Duvall
- BCS, BW, and Milk Weight Factors. (2014). Peter Coenen
- Consumer Purchasing Intent of Retail Meat. (2013). Tenille Slyvestor
- Parasitology of Spanish Boar Goats. (2012). Tia Johnson
- Condensed Tannins on House Fly Control. (2012). Cassie Schoenthal
- Aging and Temp on WBSF and CL of Pork Loins. (2010). Leslie Garcia

- **Service (10% Appointment)**

- Director of TSU Meat Laboratory Operations (2010 to 2019)
- Meat Judging Team Director (2010 to 2019)
- Product Development Team Director (2014 to 2019)
- Coordinator of TSU Meat Laboratory Social Media (2013-2019)
- University Research Council Committee (2016 to 2019)
- Institutional Biosafety Research Committee (2015 to 2019)
- Board Member, Pasture to Packer, Cooperative Ext. Service (2012 to 2019)
- Culinary Foodservice Demonstrations of carcass processing (2010 to 2019)
- Competitive Cooking Team Director (2014 to 2019)
- ASVT Graduate Faculty Committee (2014 to 2017)

- Meat Quiz Bowl Team Director (2010 to 2017)
- Championed Meat Laboratory Private/Public Joint Venture-Legend Meats (2013)
- Faculty Senate ANSC/WDMN Departmental Representative (2011 to 2013)
- Value-Added Meat Processing Workshops-Industry Partners (2010 to 2014)
- Alpha Gamma Rho Faculty Advisor (2011 to 2016)
- Superintendent Tarleton State University Invitational Meat Evaluation (2017)
- Asst. Supt. Tarleton State University Invitational Meat Evaluation (2010 to 2016)
- Asst. Supt. Tarleton State University Area Livestock Evaluation (2010 to 2014)
- Bi-monthly Meat Judging/Science Alumni Newsletter (2010 to 2013)
- North Texas Council for International Visitors (2010 to 2019)
 - Discuss operational focus of meat lab facility and provide opportunities for students (graduate & undergraduate) to enhance their understanding of international programs within the meat and food industry.
 - Moroccan
 - Germany
 - Australian/New Zealand
 - China
 - Japan
 - Brazil
 - United Kingdom
 - Argentina
- Meat Judging Alumni-Financial Support: **TOTALING \$109,150.00**
 - Coordinate and engage meat science and meat judging alumni in financial support of meat industry related programs.
 - Increase industry stakeholder engagement and financial support of research and academic programs.
 - 2018 - \$8,000.00
 - 2017 - \$28,000.00
 - 2016 - \$19,000.00
 - 2015 - \$9,000.00
 - 2014 - \$11,500.00
 - 2013 - \$14,725.00
 - 2012 - \$8,675.00
 - 2011 - \$10,000.00
 - 2010 - \$9,250.00
- TSU Meat Judging Team-Financial Support for Student Travel: **TOTALING \$83,450.00**
 - Coordinate and direct fundraising efforts for programs focused in the field of meat and food sciences.
 - Efforts enhanced the ability to recruit, engage, and provide career developmental opportunities for graduate and undergraduate students.
 - Student guided fundraising efforts which include judging workshops and an annual steer/livestock show in collaboration with livestock judging team.
- FFA Meat Judging Advising and Recruitment
 - Weatherford I.S.D.
 - Seymour I.S.D.
 - Allen I.S.D.
 - Stephenville I.S.D.
 - Bridgeport 4H

Sr. Food Technologist, January 2008 to December 2009

Tyson Foods, Inc. 2210 Don Tyson Pkwy Springdale, AR 72762

- Evaluate and implement technologies for the extension of food product shelf-life.
- Championed increased foodservice fresh poultry shelf-life from 14 d to 28 d.
- Championed high pressure processing of fully-cooked poultry products.
- Culinary Experience for Product Developers: completed 140 hours of classroom instruction.
- Duties: design, conduct, and assist food technologists' in the evaluation of technologies for extension of shelf-life with new and existing product categories. In addition, conduct research projects aimed at establishing food safety policies. Innovation and development of technologies for fresh and fully cooked shelf-life extension. Conduct centralized research projects for multi business unit applications. Continued support of academic based research through manuscript reviews. Focus of research on poultry, beef, and pork with a small engagement in fully-cooked products.

Graduate Research/Teaching Assistant, May 2004 to January 2008

University of Arkansas 1120 W. Maple St. AFLS B114 Fayetteville, AR 72701

- Dissertation: "Resolving the fresh and cooked color implications of dark-cutting beef through the use of acid enhancement."
- Research centered on the evaluation of post-mortem muscle quality of dark-cutting beef through instrumental texture, fresh and cooked color, and sensory appraisal.
- Duties: interim meat abattoir manager, laboratory procedures for chemical, textural, color quantification, manuscript reviews, and teaching assistant for meat science and animal production-based courses.

Cooperative Extension Agent, 4-H, July 2002 to May 2004

University of Arkansas, Benton County, 1204 SW 14th Bentonville, AR 72712

- Coordinate and conduct 4-H program activities for approximately 400 youth participants and 250 adult volunteers.
- Duties: assist in the advisement of committees for program development, financial procurement, club organization, and youth enhancement. Additionally, advised youth participants in team building opportunities through the participation of teen leaders, judging teams, and after-school programs.

Graduate Research/Teaching Assistant, August 2000 to May 2002

Oklahoma State University 101 Animal Science Building Stillwater, OK 74078

- Thesis: "Enhancement of the Oklahoma sheep industry through value added product development and allelic composition characterization."
- Researched solution enhancement of post-mortem lamb muscles and genetic quantification of sheep codons for scrapie resistance.
- Duties: muscle color chemistry, muscle fabrication, meat texture evaluation, carcass data collection, multi-institutional collaborative research, and cooperative extension functions.

Undergraduate Research Assistant, August 1997 to May 2000

Kansas State University 232 Weber Hall Animal Science and Industry Manhattan, KS 66506

- Monogastric research lab evaluating nutrient requirements of early-weaned pigs, energy requirements for sows, and cost-effective ingredients for optimum pork production.
- Duties: assist graduate students with thesis and dissertation research data collection, particle size assessment, protein extraction, and swine production operations.

GRANTS AND CONTRACTS:

IN REVIEW (\$0.00)

FUNDED (\$3,295,184.83)

Note: Project Investigator reflected with *, Collaborator reflected with **.

S. L. Douglas, J. J. Ball, S. P. Rodning, D. R. Mulvaney, and **J. T. Sawyer****. 2025. Investigating consumer preference for novel, nutrient-enhanced ground beef products. Alabama Cattlemen's Association (Beef Checkoff Money). \$10,000.000

J.T. Sawyer*. 2024. Graduate Student Assistantship Support. WinPak Ltd. \$25,000.00

A. D. Belk, **J. T. Sawyer****. 2023. Predicting the ground beef shelf life from the initial microbial community profile. Alabama Cattlemen's Association (Beef Checkoff Money). \$10,000.00

M. K. Mullenix, A. D. Belk, C. L. Armstrong, S. P. Rodning, and **J. T. Sawyer***. 2023. Implant strategies in grazing stocker calves. Zoetis Veterinary Medicine Research and Development. \$322,711.31

A. D. Belk, **J. T. Sawyer***. 2023. Graduate Student Assistantship Support. WinPak Ltd. \$25,000.00

A.D. Belk, **J.T. Sawyer****. 2022. The wisdom of the quorum: how biofilm microbiomes can support or inhibit listeria monocytogenes growth in small meat processing facilities. USDA. \$648,327.00

M. P. Wagoner, V. E. Zorn, A. D. Belk, D. R. Mulvaey, and **J. T. Sawyer***. 2022. Sustainable packaging technologies on storage of fresh beef steaks. Alabama Cattlemen's Association (Beef Checkoff Money). \$10,000.00

A. D. Belk, **J. T. Sawyer****, D. R. Mulvaney, and A. Krikorian. 2022. An investigation of the impact of transportation stress on beef microbiomes and pathogen shedding. Alabama Cattlemen's Association (Beef Checkoff Money). \$10,000.00

M. K. Mullenix, A. D. Belk, S. P. Rodning, and **J. T. Sawyer***. 2022. Implant strategies in backgrounding stocker calves. Zoetis Veterinary Medicine Research and Development. \$413,480.23

M. K. Mullenix, S. L. Dillard, **J. T. Sawyer****, and S. P. Rodning. 2021. The effect of Rumensin or Bovatec feeding sequence on stocker cattle growth performance, health, and grazing efficiency. 2021. Elanco Animal Health. \$140,000.00

- S. L. Dillard, M. K. Mullenix, S. P. Rodning, R. Prasad, D. Russell, **J. T. Sawyer****, and L. S. Silva. 2021. Master your business: An online certificate course for forage and livestock farmers. University of Arkansas \$49,779.00
- M. K. Mullenix, S. L. Dillard, **J. T. Sawyer****, L. S. Silva, and R. Prasad. 2021. Improving further processing of forage and feed samples for determining nutritive value in livestock systems. Auburn University College of Agriculture AAES Equipment Program. \$16,421.16
- A. Goetsch, D. Mortley, D. N. Tackie, **J. T. Sawyer****, and N. Gurung. 2021. Hempseed meal from hemp oil processing – A new protein supplement for meat goats in the U.S. 1890 Institution Teaching, Research and Extension Capacity Building Grant Program, USDA. \$500,000.00
- C. Armstrong, M. K. Mullenix, S. P. Rodning, and **J. T. Sawyer***. 2021. Implantation Impacts on Rate of Weight Gain in Suckling Beef Calves. Zoetis Veterinary Medicine Research and Development. \$214,676.00
- C. Armstrong, M. K. Mullenix, P. W. Christopherson, M. F. Chamorro, S. P. Rodning, and **J. T. Sawyer***. 2021. Safety and Pharmacokinetics of Implantation on Rate of Weight Gain in Suckling Beef Calves. Zoetis Veterinary Medicine Research and Development. \$111,134.00
- S. P. Rodning, P. H. Walz, P. Dyce, K. Ross, L. Gideons, **J. T. Sawyer****, J. G. Schnuelle, R. Hopper. 2021. Commercial Product Research and Development Requiring Highly Accurate Pregnancy Assessments in Cows and Heifers. Zoetis Global Livestock Diagnostics Innovation. \$118,195.00
- M. K. Mullenix, S. P. Rodning, C. Armstrong, **J. T. Sawyer***. 2020. Impact of Implants on beef calves in Grazing Systems. Zoetis Veterinary Medicine Research and Development. \$194,670.00
- M. K. Mullenix, S. P. Rodning, C. Armstrong, **J. T. Sawyer***. 2020. Safety of Implants on beef calves in Grazing Systems. – Zoetis Veterinary Medicine Research and Development. \$168,210.00
- D. R. Mulvaney, W. Bergen, T. D. Brandebourg, L. Dillard, P. W. Dyce, L. W. Greene, M. K. Mullenix, R. Muntifering, **J. T. Sawyer****, E. A. Staiger. 2020. A Sustainable, Efficient, Profitable Beef Production Future. USDA National Needs Fellowship - \$246,000.00
- J. T. Sawyer***, H. R. Smith, A. G. Parnell, T. Reyes, L. E. Yoder, D. R. Mulvaney, T. Bonner. 2020. Meat packaging influence on fresh and cooked composition of ground beef. \$10,000.00 – Alabama Cattlemen’s Association (Beef Checkoff Money).
- P. Walz, D. A. Tigue, L. Dillard, L. S. DaSilva, S. M. Bachamp, M. C. Ortega, W. Kelley, M. Runge, M. Elmore, **J. T. Sawyer****, S. P. Rodning, and M. K. Mullenix. – Alabama Agricultural Experiment Station. 2020. \$149,702.00
- T. Bonner, B. Wilborn, H. Smith, J. Rehm, **J. T. Sawyer***. 2019. Vacuum packaging Form-Filling VarioVac machine. \$122,450.00 – WinPak Corporation.
- E. A. Staiger, **J. T. Sawyer****, D. R. Mulvaney, P. W. Dyce. 2020. High Impact Experience: Virtual laboratory learning for Animal Sciences. – Office of Provost – Biggio Technology Resource. \$5,203.84

- J. T. Sawyer***. Undergraduate scholarships for Southwest Meat Association. 2017. \$4,500.00 – Southwest Meat Association.
- J. T. Sawyer and R. Cauble***. Competitive Cooking Team Sponsorship, HICO Steak Cookoff. \$500.00 – Ten xXx Ranch.
- J. T. Sawyer***. Undergraduate scholarships for Southwest Meat Association conference. 2016. \$3,000.00 – Private Donations, Meat Industry Alumni.
- J. T. Sawyer*** and J. Mitchell. 2016. Lowline Angus-Waygu Carcass characteristics, graduate assistantship. \$35,000.00 - Ten xXx Ranch.
- J. T. Sawyer*** and K. George. 2014. Beef Carcass Hot-Boning Testing, postmortem characteristics. \$10,407.52 – Marel Processing.
- J. T. Sawyer*** and L. Barton. 2013 through 2016. Sustainable pork production: A modified production practice. Undergraduate student worker funding. \$112,000.00 – Legend Meats.
- J. T. Sawyer***, D. Smithyman, and R. Perschon. 2013. Beef and Pork Carcass Washing Technologies: An Innovative approach to current practices. \$11,720.00 – Advanced Food Technologies.
- J. T. Sawyer*** and J. Costilla. 2013. Latin America Value-Added Meat Processing Workshop. \$3,500.00 – SunOpta Ingredient Technologies.
- J. T. Sawyer*** and J. Costilla. 2012. Fresh and Cooked Product Evaluations. \$5,790.00 – SunOpta Ingredient Technologies.
- J. T. Sawyer***. 2012. Instron testing machine for meat, food, and animal products. \$20,000.00 - Tarleton State University Office of Sponsored Research.
- J.T. Sawyer***. 2012. A novel approach to modifying muscle tenderness of the biceps femoris, semimembranosus, and triceps brachii on sensory flavor, instrumental tenderness, and surface color variations. \$7,250.00 - Tarleton State University Office of Sponsored Research.
- J. T. Sawyer***. 2011. Temperature abuse on surface discoloration of retail beef cuts. \$5,750.00 -Tarleton State University Office of Sponsored Research, Organized Research Grants.
- J. K. Apple, **J. T. Sawyer****, and J. W. S. Yancey. 2007. Effects of enhancement and packaging on the lateral and longitudinal characterization of muscle quality in the *biceps femoris* from heavy beef carcasses. \$30,430.00 - National Cattleman’s Beef Association.
- J. K. Apple, J. W. S. Yancey, and **J. T. Sawyer****. 2007. Use of subcutaneous fats/lipids to improve the fresh quality and cooked palatability of *longissimus* muscle steaks from carcasses with insufficient marbling to grade USDA Choice or higher. \$46,300.00 - National Cattleman’s Beef Association.
- J. T. Sawyer*** and J. K. Apple. 2006. Value-added effects on Dark-cutting beef. \$56,600.00 - Arkansas Beef Council (Beef Checkoff money).

J. K. Apple, **J. T. Sawyer****, M. S. Lee, and J. W. S. Yancey. 2006. Factors influencing the ability of vacuum-packaged beef to bloom. \$63,275.00 - Arkansas Beef Council (Beef Checkoff money).

UNFUNDED (\$5,800,369.22)

S. L. Douglas, **J.T. Sawyer**, D. R. Mulvaney, P. Banerjee. 2025. Impact of Dry Lot Backgrounding or Grazing Performance and Carcass Characteristics of Crossbred (Beef x Dairy) Cattle. Southeast Dairy Milk Checkoff Program. \$120,047.20

J. T. Sawyer, S. L. Douglas, D. R. Mulvaney. 2024. Improving nutritional density of high fat ground beef through added beef heart: A consumer, economic, and meat quality approach. Arkansas Beef Council – Beef Checkoff, \$66,703.33

S. P. Rodning, C. Armstrong, **J.T. Sawyer**. 2023. Implant strategies for dairy-beef crossbred cattle during finishing. Zoetis Veterinary Medicine Research and Development. \$829,489.20

C. Young, H. Burdick, S. Falkenberg, **J. T. Sawyer**, M. K. Mullenix, D. A. Tigue, M. George, N. Speer, A. T. Frazier, M. Edmondson, and S. P. Rodning. 2022. FMD Vaccine: Logistics, Administration, and Traceability. USDA NIFA Agricultural Biosecurity. \$649,477.23

J. T. Sawyer, D. Martin, S. P. Rodning, K. Hiltbrand, K. Corbitt, M. Coursen, and D. R. Mulvaney. 2022. Beef producer knowledge, attitudes, perceptions of defense security. Alabama Cattlemen's Association (Beef Checkoff Money). \$10,000.00

J. T. Sawyer, D. Martin, K. Hiltbrand, K. Corbitt, M. Coursen and D. R. Mulvaney. 2022. An analysis of Alabama citizen/consumer beef perceptions. Alabama Cattlemen's Association (Beef Checkoff Money). \$10,000.00

M. K. Mullenix, S. P. Rodning, **J. T. Sawyer***. 2022. Vaccine evaluation in stocker calves. Zoetis Veterinary Medicine Research and Development. \$414,036.00

J. M. Gonzalez and **J. T. Sawyer****. 2022. LPS Challenge in Beef Calves. Phibro Animal Health. \$113,446.46

S. Bennett, S. Locke, D. Martin, **J. T. Sawyer****, and D. R. Mulvaney. 2021. Use of video influence to overcome false perceptions of beef. Alabama Cattlemen's Association. \$10,000.00

S. Bennett, S. Locke, D. Martin, **J. T. Sawyer****, and D. R. Mulvaney. 2021. An analysis of Alabama citizen/consumer beef perceptions. Alabama Cattlemen's Association. \$8,800.00

S. Locke, S. Bennett, D. Martin, **J. T. Sawyer****, and D. R. Mulvaney. 2021. Measuring agricultural means of influence on young adults via Instagram. Alabama Cattlemen's Association. \$10,000.00

A. G. Parnell, S. Locke, S. Bennett, **J. T. Sawyer****, and D. R. Mulvaney. 2021. Examination of different modes of communication to influence perceptions of beef. Alabama Cattlemen's Association. \$10,000.00

- S. Locke, S. Bennett, D. Martin, **J. T. Sawyer****, D. R. Mulvaney. 2021. Young cattlemen's leadership program (YCLP) ripple effects on leadership, advocacy, and influence. Alabama Cattlemen's Association. \$10,000.00
- M. K. Mullenix, P. W. Christopherson, L. Starkey, B. L. Blagburn, P. H. Walz, S. P. Rodning, and **J. T. Sawyer***. 2021. Parasitology efficacy of commercial anthelmintics in stocker calves. Zoetis Veterinary Medicine Research and Development. \$454,422.00
- S. Cho, **J. T. Sawyer****, K. Matthews, D. Boursassa. 2021. Reduction of raw poultry and meat foodborne pathogens using photo-active antimicrobials. Agriculture and Food Research Initiative, Foundational and Applied Science. USDA. \$650,000.00
- M. K. Mullenix, P. W. Christopherson, L. Starkey, B. L. Blagburn, P. H. Walz, S. P. Roding and **J. T. Sawyer***. 2021. Evaluation of commercial anthelmintics on grazing cattle. Zoetis Veterinary Medicine Research and Development. \$579,168.45
- L. E. Yoder, H. R. Smith, T. Reyes and **J. T. Sawyer***. 2020. Evaluation of the sensory and color effects on pork and beef retail cuts aged in roll stock packages with different oxygen transmission rates. \$44,194.81 – Foundation for Meat and Poultry Research and Education.
- J. T. Sawyer***, H. R. Smith, L. E. Yoder, and T. Reyes. 2020. Aging and time of portioning on flavor, surface color and tenderness of retail ready beef and pork cuts. \$185,800.00 – Foundation for Meat and Poultry Research and Education.
- L. E. Yoder, H. R. Smith, A. G. Parnell, T. Reyes, D. R. Mulvaney, T. Bonner and **J. T. Sawyer***. 2020. Evaluating top sirloin steaks packaged in traditional and sustainable packaging types with differing barrier film thickness to elongate shelflife. \$10,000.00 – Alabama Cattlemen's Association (Beef Checkoff Money).
- J. T. Sawyer***, H. R. Smith, A. G. Parnell, T. Reyes, L. E. Yoder, D. R. Mulvaney, and T. Bonner. 2020. Frozen aging influence of retail beef portioned cuts. \$10,000.00 – Alabama Cattlemen's Association (Beef Checkoff Money).
- T. D. Brandebourg, **J. T. Sawyer****, and S. Clark-Price. Strengthening our nutritional security by validating the BaconBit as an innovative biometric. – Alabama Agricultural Experiment Station. 2020. \$49,680.00
- J. T. Sawyer***. Sustainable packaging platforms for consumer retail meat. Alabama Agricultural Experiment Station. 2020. \$48,368.25
- D. Bourassa, S. Cho, **J. T. Sawyer****, and K. Matthews. Photo-active antimicrobial treatment for raw poultry and meat products. USDA-NIFA, Agriculture and Food Research Initiative – Foundational and Applied Science. 2020. \$500,000.00
- J. T. Sawyer*** and T. D. Brandebourg. Soft skills ready: An approach to student preparation for the pork industry. 2020. \$60,000.00. National Pork Board

- J. T. Sawyer*** and H. R. Smith. Impact of vacuum packaging properties on fresh and cooked composition of ground beef utilizing varying sources of cull bull, cull cow, and fed beef trimmings. 2020. \$215,832.11 – National Cattlemen’s Beef Association, Beef Checkoff Dollars.
- S. M. Bachamp, D. R. Mulvaney, **J. T. Sawyer***. Implications of prolonged fescue toxicity on beef quality characteristics in the biceps femoris, gluteus medius and subscapularis. 2019. \$177,423.46 – Foundation for Meat and Poultry Research and Education.
- K. Mullenix, S. Rodning, M. Runge, **J. T. Sawyer****, K. Kelley, A. Tigue, W. Abdela, A. Lovelady, N. Gurung, G. Reddy, M. Burns, B. Bolt, N. Smith. 2019. Systems-level management approaches for optimizing profit and improving resource efficiency in southeastern cow-calf operations. \$1,000,000.00 - Agriculture and Food Research Initiative – Foundational and Applied Science.
- D. R. Mulvaney and **J. T. Sawyer****. 2019. Impact of Meat Science education and messaging on adoption of safe beef handling techniques and cookery methods by Generation “Z”. \$10,000.00 – Alabama Cattlemen’s Association (Beef Checkoff Money).
- A. Frugé, **J. T. Sawyer***, and A. Morey. 2019. Development and clinical determination of health benefits of functional minimally processed meat products. \$249,968.00 – Foundation for Meat and Poultry Research and Education.
- J. T. Sawyer***, R. Cauble, F. Francis, A. Werner. 2017. Evaluation of vacuum packaging properties for fresh beef cuts designated for the retail consumer counter. \$19,212.20 – Texas Beef Council (Beef Checkoff Money).
- J. T. Sawyer*** and R. Cauble. 2016. Feed efficiency and carcass evaluation of low line Angus cattle. \$35,600.00 – Sustainable Agriculture Research and Education (SARE).
- J. T. Sawyer***, R. Cauble, T. Glascock. 2016. Evaluating quality characteristics of branded beef products. \$27,992.20 – Texas Beef Council (Beef Checkoff Money).
- J. J. Ball, **J. T. Sawyer***, E. B. Kegley, J. K. Apple. 2015. Comparison of Akaushi Beef with our branded Beef programs. \$13,511.00 - Heartbrand Beef – Private Funding.
- J.T. Sawyer***, B. D. Lambert, H. A. Ramirez, W. H. Weems, S. Mukhtar. 2014. Addressing food sustainability through multi-disciplinary education and outreach: A model for engaging bilingual students for career enhancement. \$770, 000.00 – Capacity Building Grants for Non Land Grant Colleges of Agriculture.
- L. A. Adcock, **J. T. Sawyer***, R. P. Wyatt, J. J. Ball. 2014. Effects of aging on fresh muscle characteristics and palatability traits in branded beef programs. \$11,000.00 – Sustainable Agriculture Research and Education (SARE) Program, Southern Region.
- J. J. Ball, **J. T. Sawyer***, L. A. Adcock, R. P. Wyatt. 2014. Oat fiber in ground beef patties for use in international markets. \$9,721.00 – Sustainable Agriculture Research and Education (SARE) Program, Southern Region.

- C. Ahrens, **J. T. Sawyer***. 2012. Do alternative packaging methods of beef subprimals impact fresh color characteristics during retail display. \$10,884.00 - Sustainable Agriculture Research and Education (SARE) Program, Southern Region.
- J. T. Sawyer***. 2012. A Novel Approach to Modifying Muscle Tenderness of the Biceps Femoris, Semimembranosus, and Triceps Brachii on Sensory Flavor, Instrumental Tenderness, and Surface Color Variations. \$14,045.50 – National Cattleman’s Beef Association (Beef Checkoff Money).
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- P. Vining, K. Mullenix, A. Cantrell, S. P. Rodning, **J. T. Sawyer**, B. Wilborn, D. A. Tigue. 2020. Locally processed red meats. Alabama Cooperative Extension Systems Agricultural and Natural Resources Publication.
- P. Vining, K. Mullenix, **J. T. Sawyer**, S. P. Rodning, D. A. Tigue, and B. Wilborn. Preparing feeder calves for harvest. Alabama Cooperative Extension Systems Agricultural and Natural Resources Publication.
- S. Rodning, E. Brantley, L. Dillard, J. Elmore, M. Elmore, A. Gamble, K. Kelley, K. Kesheimer, K. Mullenix, M. Runge, D. Russell, **J. Sawyer**, S. Thomas, G. Thompson and A. Tigue. 2020. Beef Cattle Management in Uncertain Times. Alabama Cooperative Extension Systems Agricultural and Natural Resources Publication.
- S. Rodning, K. Mullenix, A. Tigue, J. Elmore, M. Elmore, and **J. T. Sawyer**. 2020. Alabama Beef Quality Assurance: Benchmarking for Quality. Alabama Cooperative Extension Systems Agricultural and Natural Resources Publication. ANR-1286.
- S. Rodning, A. Tigue, D. Daniel, J. Elmore, K. Mullenix, and **J. T. Sawyer**. 2020. Alabama Beef Quality Assurance: Implanting Cattle Properly. Alabama Cooperative Extension Systems Agricultural and Natural Resources Publication. ANR-1281.
- S. Rodning, K. Mullenix, A. Tigue, P. Vining, and **J. T. Sawyer**. 2020. Alabama Beef Quality Assurance: Avoiding Residue from Feed. ANR-1284. Auburn University Cooperative Extension System.
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- J. T. Sawyer**, J. K. Apple, Z. B. Johnson. 2007. The impact of acidic marination concentration and sodium chloride on sensory and instrumental color characteristics of dark-cutting beef. Research Series. 553. pp 92-95. University of Arkansas, Fayetteville.
- M. S. Lee, J. K. Apple, J. W. S. Yancey, **J. T. Sawyer**, M. M. Brashears, and T. P. Stephens. 2007. Influence of sanitizing feedlot pens on microbial populations and cattle performance. Research Series 553. Pp 34-38 University of Arkansas, Fayetteville.
- J. T. Sawyer**, R. T. Baublits, J. K. Apple, and Z. B. Johnson. 2006. Longitudinal and lateral characterization of color stability in the beef *semimembranosus*. Research Series 545. pp 47-51. University of Arkansas, Fayetteville.
- J. T. Sawyer**, R. T. Baublits, J. K. Apple, J.-F. Meullenet, Z. B. Johnson, and T. K. Alpers. 2006. Lateral and longitudinal characterization of instrumental tenderness and sensory characteristics in the beef *semimembranosus*. Research Series 545. pp 43-46. University of Arkansas, Fayetteville.
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- J. Sawyer**, J. C. Brooks, L. L. Locke, and G. Q. Fitch. 2002. The effects of product enhancement on palatability and shelf-life characteristics of lamb retail cuts. Animal Science Research Report P-993. Article no. 6 Oklahoma State University, Stillwater.
- J. T. Sawyer**, J. C. Woodworth, P. R. O'Quinn, J. L. Nelssen, M. D. Tokach, R. D. Goodband, and S. S. Dritz. 1999. Effects of diet processing method on growth performance of segregated early-weaned pigs. SRP 841. pp 72-75. Kansas State University, Manhattan.

- J. C. Woodworth, M. D. Tokach, J. L. Nelssen, R. D. Goodband, **J. T. Sawyer**, and C. A. Maxwell. 1999. Effects of different zinc oxide sources on weanling pig growth performance. SRP. 841. pp 54-57. Kansas State University, Manhattan.
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- J. C. Woodworth, M. D. Tokach, J. L. Nelssen, R. D. Goodband, **J. T. Sawyer**, K. A. Maxwell, and T. M. Fakler. 1999. The interactive effects of zinc source and feed grade medication on weanling pig growth performance. SRP. 841. pp 63-66. Kansas State University, Manhattan.
- J. C. Woodworth, R. D. Goodband, J. A. Unruh, J. L. Nelssen, M. D. Tokach, P. R. O'Quinn, A. T. Waylan, and **J. T. Sawyer**. 1999. Interactive effects of modified tall oil and fat source on growth performance and carcass characteristics of finishing barrows and gilts. SRP. 841. pp 159-164. Kansas State University, Manhattan.
- G. S. Grinstead, R. D. Goodband, J. L. Nelssen, M. D. Tokach, B. Reibold, **J. Sawyer**, and M. Molitor. 1998. Evaluation of a high-protein whey protein concentrate and spray-dried animal plasma on growth performance of weanling pigs. SRP. 819. pp 28-37. Kansas State University, Manhattan.
- C. J. Samland, R. E. Musser, J. K. Peters, **J. T. Sawyer**, K. Q. Owen, and D. L. Davis. 1998. Ovulation and fertilization rate of gilts provided additional L-carnitine and chromium nicotinate. SRP. 819. pp 25-27. Kansas State University, Manhattan.
- G. S. Grinstead, M. D. Tokach, R. D. Goodband, J. L. Nelssen, **J. Sawyer**, K. Maxwell, R. Stott, and A. Moser. 1998. Influence of spirulina plantesis on growth performance of weanling pigs. SRP. 819. pp 67-74. Kansas State University, Manhattan.

POPULAR PRESS ARTICLES

- E. Johnson, **J. T. Sawyer**, D. R. Mulvaney. Exploring Cattle Producer Perspectives on Sustainability in Alabama. Alabama Cattlemen Magazine. Alabama Cattlemen's Association – September 1, 2025.
- J. T. Sawyer**. 2024. Where's the Beef. Alabama Cattlemen Magazine. Alabama Cattlemen's Association – December 1, 2024.
- R. A. Norton, S. P. Rodning, D. J. Collier, P. H. Nelson, N. Simmons, E. Monu, D. V. Bourassa, and **J. T. Sawyer**. 2021. Empowering food and agriculture to respond as critical infrastructure to COVID-19 and future pandemics Part 2: The pandemic takes hold in the critical infrastructure of agriculture and food. The McCray Institute for Cyber and Critical Infrastructure Security April, 2021.
- R. A. Norton, S. P. Rodning, D. J. Collier, P. H. Nelson, N. Simmons, E. Monu, D. V. Bourassa, and **J. T. Sawyer**. 2021. Empowering food and agriculture to respond as critical infrastructure to COVID-19 and future pandemics Part 3: Strategic implications and critical infrastructure vulnerabilities. The McCray Institute for Cyber and Critical Infrastructure Security April, 2021.

- R. A. Norton, S. P. Rodning, D. J. Collier, P. H. Nelson, N. Simmons, E. Monu, D. V. Bourassa, and **J. T. Sawyer**. 2021. Empowering food and agriculture to respond as critical infrastructure to COVID-19 and future pandemics Part 4: Grazy zones, black swans, and gray rhinos – preparing for disruption. The McCray Institute for Cyber and Critical Infrastructure Security April, 2021.
- H. R. Smith and **J. T. Sawyer**. 2020. Cuts from the Butcher Block: Where's My Butcher Beef. Alabama Cattlemen Magazine. Alabama Cattlemen's Association – June 1, 2020.
- R. A. Norton, S. P. Rodning, D. J. Collier, P. H. Nelson, N. Simmons, E. Monu, D. V. Bourassa, and **J. T. Sawyer**. 2020. Empowering food and agriculture to respond as critical infrastructures to COVID-19 and future pandemics. McCrary Institute.
- E. Monu, D. Bourassa, D. A. Tigue, S. P. Rodning, R. Norton, and **J. T. Sawyer**. 2020. Impact of SARS-CoV-2 on the Meat Industry and Food Safety. Food Safety Magazine – June 16, 2020.
- H. R. Smith and **J. T. Sawyer**. 2020. Cuts from the Butcher Block: Alternative Beef Marketing. Alabama Cattlemen Magazine. Alabama Cattlemen's Association.

INVITED SPEAKING ENGAGEMENTS

1. AL National Guard – Food and Agricultural Security. 2024. “Meat Industry Vulnerabilities”. Auburn, AL
2. Beef Tips – Golden State Foods. 2024 . “Meat Industry Topics”. Auburn, AL
3. BalChem Pet Forum – Imaginarium. 2023. “Packaging Technologies are Evolving”. Auburn, AL
4. WINPAK Ltd. – Protein Sales Meeting. 2023. “Future of meat packaging research”. Auburn, AL
5. AC Legg – Sales Training. 2022. “Tools for Answering Meat Customer Questions”. Auburn, AL
6. WINPAK Ltd. – Technical Training. 2022. “Meating of the Packaging Minds”. Auburn, AL
7. BalChem Pet Forum – Imaginarium. 2022. “Meating the Packaging Demands of the Future”. Auburn, AL
8. Tuskegee Beef Field Day – Extension. 2022. “Meat (Beef) Industry Tools”. Selma, AL
9. Golden State Foods – Supervisor Training. 2022. “Beef Tips”. Auburn, AL
10. Aptar Packaging – In Service Training. 2022. “Meat Industry Toolbox”. Auburn, AL
11. Alabama Veterinary Medical Association. 2022. “Disruptions to the Meat Industry”. Auburn, AL
12. ANSC 1100. 2021. Careers and Orientation. “What do I need for Success in College”. Auburn, AL
13. National Junior Angus Association. 2021. “Beef Industry Technology”. Auburn, AL.

14. 20th Special Forces Group (Airborne). 2021. "Field Slaughter and Processing". Special Forces Non-Trauma Module Course.
15. Alabama Farmers Federation. 2020. "Pandemic Meat Industry Influence". Alabama AG Cast. Hosted by Brady Ragland.
16. ANSC 1100. 2020. Careers and Orientation. "Meat Industry Careers and Expectations". Zoom Audience.
17. Alabama Farmers Federation. 2020. Beef Commodity Committee. "Real Answers to Fake Meat". Montgomery, AL
18. Food Safety Magazine. 2020. Podcast. Impacts of COVID-19 on meat industry.
19. Alabama Farmers Federation. 2020. Internal Training. "Meat and Society". Montgomery, AL
20. Alabama Cattlemen's Association. 2020. Webinar. "Marketing Meat Direct to Consumers-The Processing Process".
21. ANSC 1100. 2019. Careers and Orientation. "Meat Industry, What can it Provide"? Auburn University, Auburn AL.

BOOKS

Leanne Dillard, Adam Rabinowitz, Audrey Gamble, David Russell, **Jason Sawyer**, Katelyn Kesheimer, Ken Kelley, Kim Mullenix, Liliane Silva, Max Runge, Rishi Prasad, and Soren Rodning. Alabama Forages Handbook
Publisher Alabama Cooperative Extension Service

PATENT APPLICATIONS

R. T. Baublits and **J. T. Sawyer**. 2010. Method of packaging fresh meat products in a low oxygen environment, meat color improvement solution and pre-packaged food product.

HONORS / AWARDS

2022 University Author Award – Alabama Forages Handbook
2015 College of Agriculture and Environmental Sciences – Excellence in Student Success
2014 Heart of 4H Volunteer Award

GRADUATE STUDENT AWARDS

2025 Auburn University Outstanding Doctoral Graduate Student – Savannah Douglas
2025 Auburn University Outstanding Master's Graduate Student – Ella Johnson
2022 Auburn University Outstanding Master's Graduate Student – Tristan Reyes
2021 Auburn University Outstanding Master's Graduate Student – Hunter Smith

GIFT-IN-KIND TOTALING \$33,800.00

2017 Water Activity Meter

Value: \$2,500.00

Donated By: Ronnie Bowles Tex xXx Ranch

Location: Tarleton State University Meat Lab

2011 Meat Product Formulation Ingredients

Value: \$800.00

Cargill Fresh Meat Solutions

Tarleton State University Meat Lab

2015 Vacuum Package Bags

Value: \$3,500.00

Donated By: Cryovac Sealed Air Corporation

Location: Tarleton State University Meat Lab

2010 Three-Tiered Retail Display Unit

Value: \$ 12,000.00

Donated By: H-E-B Stores, San Antonio, TX

Location: Tarleton State University Meat Lab

2015 Carcass Washing Antimicrobial Ingredients

Value: \$1,200.00

Donated By: Zoetis

Location: Tarleton State University Meat Lab

2010 Lamb Skinning Cradle

Value: \$ 2,500.00

Donated By: University of Arkansas Animal
Science Dept., Fayetteville, AR

Location: Tarleton State University Meat Lab

2013 Tipper Tie Bag Clipping Machine

Value: \$2,500.00

Donated By: Winn Meat Co

Location: Tarleton State University Meat Lab

2010 Formaco Multi-needle Meat Injector

Value: \$ 8,000.00

Donated By: Tyson Foods, Inc., Springdale, AR

Location: Tarleton State University Meat Lab

2011 Antimicrobial and Carcass Washing Ingredients

Value: \$500.00

Donated By: Purac Ingredient Solutions

Location: Tarleton State University Meat Lab

2010 Vacuum Package Bags and Retail Display Trays

Value: \$ 1,500.00

Donated By: Cryovac Sealed Air Corporation,

Location: Tarleton State University Meat Lab

2011 Fresh Meat Retail Display Materials

Value: \$500.00

Donated By: Cryovac Sealed Air Corporation

Location: Tarleton State University Meat Lab

2010 TSU Meat Judging Camp Supplies

Value: \$500.00

Donated By: Pig Improvement Corporation,
Hendersonville, TN; ConAgra Foods, Omaha, NE;

TSU Agricultural Services Department

Location: Tarleton State University Meat Lab

2011 Hot Dog Casings

Value: \$300.00

Tyson Foods, Inc

Location: Tarleton State University Meat Lab

PROFESSIONAL AFFILIATIONS/ACTIVITIES:

American Meat Science Association
American Society of Animal Science
North American Meat Processors Association
Southwest Meat Association
Southeast Meat Association
Alabama Cattlemen's Association
American Meat Science-Meat Judging Coaches Association
University of Arkansas Graduate Student Association
Oklahoma State University Graduate Student Association
Kansas State University Wool Judging Team
Kansas State University Block and Bridle
Barton County Community College Ag Club
4H Member: 12 years
FFA Member: 4 years

TEACHING/COACHING/COMMUNITY SERVICE EXPERIENCES:

East Alabama Food Bank – Volunteer Worker
Volunteer Youth Sports – PeeWee Basketball Lee Scott Academy
Volunteer Youth Sports Coach – Auburn Youth Lacrosse Club
Volunteer Youth Sports Coach – Soccer, Auburn Parks and Recreation
Volunteer Youth Sports Coach – Lacrosse, Greater Birmingham Youth Lacrosse
ANSC 2350 Anatomy and Physiology, Tarleton State University
ANSC 2101 Animal Science Industry, Tarleton State University
ANSC 1051 Introduction to Livestock Industry, University of Arkansas
ANSC 3613 Meat Science, University of Arkansas
ANSC 4272 Sheep Production, University of Arkansas
ANSCI 4553 Sheep Science, Oklahoma State University
ANSI 2254 Meat Animal and Carcass Evaluation, Oklahoma State University
Collegiate Meat Judging Team, Tarleton State University 2010 – 2019
Academic Meat Science Quiz Bowl Team, Tarleton State University 2010 - 2019
World Dairy Expo Youth 4H Judging Contest, 12th Overall Team, 2004
Arkansas Dairy Judging Team, State Champions, 2004
National 4-H Livestock Skillathon Contest, 12th Overall Team, 2003
Arkansas Livestock Skillathon State Champions, 2003
Arkansas Dairy Quiz Bowl, Jr. & Sr. Division State Champions, 2003
Arkansas Parliamentary Procedure Team State Champions, 2003
National Youth Invitational Dairy Judging Contest, 10th Overall Team, 2003
Arkansas Beef Quiz Bowl State Champions, 2002