
Dianna V. Bourassa, Ph.D.
Associate Professor / Extension Specialist
Poultry Science
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Education and Training

2013	Ph.D. Biochemistry and Molecular Biology	University of Georgia
2004	M.S. Poultry Science	University of Georgia
2002	B.S. Poultry Science	University of Georgia

Research and Professional Experience

Positions

2022-present **Associate Professor / Extension Specialist**, Department of Poultry Science, Auburn University, Auburn, Alabama

2016-2022 **Assistant Professor / Extension Specialist**, Department of Poultry Science, Auburn University, Auburn, Alabama

2001–2016 **Research Technician**, Poultry Microbiological Safety and Processing Research Unit, U.S. National Poultry Research Center, Agricultural Research Service, United States Department of Agriculture

Professional Activities

2023-present **First Vice President/Second Vice President**, Southern Poultry Science Society

2023-present **Advisory Committee Member**, USDA-Food Safety and Inspection Service, National Advisory Committee on Meat and Poultry Inspection

2023-present **Subject Matter Expert**, Chick-fil-a Animal Wellbeing Council

2023-present **Subject Matter Expert**, Poultry Processing, Aviagen North America

2022-present **Education and Training Committee**, International Poultry Welfare Alliance

2022-present **Research and Innovation Training Committee**, International Poultry Welfare Alliance

2021-present **Alabama HACCP Coordinator**, Food Safety and Inspection Service

2020-2023 **Chair**, Poultry Science Association Think Tank Steering Committee

2019-present **Subject Editor**, *Journal of Applied Poultry Research* – Meat Bird Processing and Products

2018-present **Associate Editor**, *Poultry Science* - Microbiology and Food Safety

2018, 2023 **Proposal Reviewer**, Foundation for Food and Agriculture Research: New Innovator in Food and Agriculture Research Grants
BARD US-Israel Agricultural Research and Development Fund Review Panel

2013-present **Journal Reviewer**, *Animals*, *BioMed Research International*, *British Poultry Science*, *Food Control*, *Foodborne Pathogens and Disease*, *Food Science and Technology International*, *Food Quality and Safety*, *Food Science and Nutrition*, *International Journal of Microbiology*, *Letters in Applied Microbiology*, *Journal of Agriculture and Food Research*, *Journal of Animal Science and Biotechnology*, *Journal of Applied Animal Welfare Science*, *Journal of Applied Microbiology*, *Journal of Applied Poultry Research*, *Journal of Food Protection*, *Journal of Food Safety*, *Microorganisms*, *PLOS ONE*, *Poultry Science*, *The Microbe*, *Veterinary Integrative Sciences*, *Veterinary Microbiology*

2001-present **Member**, Poultry Science Association

2001-present **Member**, World's Poultry Science Association

2016-present **Member**, International Association for Food Protection

Honors and Awards

- 2024 Dean's Grantsmanship Award, College of Agriculture, Auburn University
2023 Early Career Service Award, Epsilon Sigma Phi, Alpha Pi Chapter, Extension
2021 Early Achievement Award for Extension, Poultry Science Association
2021 Academy of Reviewers--Silver, Poultry Science Association

Teaching and Extension Activities

- 2021-2024 POUL2000 Poultry and Egg Evaluation - Instructor
2023, 2024 Alabama/Mississippi Poultry Processor Workshop – Program Delivery
2023, 2024 Commercial Poultry Basics Workshop – Program Delivery
2019-present HACCP Roundtable Meeting – USDA-FSIS Jackson District – Program Delivery
2016-present 67 Invited Speaker engagements on poultry food safety, meat quality, and stunning methods – 28 State/Regional, 27 National, 12 International
2016-present Written Publications – 16 Extension, 31 popular press, 75 newsletters, 21 electronic products, 13 interviews

Peer-Reviewed Publications in the Last Four Years

- Adhikari, Y., M.A. Bailey, J.T. Krehling, S. Kitchens, P. Gaonkar, L.R. Munoz, C. Escobar, R.J. Buhr, L. Huber, S.B. Price, **D.V. Bourassa**, and K.S. Macklin. 2024. Assessment and genomic analysis of *Salmonella* and *Campylobacter* from various stages of an integrated No-Antibiotics-Ever (NAE) broiler complex: A longitudinal study. *Poult. Sci.* 103:104212. <https://doi.org/10.1016/j.psj.2024.104212>
- Wellington, A., Z. Morgan, M. Reina, E. Drabold, D.E. Wells, **D.V. Bourassa**, Q. Wang, and B.T. Higgins. 2024. Pilot-scale evaluation of poultryponics: Insights into nitrogen utilization and food pathogen dynamics. *ACS ES&T Water*. <https://doi.org/10.1021/acsestwater.4c00262>
- Walker, G.K., **D.V. Bourassa**, R. Qudsieh, B. Hutson, D. Joardar, and M.L. Livingston. 2024. Research Note: A scald water surfactant combined with organic acid carcass dip reduces microbial contaminants on broiler carcasses during processing. *Poult. Sci.* 103:103847. <https://doi.org/10.1016/j.psj.2024.103847>
- Jackson, A.P., **D.V. Bourassa**, and B.I. Baker. 2024. Applied Research Note: Evaluation of head removal following euthanasia by cervical dislocation on latency insensibility and death on broiler welfare. *J. Appl. Poult. Res.* 33:100394. <https://doi.org/10.1016/j.japr.2023.100394>
- Reina, M., A.D. McConnell, J.C. Figueroa, M.R. Riggs, R.J. Buhr, S.B. Price, K.S. Macklin, and D.V. Bourassa. 2024. Quantification of *Salmonella* *Infantis* transfer from transport drawer flooring to broiler chickens during holding. *Poult. Sci.* 103:103277. <https://doi.org/10.1016/j.psj.2023.103277>
- Reina, M., A. Urrutia, J.C. Figueroa, M.R. Riggs, K.S. Macklin, R.J. Buhr, S.B. Price, and **D.V. Bourassa**. 2024. Application of pressurized steam and forced hot air for cleaning broiler transport container flooring. *Poult. Sci.* 103:103276. <https://doi.org/10.1016/j.psj.2023.103276>
- Samoylov, A.V., K. Schwan-Lardner, T.G. Crowe, W. Daley, A. Giorges, B. Kiepper, **D.V. Bourassa**, B. Bowker, H. Zhuang, K. Christensen, and R.J. Buhr. 2023. Symposium: Alternative slaughter procedures: on-farm slaughter and transport system for broilers. *Poult. Sci.* 102:103137. <https://doi.org/10.1016/j.psj.2023.103137>
- Urrutia, A., L. Orellana, K.S. Sierra, M. Reina, J.C. Figueroa, A.P. Jackson, K.S. Macklin, R.J. Buhr, and **D.V. Bourassa**. 2023. *In vitro* effect of photo-active compounds curcumin and

- chlorophyllin against single strains of *Salmonella* and *Campylobacter*. *J. Food Prot.* 86:100157. <https://doi.org/10.1016/j.jfp.2023.100157>
- Barua, S., M.A. Bailey, K. Zhong, N. Iduu, T. Dormitorio, K.S. Macklin, **D.V. Bourassa**, S.B. Price, R. Hauck, J. Krehling, S. Kitchens, C. Kyriakis, R.J. Buhr, C. Wang. 2023. Role of darkling beetles (*Alphitobius diaperinus*) and litter in spreading and maintaining *Salmonella* Enteritidis and *Campylobacter jejuni* in chicken flocks. *Poult. Sci.* 102:103061. <https://doi.org/10.1016/j.psj.2023.103061>
- Munoz, L.R., J.T. Krehling, M.A. Bailey, **D.V. Bourassa**, W.J. Pacheco, B. Chaves-Cordoba, C. Escobar, L. Orellana-Galindo, Y. Adhikari, and K.S. Macklin. The role of dietary supplementation of yeast cell walls in response to a *Campylobacter jejuni* inoculation in broiler chickens. *Avian Dis.* 67:245-253. <https://doi.org/10.1637/aviandiseases-D-23-00003>
- Munoz, L.R., M.A. Bailey, J.T. Krehling, **D.V. Bourassa**, M.R. Hauck, W.J. Pacheco, B. Chaves-Cordoba, K.S. Chasteen, A.A. Talorico, C. Escobar, A. Pietruska, and K.S. Macklin. Effect of yeast cell wall on performance, pathogen colonization, innate immune response, histomorphology, and slaughter characteristics of broiler chickens inoculated with *Campylobacter jejuni* at day 21. *Poult. Sci.* 102:102609. <https://doi.org/10.1016/j.psj.2023.102609>
- Harris, C.E., L.N. Bartenfeld Josselson, **D.V. Bourassa**, and R.J. Buhr. 2023. Development of injection inoculation methods to simulate *in ovo* vertical transmission of *Salmonella* spp. and *Campylobacter* spp. *J. Appl. Poult. Res.* 32:100329. <https://doi.org/10.1016/j.japr.2023.100329>
- Riggs, M.R., R. Hauck, B.I. Baker-Cook, R.C. Osborne, A. Pal, M.T. Bethonico Terra, G. Sims, A. Urrutia, L. Orellana-Galindo, M. Reina, J.F. DeVillena, and **D.V. Bourassa**. 2023. Meat quality of broiler chickens processed using electrical and controlled atmosphere stunning systems. *Poult. Sci.* 102:102422. <https://doi.org/10.1016/j.psj.2022.102422>
- Harris, C.E., L.N. Bartenfeld Josselson, **D.V. Bourassa**, and R.J. Buhr. 2022. Examination of the eggshell cuticle and membranes on their impact of *Salmonella* Enteritidis or Typhimurium recovery from inoculated and stored eggs. *J. Appl. Poult. Res.* 31:100297. <https://doi.org/10.1016/j.japr.2022.100297>
- Gregg, C.R., O.J. Tejada, L.F. Spencer, A.J. Calderon, **D.V. Bourassa**, J.D. Starkey, and C.W. Starkey. 2022. Impacts of increasing additions of choline chloride on growth performance and carcass characteristics of broiler chickens reared to 66 days of age. *Animals* 12:1808. <https://doi.org/10.3390/ani12141808>
- Boyal, R.S., R.J. Buhr, C.E. Harris, L. Jacobs, and **D.V. Bourassa**. 2022. Evaluation of mechanical cervical dislocation, captive bolt, carbon dioxide, electrical methods for individual on-farm euthanasia of broiler breeders. *Poult. Sci.* 101:102000. <https://doi.org/10.1016/j.psj.2022.102000>
- Gregg, C.R., O.J. Tejada, L.F. Spencer, A.J. Calderon, **D.V. Bourassa**, J.D. Starkey, and C.W. Starkey. 2022. Effect of dietary choline chloride supplementation on growth performance and carcass characteristics of broiler chickens reared to 32 days of age. *Poultry* 1:66-73. <https://doi.org/10.3390/poultry1020007>
- Bailey, M.A., **D.V. Bourassa**, J.T. Krehling, L. Munoz, K.S. Chasteen, C. Escobar, K.S. Macklin. 2022. Effects of common litter management practices on prevalence of *Campylobacter jejuni* in broilers. *Animals* 12:858. <https://doi.org/10.3390/ani12070858>

- Pal, A., A.P. Jackson, A. Urrutia, K.S. Macklin, S.B. Price, R.J. Buhr, and **D.V. Bourassa**. 2022. Research Note: Bacterial composition of settled dust during growout of broiler chickens. *Poult. Sci.* 101:101602. <https://doi.org/10.1016/j.psj.2021.101602>
- Pal, A., M.R. Riggs, A. Urrutia, R.C. Osborne, A.P. Jackson, M.A. Bailey, K.S. Macklin, S.B. Price, R.J. Buhr, and **D.V. Bourassa**. 2021. Investigation of the potential of aerosolized *Salmonella* Enteritidis on colonization and persistence in broilers from D 3 to 21. *Poult. Sci.* 100:101504. <https://doi.org/10.1016/j.psj.2021.101504>
- Pal, A., M. Bailey, A.A. Talorico, J.T. Krehling, K.S. Macklin, S.B. Price, R.J. Buhr, and **D.V. Bourassa**. 2021. Impact of poultry litter *Salmonella* levels and moisture on transfer of *Salmonella* through associated *in vitro* generated dust. *Poult. Sci.* 100:101236. <https://doi.org/10.1016/j.psj.2021.101236>
- Talorico, A.A., M.A. Bailey, L.R. Munoz, K.S. Chasteen, A. Pal*, J.T. Krehling, **D.V. Bourassa**, R.J. Buhr, and K.S. Macklin. 2021. The use of roller swabs for *Salmonella* detection in poultry litter. *J. Appl. Poul. Res.* 30:100163. <https://doi.org/10.1016/j.japr.2021.100163>
- Jacobs, L., **D.V. Bourassa**, R.S. Boyal, C.E. Harris, L.N. Bartenfeld Josselson, A. Campbell, G. Anderson, and R.J. Buhr. 2021. Animal welfare assessment of on-farm euthanasia methods for individual, heavy turkeys. *Poult. Sci.* 100:100812 <https://doi.org/10.1016/j.psj.2020.11.001>
- Bourassa, D.V.**, R.J. Buhr, C.E. Harris, and L.N. Bartenfeld Josselson. 2021. Assessment of stabilized hydrogen peroxide for use in reducing *Campylobacter* levels and prevalence on broiler chicken wings. *J. Food Prot.* 84:449-455. <https://doi.org/10.4315/JFP-20-356>