

Payton Lane Dahmer, Ph.D.

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EDUCATION

Kansas State University – Manhattan, KS May 2023
Doctor of Philosophy in Animal Science
Dissertation: “Nutritional and management strategies to improve beef and pork production efficiency.”

Kansas State University – Manhattan, KS December 2020
Master of Science in Animal Science
Thesis: “The impacts of feed additives to improve performance in nursery pigs and Boer goats”

Kansas State University – Manhattan, KS May 2019
Bachelor of Science in Agriculture
Major: Animal Sciences and Industry (Business Option)

Butler Community College – El Dorado, KS May 2017
Associates of Science in Agriculture

EMPLOYMENT

Kansas State University – Department of Animal Sciences & Industry June 2023 - Present
Instructor and Livestock Judging Team Coach
KSU Sheep and Goat Center Faculty Supervisor
Appointment: 100% teaching

EXPERIENCE

Coaching Experience

Assistant Coach, Kansas State University Livestock Judging Team 2019 - 2021

- 2020 National Champion Livestock Judging Team
 - 10 undergraduate students representing 8 states
 - Fielded 3 Academic All-Americans
 - Team also named champions at the 2020 American Royal and numerous other competitions throughout the year
- 2019 Reserve National Champion Livestock Judging Team
 - 16 undergraduate students representing 8 states
 - Fielded 5 Academic All-Americans
 - Team also named champions at the Houston Livestock Show and Rodeo, San Antonio Livestock Show and Rodeo, and American Royal, and numerous other competitions throughout the year
- Direct responsibilities as Assistant Coach:
 - Facilitator for K-State ‘Champions’ Livestock Judging Camp 2017-2021
 - Hosted prospective students for recruitment visits, provided guided facility tours

- Provided one-on-one critique of individual students' evaluation and oral reasons
- Presented to the Student Government Association on the mission and benefits of academic judging teams as a part of their annual funds request process
- Engaged with stakeholders, industry professionals, breeders, and colleagues
- Provided mentorship to undergraduate students for how competition teams relate to academic pathways for success, extracurricular activities, and personal goals

Livestock Judging Experience

Independent Livestock Judge

- Serves as professional judge at livestock shows spanning across multiple species at the local, state, and national level, including 17 states, Arizona National Livestock Show, American Royal Livestock Show, Oklahoma Youth Expo, State fairs in AR, MO, and IL.

Kansas State University Livestock Judging and Meat Animal Evaluation Team

- Member of 2018 Reserve National Champion Livestock Judging Team
 - 6th high individual overall in the national contest
 - Named to the 2018 All-American Senior College Team
 - Placed in top 10 overall and in oral reasons at numerous other national competitions
- Member of 2018 National Champion Meat Animal Evaluation Team
 - 4th high individual overall; high individual breeding division

Butler Community College Livestock Judging Team

- Member of 2017 Livestock Judging Team that was named 'Team of the Year'
 - Named to the 2017 All-American Junior College Team
- High individual overall and in oral reasons at the 2017 American Royal
- Placed in top 10 overall and in oral reasons at numerous other national competitions

Teaching and Undergraduate Mentor Experience

Instructor of Record: ASI 524 – Sheep & Meat Goat Science Fall 2022

- Developed course syllabus, assessment methods, and individual lectures to support student learning outcomes with minimal prior materials available.
- Coordinated lecture with laboratory teaching assistant and guest speakers to align schedule to meet four weekly contact hours (2 hours lecture + 2 hours laboratory/week)
- Managed student absences, student of concern reports, and accommodation needs for the 57 students enrolled, an increase enrollment of 20% compared to prior semesters.

| Number of Students | Overall Effectiveness | Increased Desire to Learn | Amount Learned |
|--------------------|-----------------------|---------------------------|----------------|
| 57 | 4.6 | 4.5 | 4.5 |

Instructor of Record: ASI 560-01B – Swine Undergraduate Research Lab Spring 2022

- Served as sole instructor of laboratory component (2 contact hours/week) and coordinated weekly activities with lecture instructor and other species research labs.
- Identified research project topic, experimental design, and response criteria with a scope appropriate for course-based undergraduate research.
- Adapted course content available from prior semesters to lead 21 students through a guided research experience at the K-State Swine Teaching & Research Center.

| Number of Students | Overall Effectiveness | Increased Desire to Learn | Amount Learned |
|--------------------|-----------------------|---------------------------|----------------|
| 21 | 5.0 | 5.0 | 4.8 |

Graduate Teaching Assistant: ASI 560 – Undergraduate Research in ASI Fall 2019 – Fall 2021

- Interacted with 330 undergraduate students over 6 semesters conducting course-based and independent research
- Personally mentored 4 undergraduate students through independent research projects in swine nutrition, sheep nutrition, and beef cattle management, where direct responsibilities included planning, implementation, data analysis, and presentation of the research
- Undergraduate research awards won by KSU students during tenure as a mentor:
 - 2022 ASAS Midwest Meeting, 2nd Place
 - 2020 and 2021 Gamma Sigma Delta Outstanding Undergraduate Research Awards
 - 2020 ASAS Midwest Meeting, 1st, 2nd Place
- Conducted scholarship of teaching and learning to evaluate impact of undergraduate research experiences on student learning outcomes and adapted course content based on resultant data
- Awarded 2020 Gamma Sigma Delta/College of Ag. Outstanding M.S. Graduate Teacher

Graduate Teaching Assistant: ASI 450 – Principles of Livestock Selection Fall 2019 – Fall 2021

Graduate Teaching Assistant: ASI 470 – Form and Function of Livestock Fall 2019 – Fall 2021

Invited Presenter at Youth Events

- Kansas State Fair. Market Lamb Show Commentator. September 2022. Hutchinson, KS.
- National Junior Angus Show. Selection of breeding and market cattle. July 2022. Kansas City, MO.
- Kansas State University Animal Science Leadership Academy. Sheep and goat industries in Kansas. July 2022. Manhattan, KS.
- Kansas State University Junior Sheep Producer Day. Sheep and goat selection. Facilities. Showmanship. March 2022. Manhattan, KS.
- Kansas State University Junior Swine Producer Day. Swine Showmanship: Tips and Tricks. March 2021. Manhattan, KS
- Developed 30-page Show Lamb Guide for use by the K-State Youth Livestock Program.

Other Relevant Experience

Manager of Sheep and Meat Goat Center, Kansas State University July 2021 – Present

- Responsible for the health, nutritional, and reproductive management of 150 sheep and 50 goats used for research, teaching, and extension
 - Established collaborative relationships with University compliance office and attending veterinarians to resolve a prior history of significant parasite challenges. The last two bi-annual University compliance inspections have yielded no findings.
 - Coordinated animal breeding activities with Department and University needs, such as lambing class and birthing center at the Kansas State Fair.
 - Developed strategy for breeding program to meet Department and University teaching and research needs. Implementation has begun, including the successful solicitation of donated animals, germplasm, and services to meet strategic needs.

- Manage daily operational expenditures and financial sustainability
 - Created and received approval for the unit's first-even schedule of charges
 - Evaluated previous years' financial records to identify opportunities for fiscal growth
 - Consulted with other units and administrators to establish unit goals and budget
- Collaborate with researchers to execute applied research with sheep and goats
 - Six research projects conducted in the past year have yielded \$44,980 in research revenue to the Center vs. none invoiced in the previous 15 years
 - Provided unit support to 70 undergraduate students conducting course-based research
- Manage a team of 8-10 undergraduate student employees annually
- Engage with industry stakeholders, sheep and goat producers, and youth through a variety of extension and educational events
- Maintain facility presence and cleanliness to host apx. 10 prospective students weekly

Graduate Research Assistant

July 2019 – May 2023

- Conducted nutritional and/or management research utilizing sheep, goats, pigs, feedlot cattle, and suckling calves at the K-State Sheep and Meat Goat Center, Swine Teaching and Research Center, Beef Cattle Research Center, and Agricultural Research Center in Hays
 - Direct responsibilities included research and compliance protocol development, communication with unit staff, supply procurement and experiment setup, daily animal care, data collection, statistical analysis, data interpretation, research presentation, coordination with relevant undergraduate student researchers
- Identified the research gap, led authorship of grant solicitation, and developed experimental design in addition to research execution of all PhD-level projects
- Currently has 4 published research or teaching manuscripts, 2 submitted, and 2 in preparation
- Author or co-author of 8 published abstracts presented at regional and/or national meetings
- Recipient of the 2023 Larry Corah Outstanding Ph.D. Student Award

Field Representative Intern National Swine Registry

Summer 2018

- Traveled across the United States providing consulting and marketing services to purebred swine breeders
- Facilitated 2 national type conferences and junior livestock exhibitions (World Pork Expo, Des Moines, IA; National Junior Summer Spectacular and NSR Summer Type Conference, Louisville, KY)
- Contributed to print and digital media efforts of the organization through type conference sale reports and guest columns

Service and Volunteerism

- Kansas FFA Agriscience Fair Judge
- Kansas FFA Livestock Evaluation Career Development Event Volunteer
- Kansas State University ASI Graduate Student Association
- American Society of Animal Science Graduate Student Member
- Kansas State University Swine Club Graduate Student Advisor
- Kansas 4-H Livestock Sweepstakes Volunteer
- Kansas State University ASI Meat Science Consumer Panelist

SCHOLARSHIP

Refereed Journal Articles

1. **Dahmer, P.L.**, J.M. DeRouchey, C.B. Paulk, J.T. Gebhardt, and C.K. Jones. 2023. Summary of methodology of enterotoxigenic *Escherichia coli* (ETEC) challenge experiments in weanling pigs and quantitative assessment of variability. *Transl. Anim. Sci.* *Accepted*.
2. **Dahmer, P.L.**, G.A. Hock, and C.K. Jones. Assessing how undergraduate research experiences in animal science impact student cognitive gains and competence in the scientific method. *J. Anim. Sci.* *Anticipated submission: August 2023*.
3. **Dahmer, P.L.**, F. Matias-Ferreira, and C.K. Jones. 2022. Evaluation of a microencapsulated form of zinc oxide on the growth performance, intestinal morphology, and zinc excretion of weanling pigs. *Transl. Anim. Sci.* *Anticipated submission: August 2023*.
4. **Dahmer, P.L.**, O.L. Harrison, and C.K. Jones. 2022. Effects of formic acid and glycerol monolaurate on weanling pig growth performance, fecal consistency, fecal microbiota, and serum immunity. *Transl. Anim. Sci.* *Submitted*.
5. Harrison, O.L., **P.L. Dahmer**, and J.T. Gebhardt. 2022. Evaluation of Biosecurity Measures on a Commercial Swine Operation Using Glo Germ Powder as a Visible Learning Aid. *J. Swine Health Prod.* *Submitted*.
6. **Dahmer, P.L.**, C.A. Zumbaugh, M.E. Reeb, N.B. Stafford, Z.T. Buessing, K.G. Odde, J.S. Drouillard, A.J. Tarpoff, and C.K. Jones. 2022. Impacts of a post-transport/pre-processing rest period on growth performance, anthelmintic efficacy, and serum metabolite changes in cattle entering a feedyard. *Transl. Anim. Sci.* 6(3):txac085. doi:10.1093/tas/txac085.
7. **Dahmer, P.L.**, F.B. McDonald, C.K.Y. Chun, C.A. Zumbaugh, C.K. Jones, A.R. Crane, T. Kott, J.M. Lattimer, and M.D. Chao. 2022. Evaluating the impact of feeding dried distillers grains with solubles on goat growth performance, meat color stability, and antioxidant capacity. *Transl. Anim. Sci.* 6(2):txac060. doi:10.1093/tas/txac060.
8. **Dahmer, P.L.** and C.K. Jones. 2021. Evaluating dietary acidifiers as alternatives to conventional feed-based antibiotics in nursery pig diets. *Transl. Anim. Sci.* 5(2). doi:10.1093/tas/txab040.
9. **Dahmer, P.L.**, G.E. Leubcke, A.B. Lerner, and C.K. Jones. 2020. Effects of medium chain fatty acids as alternatives to ZnO or antibiotics in nursery pig diets. *Transl. Anim. Sci.* 4(3). doi:10.1093/tas/txaa151.

Scientific Abstracts

1. **Dahmer, P.L.**, G.A. Hock, and C.K. Jones. 2022. Evaluating the impacts of undergraduate research experiences on the development of student professional skills and competence in the scientific method. Kansas State University Scholarship of Teaching and Learning Symposium. https://www.k-state.edu/tlc/faculty_gta_development/sotlshowcase/

2. **Dahmer, P.L.**, O.L. Harrison, and C.K. Jones. 2022. Investigating potential additive effects of formic acid and glycerol monolaurate in nursery pig diets. *J. Anim. Sci.* 100(Suppl. 2):60-61. doi:10.1093/jas/skac064.096.
3. Smallfield, J., **P.L. Dahmer**, O.L. Harrison, and C.K. Jones. 2022. Evaluating formic acid and glycerol monolaurate alone or in combination on weanling pig growth and fecal consistency. *J. Anim. Sci.* 100(Suppl. 2):200. doi:10.1093/jas/skac064.337.
4. Lewis, K.G., **P.L. Dahmer**, O.L. Harrison, and C.K. Jones. 2022. Impacts of formic acid and glycerol monolaurate on weanling pig immune function. *J. Anim. Sci.* 100(Suppl. 2):199-200. doi:10.1093/jas/skac064.336.
5. Harrison, O.L., **P.L. Dahmer**, J.C. Woodworth, C.B. Paulk, J.T. Gebhardt, V. Trinetta, and C.K. Jones. 2022. Evaluating the efficacy of acidifiers used in nursery diets in reducing bacterial loads in both non-inoculated and inoculated complete feed. *J. Anim. Sci.* 100(Suppl. 2):181. doi:10.1093/jas/skac064.307.
6. **Dahmer, P.L.**, and C.K. Jones. 2021. The impacts of commercial dietary acidifiers on growth performance of nursery pigs. *J. Anim. Sci.* 99(Suppl. 1):87. doi:10.1093/jas/skab054.141.
7. **Dahmer, P.L.**, T. Kott, A.R. Crane, J.M. Lattimer, and C.K. Jones. 2021. The impacts of feeding corn co-products and ionophores to growing Boer goats. *J. Anim. Sci.* 99(Suppl. 1):215-216. doi:10.1093/jas/skab054.353.
8. Newton, S.P., L.R. Corah, **P.L. Dahmer**, K.R. Harmony, J.R. Jaeger, and C.K. Jones. 2020. Impact of SYNOVEX® ONE GRASS implantation during suckling on pre-weaning calf growth performance. *J. Anim. Sci.* 98(Suppl. 3):239. doi:10.1093/jas/skaa054.418.
9. **Dahmer, P.L.**, A.B. Lerner, G.E. Leubcke, and C.K. Jones. 2020. Effects of specialty lipids as alternatives to conventional antimicrobial feed additives on nursery pig growth performance. *J. Anim. Sci.* 98(Suppl. 3):144-145. doi:10.1093/jas/skaa054.253.

Extension Publications

1. **Dahmer, P.L.**, Z.T. Buessing, N.B. Stafford, M.E. Reeb, C.A. Zumbaugh, A.J. Tarpoff, K.G. Odde, J.S. Drouillard, M. Theurer, T. Jones, and C.K. Jones. 2022. Impacts of a post-transport/pre-processing rest period on the growth performance and serum metabolites of cattle entering a feedyard. 2022 Kansas State University Cattlemen's Day. *KS Agric. Exp. Stn. Res.* 8:1.
2. Harrison, O.L., **P.L. Dahmer**, J.T. Gebhardt, C.B. Paulk, J.C. Woodworth, and C.K. Jones. 2021. Evaluation of biosecurity measures on a commercial swine operation using glo germ powder as a visible learning aid. 2021 Kansas State University Swine Day. *KS Agric. Exp. Stn. Res.* 7:11.

3. **Dahmer, P.L.**, O.L. Harrison, and C.K. Jones. 2021. Investigating potential additive effects of formic acid and glycerol monolaurate in nursery pig diets. 2021 Kansas State University Swine Day. KS Agric. Exp. Stn. Res. 7:11.
4. **Dahmer, P.L.**, and C.K. Jones. 2021. Evaluating dietary acidifiers as alternatives to conventional feed-based antibiotics in nursery pig diets. 2020 Kansas State University Swine Day. KS Agric. Exp. Stn. Res. 7:11.
5. **Dahmer, P.L.**, G.E. Leubcke, A.B. Lerner, and C.K. Jones. 2019. Effects of varying lipid sources as alternatives to zinc oxide or carbadox on nursery pig growth performance and fecal consistency. 2019 Kansas State University Swine Day. KS Agric. Exp. Stn. Res. 5:8.
6. **Dahmer, P.L.** and A.R. Crane. MF3524: Show lamb selection.
7. **Dahmer, P.L.** and A.R. Crane. MF3525: Sheep breeds.
8. **Dahmer, P.L.** and A.R. Crane. MF3526: Show lamb care and management.
9. **Dahmer, P.L.** and A.R. Crane. MF3527: Show lamb nutrition.
10. **Dahmer, P.L.** and A.R. Crane. MF3528: Show lamb preparation and showmanship.