

CURRICULUM VITAE
Jordan C. Wicks, Ph.D.

GENERAL INFORMATION

I. Professional Experience:

- a. University of Nebraska – Lincoln, Assistant Professor, 2023 – Present
- b. Nebraska College of Technical Agriculture - Adjunct Professor, 2024-Present
- c. Virginia Tech, Meat Lab Manager, 2014 – 2023
- d. Conecuh Sausage, Food Safety and Quality Manager, 2013 – 2014
- e. Fatback Pig, Plant Manager, 2012 – 2013
- f. Auburn University, Graduate Research Assistant, 2010 - 2012

II. Education:

Virginia Tech, Blacksburg VA
Ph.D. Animal Science, Graduated: August, 2023
Area of Specialization: Meat Science and Muscle Biology

Auburn University, Auburn, AL
M.S. Animal Science, Graduated: May, 2012
Area of Specialization: Meat Science and Muscle Biology

Southern Illinois University, Carbondale, IL
B.S. Animal Science, Graduated: May, 2010
Minor: Ag-business Economics

III. Awards and Honors:

- a. NAMI Scholarship Recipient, 2021
- b. SIU Early Career Recipient, 2020
- c. MISA Scholarship Recipient, 2016

IV. Memberships in academic, professional involvement:

- a. Nebraska Association of Meat Processors Advisory Board Member, 2023-Present
- b. University of Nebraska-Lincoln Meat Laboratory Faculty Advisor, 2023-Present
- c. American Meat Science Association Member 2015 - present
- d. Virginia Tech Meat Science Club Advisor, 2014 - 2023
- e. Tyson Short Course: Beyond Fresh Meats, 2017, 2018

- f. Reciprocal Meats Conference, 2015, 2016, 2017, 2018
- g. Journal Peer Reviewer, Meat Science

RESEARCH PUBLICATIONS

I. Peer-reviewed

1. Kirkpatrick, L. T., Gómez, J.F., Beline, M., **Wicks, J.**, Shi, H., Silva, S.L., Aalhus, J.L., King, D.A., & Gerrard, D. A. (2023). Muscle of dark beef differs metabolically [Manuscript submitted for publication].
2. Spires, M. D., Bodmer, J. S., Beline, M., **Wicks, J. C.**, Zumbaugh, M. D., Shi, T. H., Reichert, B. T., Schinckel, A. P., Grant, A. L., & Gerrard, D. E. (2023). Postmortem Metabolism and Pork Quality Development Are Affected by Electrical Stimulation Across Three Genetic Lines. *Animals*, 13(16), 2599.
3. **Wicks, J. C.**, Zumbaugh, M. D., Daniels, R. P., Matarneh, S. K., Venhuizen, M. D., Elgin, J., Bodmer, J., Yen, C-N., Beline, M., Shi, H., Silva, S.L., & Gerrard, D. E. (2023). Time of dehairing alters pork quality development. *Meat Science*, 109233.
4. Daniels, R. P., **Wicks, J. C.**, Zumbaugh, M. D., Matarneh, S. K., Venhuizen, M. D., Elgin, J., Bodmer, J., Yen, C. N., El-Kadi, S. W., Shi, H., Silva, S. L., & Gerrard, D. E. (2022). Reduced scald time does not influence ultimate pork quality. *Meat Science*, 108958.
5. Kirkpatrick, L. T., Elgin, J. M., Matarneh, S. K., **Wicks, J. C.**, , Daniels, R. P., Yen, C-N., Bodmer, J. S., Zumbaugh, M. D., El-Kadi S. W., Shi, H., and Gerrard, D. E. (2022) Inherent factors influence color variations in semimembranous muscle of pigs. *Meat Science*, 185, 108721.
6. Guo, Q., **Wicks, J.C.**, Yen, C-N., Scheffler, T.L., Richert, B.T., Schinckel, A.P., Grant, A.L., and Gerrard, D.E. (2021). Ractopamine changes in pork quality are not mediated by changes in muscle glycogen or lactate accumulation *postmortem*. *Meat Science*, 174, 108418.
7. Pancini, S., Cooke, R.F., Brandão, A., Dias, N.W., Timlin, C., Fontes, P.L.P., Sales, A., **Wicks, J.C.**, Murray, A., Marques, R.S., Pholer, K.G. and Mercadante, V.R.G. (2020). Supplementing a yeast-derived product to feedlot cattle: impacts on performance, physiological responses, and carcass characteristics. *J. Anim. Sci.*, 232, 103907.
8. Apaoblaza, A., Gerrard, S.D., Matarneh, S.K., **Wicks J. C.**, Kirkpatrick, L., England, E. M., Scheffler, T.L., Duckett, S.K., Shi, H., and Gerrard, D.E. (2020). Muscle from grass- and grain-fed differs energetically. *Meat Science*, 161, 107996.
9. Pancini, S., Cooke, R. F., Brandão, A., Dias, N. W., Timlin, C., Fontes, P. L. P., Sales, A. **Wicks, J. C.**, Murraray. A. and Mercadante, V. R. (2019). 387 Supplementing a yeast-derived product to feedlot cattle: impacts on performance, physiological responses, and carcass characteristics. *Journal of Animal Science*, 97(Supplement_3), 154-154.
10. **Wicks, J.**, Beline, M., Gomez, J. F. M., Luzardo, S., Silva, S. L., & Gerrard, D. (2019). Muscle energy metabolism, growth, and meat quality in beef cattle (Review). *Agriculture*, 9(9), 195.

11. Matarneh, S. K., Yen, C.-N., Elgin, J. M., Beline, M., da Luz e Silva, S., **Wicks, J. C.**, England, E. M., Dalloul, R. A., Persia, M. E., Omara, I. I., Shi, H., & Gerrard, D. E. (2018). Phosphofructokinase and mitochondria partially explain the high ultimate pH of broiler pectoralis major muscle. *Poultry Science*, 97(5), 1808-1817.
12. England, E. M., Matarneh, S. K., Mitacek, R. M., Abraham, A., Ramanathan, R., **Wicks, J. C.**, Shi, H., Sheffler, T. L., Oliver, E. M., Helm, E. T. & Gerrard, D. E. (2018). Presence of oxygen and mitochondria in skeletal muscle early postmortem. *Meat Science*, 139, 97-106.
13. Matarneh, S. K., England, E. M., Scheffler, T. L., Yen, C.-N., **Wicks, J. C.**, Shi, H., & Gerrard, D. E. (2017). A mitochondrial protein increases glycolytic flux. *Meat Science*, 133, 119-125.
14. Jiang, T., **Wicks, J.**, Welch, T., Owsley, W., Rodning, S., Cummins, K., & Bratcher, C. (2014). Growth performance, carcass characteristics, and pork quality of pigs fed plum juice concentrate as a feed additive. *The Professional Animal Scientist*, 30(2), 252-259.
15. **Wicks, J.**, Jiang, T., Welch, T., Singh, M., Owsley, W., Cummins, K., & Bratcher, C. (2014). Effect of supplemental feeding of plum juice concentrate on fecal microbial shedding in growing-finishing Yorkshire pigs. *The Professional Animal Scientist*, 30(2), 260-265.

II. In Preparation:

1. **Wicks, J. C.**, Wivell, A. L., M. Beline, Zumbaugh, M. D., Bodmer, J. S., Yen, C.-N., Johnson-Schuster, C., Wilson, T. B., Greiner, S. P., Johnson, S. E., Shi, T. H., Silva, S. L., and Gerrard, D. E. (2023). Determining muscle plasticity and meat quality development of low-input market ready steers (Submitted for Publication).
2. **Wicks, J. C.**, Wivell, A. L., Beline, M., Zumbaugh, M. D., Bodmer, J.S., Yen, C.-N., Wilson, T. B., Greiner, S. P., Johnson, S. E., Shi, T. H., Silva, S. L., and Gerrard, D. E. (2023). Reducing extensive feeding 30 days does not reduce yield of quality in finishing steers. (Manuscript in preparation).
3. **Wicks, J. C.**, Wivell, A. L., Archabald, T. G., and Gerrard, D. E. (2023) A Needs Assessment of Small Meat Processors in Virginia and Nebraska. (Manuscript in preparation).

III. Other:

1. Book Chapters:

Wicks, J. C., Bodmer, J. S., Yen, C. N., Zumbaugh, M. D., Matarneh, S. K., England, E. M., Scheffler, T. L., Silva, S. L., Shi, H., and Gerrard, D. E. (2022). Postmortem Muscle Meat Metabolism and Meat Quality. In *New aspects of meat quality*. 2nd Ed. Woodhead Publishing.

2. Extension Publications:

Wicks, J. C., Venhuizen, M. D., Daughtry, M., and Gerrard, D. E. (2020, March). Potential effects of cell-cultured technology and meatless diets on livestock production. In *Virginia Pork Industry Conference* (p. 4).

3. Dissertation:

Wicks, J. C., 2023. Understanding beef quality development and different feeding regimes. Ph. D. Dissertation, Virginia Tech, Blacksburg, VA.

4. Thesis:

Wicks, J. C., 2012. Effects of supplemental feeding of plum juice concentrate on fecal microbial shedding and pork quality. M. S. Thesis, Auburn University, Auburn, AL.

GRANTSMENTSHIP

- 1.) *Defining the Implementation of High-Pressure Processing (HPP) on Dark-Cutting Beef*. Industry Proposal (Cargill). (Pending). PI: **Dr. Jordan Wicks**
- 2.) *Optimizing pre- and post-harvesting techniques to alleviate dark-cutting beef*. Industry Proposal (Greater Omaha). (Pending). PI: **Dr. Jordan Wicks**
- 3.) *Effects of Conventional Beef Processing Practices on Varying Degrees of Yield Grade and Its Impact on Lean Color Development*. UNL Research Council Faculty Seed Grant. Awarded \$9,963.00 (Dec. 2023). PI: **Dr. Jordan Wicks**
- 4.) *Strengthening Management Capabilities of Small Federally Inspected and Custom Exempt Meat and Poultry Processing Plants*. North Central Extension Risk Management Education. Awarded \$149,973 (April 2023). PI: Elliot Denis, co-PI: **Dr. Jordan Wicks**, co-PI: Dr. Gary Sullivan
- 5.) *Building Capacity and Food Security: Expanding the meat processing education in the Commonwealth*. Virginia Beef Industry Council. Awarded \$25,000 (Jan. 2023). PI: Dr. David Gerrard, co-PI: **Dr. Jordan Wicks**
- 6.) *Beef Color: It's not Dark, It's Just Different. Expanding Beef Processing Capacity in Virginia*. Virginia Beef Industry Council. Awarded \$15,000 (Aug. 2021). PI: Dr. David Gerrard, co-PI: **Dr. Jordan Wicks**
- 7.) *Expanding Beef Processing Capacity in Virginia*. Virginia Beef Industry Council. Awarded \$29,785 (March. 2021). PI: Dr. David Gerrard, co-PI: **Dr. Jordan Wicks**
- 8.) *Utilizing Myoglobin in Curing Brines to Enhance Meat Color*. Virginia Pork Council. Awarded \$10,000 (March 2018). PI: Dr. David Gerrard, co-PI: **Dr. Jordan Wicks**

POPULAR PRESS INTERVIEWS

1. “Starting a Meat Processing Facility From ‘Scratch’”. Virginia Young Farmers Podcast. July 2023.
2. Pellegrini, M. “Ground Beef Processing: Part hi-tech, part back to basics”. The National Provisioner. Dec 2021.

TEACHING

I. Virginia Tech

1. APSC 3214 – *Principles of Meat Science*, 3 Credits (Co-instructor) *Fall 2016 – 2023*
This course covers the technology and biochemistry involved with the transformation of muscle to meat, as well as integrates concepts of animal and meat processing, packaging, food safety, and consumer demand.
2. APSC 3224 – *Meat Science Laboratory*, 1 Credit *Fall 2014 – 2023*
This course utilizes a hands-on learning approach to educated applied aspects of meat production such as harvesting, fabrication, and further processing.
3. APSC 4984 - *Animal Processing*, 3 Credits *Winter 2016, 2018*
This course integrates topics of HACCP, harvesting of livestock, fabrication of wholesale and retail cuts, as well as fresh meat processing and cookery. Students experience “hands-on” learning with fully processing beef, pork, and lamb, and become HACCP Certified.
4. Invited Lectures
 - a. APSC 1464 - Introduction to Animal Sciences Laboratory, *Carcass Evaluation*
 - b. APSC 3254 - Animal Products, *Food Safety and Sanitation, Product Development*
 - c. APSC 4444 - Swine Management – *Pork Carcass Evaluation*
 - d. APSC 4414 - Beef/Sheep Production – *Beef and Sheep Carcass Evaluation*
 - e. APSC 1504 - APSC First Year Experience – *Careers in the Meat Industry*
 - f. AT 0304 - Meats and Animal Products, Processing, and Evaluation – *Beef Cutting Demonstration*

II. Auburn University

1. ANSC 4700 - *Advance Meat Processing Laboratory*, 1 Credit (Teaching Assistant) *Fall 2010, 2011*
This course utilizes a hands-on learning approach to applied further meat processing, food chemistry, food safety, sensory and product development.

2. ANSC 3700 - *Muscle Foods Laboratory*, 1 Credit (TA)
Spring 2011 - 2012

This course utilizes a hands-on learning approach to educated applied aspects of meat production such as, harvesting, fabrication, and food safety.

3. ANSC 1000 - *Introduction to Animal Science*, 1 Credit (TA)
Fall 2010

This course utilizes a hands-on learning approach to educated applied aspects of livestock production.

EXTENSION/OUTREACH

I. University of Nebraska - Lincoln

1. USDA Cattle and Carcass Training Center, AMS Grader Training. “*Meat Science 101: The Conversion of Muscle to Meat*” 2024.
2. Nebraska Youth Beef Leadership Symposium, “*Carcass Breakdown and Value Demonstration*” 2023.

II. Virginia Tech

1. Beef-Up: Beef Processing Short Course, 2023.
 - a. Overall Short-Course Lead
 - b. Lead Instructor for Beef Harvesting
 - c. Speaker: “*Facility, Design and Equipment*”
2. SEE VT Camp, “*Meat Quality and Preservation*” 2022-2023
3. Virginia Ag Teacher Conference, “*Building a Meat Evaluation Program*”, 2023
4. Virginia State 4-H and FFA State Meats Contest, 2014 -2023.
5. National Jr. Angus Show, “*Breaking Down Beef: A Cutting Demonstration*”, 2022.
6. Virginia Cattlemen’s State Convention, “*Utilizing the Beef Carcass; A Cutting Demonstration*”, 2019.
7. Shenandoah Valley Invitational Meats Contest, 2018.
8. Master Cattleman’s Clinic, “*Beef Processing: A Harvest and Fabrication Demonstration*”, 2015 – 2017.
9. SOVA Agritourism Experience, *Pork as Your Protein*, 2016.
10. Instructor of Beef Cutting Clinic, 2016.

III. Auburn University

1. Alabama Cattleman's Field Day, *Beef Grading*, 2011.
2. B.E.E.F. U. Youth Clinic, *Further Beef Processing*, 2011 – 2012.