

# CASEY L. BRADLEY, Ph.D.

**PRESIDENT OF THE SUNSWINE GROUP, LLC (DBA ANIMISTIC)**

technical@animistic.co

## EDUCATION

<b>University of Arkansas, Animal Science</b> <i>Doctor of Philosophy, "The efficacy of organic trace mineral supplementation to developing gilts and reproductive sows on reproduction efficiency, lameness, and longevity."</i>	2010
<b>University of Arkansas, Animal Science</b> <i>Master of Science, "Efficacy of Bio-Mos supplementation to sow diets during gestation and lactation on subsequent performance of pigs supplemented with or without Bio-Mos."</i>	2006
<b>Michigan State University, Animal Science</b> <i>Bachelor of Science,</i>	2000

## SKILLS

- Project and Research Management
- Global Animal Nutrition Network
- Technical sales and relationship development
- Company and product communications and marketing development
- Podcast development and management
- Mentoring and Coaching
- Course Development: Virtual, In-Person, Laboratory, E-Learning
- Technical writing for both publication and marketing
- Multi-species feed formulation
- Quality Assurance Program development and implementation.
- Research Protocol and Standard Operating Procedures development and implementation
- SAS and other statistical analysis procedures
- AWS Platform
- Report writing and presentations.

## WORK EXPERIENCE

**The Sunswine Group, LLC: Lowell, AR** 2020 - Present  
President

I have been operating my own company focusing on outreach and consulting services for livestock producers. Within the last two years I have successfully launched a mentoring program, "Coffee & Careers in Animal Science," "The Real P3" Podcast, and our Sunswine Academy. My consultancy services range from project and research management, nutritional support, technical writing, and data analytics. With the support of a team in Ecuador we have also developed and are in the process of launching a digital data analytic platform into the swine and poultry markets. Our clients are global feed additive suppliers, integrated swine producers, and niche poultry and livestock producers. Through this opportunity, I have been able to find my true passion for developing programs and initiatives to support animal production of any size and the people of our industry succeed.

## WORK EXPERIENCE - CONTINUED

### **Ecclesia College, Springdale, AR**

Fall 2021 - 2022

#### Adjunct Faculty

- Taught the undergraduate course, Introduction to Biology, which included a laboratory component, at Ecclesia College.
- Utilized this role as a platform for outreach and mentoring, aiming to inspire and guide future leaders.
- Developed initiatives with the vision of expanding an agricultural education program to support future missionaries in their fieldwork.

### **DSM Nutritional Products, LLC; Parsippany, NJ**

April 2018 - February 2020

#### Senior Technical Solutions Manager -Innovation and Application

- Led innovation initiatives for the swine sector in North America, focusing on the research and development of new products tailored for market entry.
- Originated and transformed innovative ideas into robust business cases, enhancing both regional and potential global project pipelines.
- Collaborated with sales and technical service teams to devise solutions for customers and identify new application opportunities for existing products.
- Successfully launched a new product in early 2019 and prepared another for launch in mid-2020, with 2-3 more projects in development for future years.
- Coordinated with marketing, commercial, and regulatory teams to develop and implement strategic action plans to support ongoing and upcoming projects.

### **Purina Animal Nutrition, LLC, Shoreview, MN**

May 2017 - March 2018

#### Swine Technical Manager

- Served as the technical support for Purina's National Swine Team, addressing the needs of swine integrators across the USA, similar to responsibilities held at AB Vista.
- Collaborated with four salesmen and two other technical managers to enhance client service and support.
- Continued to write a column for Pig Progress and developed marketing materials to support sales and technical teams.
- Utilized expertise in nutrition to custom formulate feed additive strategies and component solutions for key accounts, optimizing packaging and premix options.
- Successfully integrated products such as LucraFit® and Ambitine® into the nutritional programs of major accounts, impacting over 500,000 sows.

### **AB Vista, Inc., Plantation, FL**

September 2013 - May 2017

#### Technical Manager (September 2013 - May 2017)

- Spearheaded the development of customer-focused relationships to drive sales opportunities within the North American swine industry.
- Provided comprehensive technical support to customers and agents, including key swine integrators and feed companies in the USA and Canada.

## WORK EXPERIENCE - CONTINUED

- Collaborated with the marketing group to define and implement marketing strategies for swine and ruminant sectors, which involved creating marketing materials, delivering presentations, and organizing key customer events.
- Worked jointly with AB Vista's and our customers' research and development programs to create innovative and sustainable solutions for the swine and ruminant industries.
- Authored and maintained an internal blog, wrote a regular column for Pig Progress Magazine, and contributed to other professional publications.
- Contributed significantly to making Quantum Blue the leading phytase product in Canada, represented business encompassing approximately 829,000 sows, including 8 of the top 40 integrators in the USA, and various regional feed companies in both the USA and Canada.

### **Kalmbach Feeds, Inc., Upper Sandusky, OH**

February 2011 - August 2013

Nutritionist, Technical Service

- Provided comprehensive technical service support to sales teams, customers, production staff, and Kalmbach Swine Management, enhancing service quality and operational efficiency.
- Initiated and developed Kalmbach's Poultry Research Program, leading efforts to expand company expertise and service offerings into the poultry sector.
- Developed "OmEGGa," a high omega fatty acid product for layers, enhancing nutritional profiles and marketability of poultry products.
- Created marketing materials, consulted with customers and sales representatives, and developed strategies to create mutually beneficial outcomes for clients and the company.
- Served as Swine Research and Development Coordinator, organizing, implementing, and summarizing internal and contract research for swine research programs.
- Acted as a key member of the Cooperative Research Farms' Swine Research Team, contributing to collaborative research initiatives.
- Implemented and maintained a quality assurance feed testing program tailored to specific customer needs.
- Handled state regulatory investigations and registrations, formulated feeds, and managed special projects to meet diverse customer needs effectively.

### **University of Arkansas – Department of Animal Science – SwineResearch Center**

2002-2011

Swine Research Farm Manager (Program Technician II)

- Managed the University's swine research farm, overseeing a herd of 120 sows used for reproductive and/or lactation trials.
- Conducted approximately seven to ten different nursery, finisher, and/or wean to finish trials annually, utilizing pigs produced from the herd.
- Oversaw farm operations including management of the swine herd, facilities, and a team of 6 to 8 employees, ensuring efficient and effective research activities.
- Acted as the primary liaison between professors, graduate students, industry sponsors, and other support staff for all swine research trials conducted at the University.

## WORK EXPERIENCE - CONTINUED

- Assisted in the development and implementation of research protocols, and was responsible for data collection, analysis, and summary.
- Developed Standard Operating Procedures (SOPs) to meet Good Clinical Practice (GCP) standards for the University's swine research program.
- Designed and led various laboratories, workshops, and tours for different Animal Science classes and community groups throughout Arkansas, enhancing educational outreach.
- Handled additional responsibilities including manure management, employee training, construction and maintenance, least cost purchasing, employee management, and overall maintenance of a farrow-to-finish operation.

## MEMBERSHIPS

- American Society of Animal Science
- NIAMRRE - Corporate
- AR Poultry Federation - Corporate

## ACTIVITIES

- Coffee and Careers in Animal Science – Committee Chair/Founder (2020-2023)
- National Animal Nutrition Program Feed Composition Committee (2016-2021)
- Midwest Swine Nutrition Planning Committee (2016-2021)
- Targeting Excellence Iowa Scholarship Committee (2016-2019)
- ASAS Midwest Animal Science Undergraduate Oral and Poster Judge (2016-2018)
- AFIA Nutrition Committee Member (2014-2017)
- ASAS Public Policy Committee Member (2014-2018)
- AFIA PISC Committee Member (2014-2015)
- CRF Swine Research Committee Member (2011-2013)
- CRF Poultry Research Committee Member (2011-2012)
- Dale Carnegie Graduate Coach 2013

## PRESENTATIONS

- 2024 Pig Feed Quality Conference Ho Chi Minh, Vietnam
- Coffee in the Barn Host and Producer – 2022-present
- The Real P3 Podcast Host and Producer – 2021-present
- 2020 Misset Virtual Webinar
- 2020 SwineTalks, Virtual
- 2019 Zero Zinc Summit, Copenhagen, Denmark
- AB Vista Customer Events
  - Quantum Blue Launch – The Netherlands – 2013
  - US Swine Inspire – Chicago, IL – 2014

## PRESENTATIONS - CONTINUED

- Swine Phytase Workshop – Ames, IA – 2016
- USA Swine Phytate Meeting – Las Vegas, NV - 2017
- 2018 Midwest Swine Nutrition Conference.
- 2016 Western Canadian Nutrition Conference.
- 2016 Greece Pig Producers Inaugural Conference.
- 2008 Zinpro Feet First Symposium – 3 poster presentations.
- 2008 American Association of Swine Veterinarians Annual Conference - poster presentation.
- CRF Winter and Summer Meetings (2011-2013) - 5 oral presentations.
- National Animal Science and Midwest Animal Science (1997-present)

## PUBLICATIONS

### **Pig Progress Column: September 2014-19 Publications – Feed for Thought**

- Bradley, C. "Are you up to the new-crop challenge?" Pig Progress Vol. 30, No. 8 2014.
- Bradley C. "Diet formulation – the never-ending journey" Pig Progress Vol. 30, No. 10 2014.
- Bradley C. "Microbiome management – the next big step in pig nutrition?" Pig Progress Vol. 31, No. 2 2015.
- Bradley C. "Is human nutrition the new frontier for pig feeding?" Pig Progress Vol. 31, No. 4, 2015.
- Bradley C. "The ever-widening web of collaboration." Pig Progress Vol. 31, No. 6, 2015.
- Bradley, C. "Don't forget the small things." Pig Progress Vol. 32, No. 2, 2016.
- Bradley, C. "The changing face of feed quality testing." Pig Progress Vol. 32, No. 4, 2016.
- Bradley, C. "Where less can be more." Pig Progress Vol. 32, No. 6, 2016.
- Bradley, C. "The future of feeding is already here." Pig Progress, Vol. 32, No. 8. 2016.
- Bradley, C. "Turning a great defence into an even better offence." Pig Progress Vol. 32, No. 10. 2016.
- Bradley, C. "Correlation is not causation." Pig Progress Vol. 33, No. 2, 2017.
- Bradley, C. "Remembering forgotten relationships!" Pig Progress Vol. 33, No. 4, 2017.
- Bradley, C. "Dietary calcium – how to use it?" Pig Progress Vol. 33, No. 6, 2017.
- Bradley, C. "Winds of change." Pig Progress Vol. 33, No. 6, 2017.
- Bradley, C. "Finding trusted resources in swine nutrition." Pig Progress Vol. 33, No. 8, 2017.
- Bradley, C. "What if...?" Pig Progress Vol. 34, No. 2, 2018.
- Bradley, C. "Lost treasures under the bed." Pig Progress Vol. 34, No. 4, 2018.
- Bradley, C. "Sticker Shock." Pig Progress Vol. 34, No. 6, 2018.
- Bradley, C. "What if pigs went back to their roots?" Pig Progress Vol. 34, No. 8, 2018.
- Bradley, C. "New Year, new me in 2019." Pig Progress Vol. 35, NO. 2, 2019.
- Bradley, C. "King Arthur and Sir Lancet." Pig Progress Vol. 35, No. 4, 2019.
- Bradley, C. "Formaldehyde in pig feed." Pig Progress Vol.35, No. 6, 2019.
- Bradley, C. "On the move." Pig Progress Vol. 35, No. 8, 2019.
- Bradley, C. "Topping Out." Pig Progress Vol 35, No. 10, 2019.
- Bradley, C. "Putting out fires." Pig Progress Vol. 36, No. 2, 2020.
- Bradley, C. "Once I lived 'sustainably'." Pig Progress Vol. 36, No. 3, 2020.
- Bradley, C. "Maternal and neonatal pig nutritional some creative ideas." Pig Progress Vol. 36,

## PUBLICATIONS - CONTINUED

### ***Pig Progress Column: September 2014-19 Publications – Feed for Thought***

No. 5, 2020.

Bradley, C. "Winds of Change." *Pig Progress* Vol. 36, No. 7, 2020.

Bradley, C. "Do we need to refocus our attention?" *Pig Progress* Vol. 36, No. 9, 2020.

Bradley, C. "Functional nutrition opportunities." *Pig Progress* Vol. 37, No. 10, 2021.

Bradley, C. "Ripping down silo walls." *Pig Progress* Vol. 37, No. 8, 2021.

Bradley, C. "Market uncertainty and risk." *Pig Progress* Vol. 37, No. 5/6, 2021.

Bradley, C. "New terminology and methods." *Pig Progress* Vol. 37, No. 3, 2021.

Bradley, C. "Fluctuating markets." *Pig Progress* Vol. 38, No. 2, 2022.

Bradley, C. "Managing risk – from the nutrition desk." *Pig Progress* Vol. 38, No. 4, 2022.

Bradley, C. "Sow condition: a roller coaster." Vol. 38, No. 6, 2022.

Bradley, C. "Sow Condition Part 2" *Pig Progress*, Vol. 38, No. 8, 2022.

Bradley, C. "Managing feed mill contacts." *Pig Progress* Vol. 39, No. 1, 2023.

Bradley, C. "Unlocking mother nature." *Pig Progress* Vol. 39, No. 3, 2023.

Bradley, C. "Palm Oil in the spotlight." *Pig Progress* Vol. 39, No. 5, 2023.

Bradley, C. "Alphabet Soup – the changing nomenclature and units in swine nutrition." *Pig Progress*, Vol. 40, No. 2, 2024.

Bradley, C. "Don't forget the hidden costs when making buying decisions." *Pig Progress*, Vol. 40, No. 5, 2024.

### ***Professional Magazines & Newsletters***

Pairis-Garcia, M.; **C. Bradley. 2018.** "12 questions to ask to avoid sow mortality." *Pig Progress* Vol. 34, No. 2, P 6-9.

**Bradley, C.;** U. Aftab. "Superdosing phytase: a cost-effective alternative to spray dried plasma?" *Asian Pork Magazine*. Sept. 2015.

**Bradley, C. L.** "Changes in D.C. will be felt in rural America." *Taking Stock D.C. ASAS*, 29, June 2017.

**Bradley, C. L.** "Communication Gone Wrong." *Taking Stock D.C. ASAS*, 1, Nov. 2017.

**Bradley, C. L.** "Does the public trust science?" *Taking Stock D.C. ASAS*, 26, Oct. 2015.

**Bradley, C. L.** "Food safety under one roof: Good or Bad?" *Taking Stock D.C. ASAS*, 23, Feb. 2015.

**Bradley, C.L.** "Proposed zinc oxide ban in the EU." *Taking Stock D.C. ASAS*, 27, Feb. 2017.

**Bradley, C. L.** "Recap of pre-conference symposium hosted by ASN-ASAS." *Taking Stock D.C. ASAS*, 31, July 2017.

**Bradley, C. L.** "Taxation for antibiotic use." *Taking Stock D.C. ASAS*, 29 Sept. 2017.

## PUBLICATIONS - CONTINUED

**Bradley, C. L.** 2020. "The value of feed additives: An economic Analysis. Pig Progress. Vol. 26, No. 10, P 37-39.

**Bradley, C. L.** "The world of science and agriculture within the 2016 U.S. Presidential Race." Taking Stock D.C. ASAS, 27, June 2016.

**Bradley, C. L.** "Update on policies regarding antibiotic-resistant bacteria." Taking Stock D.C. ASAS, 24, Nov. 2014.

**Bradley, C. L.** "Will stricter environmental policies come from the state level?" Taking Stock D.C. ASAS, 30, Jan. 2017.

**Bradley, C. L.** and T. Davis. "Do you love animals and science...Apply here!" Taking Stock D.C. ASAS, 28 Oct. 2014.

**Bradley, C.;** C. Walk, C. Wyatt. Phytate destruction key for poultry performance. Feedstuffs, 25, Jan. 2016.

Walk, C.L.; **C. L. Bradley**, P. Wilcock, I. Wellock. 2014. Phytase, phytate and zinc – a complex interaction. Pig Progress Special Edition – Piglet Health (May) P 16-17.

### ***Department Reports and Conference Proceedings***

Bass, B. E., **C. L. Bradley**, J. W. Frank, and C. V. Maxwell. 2007. Effect of Weaning Age on Nursery Pig Growth Performance. Arkansas Anim. Sci. Dept. Report.

**Bradley, C. L.** 2016. Feed enzymes optimizing performance and nutrient management in swine: Lower the manure output. Proceedings of the 2016 Western Nutrition Conference, Saskatoon, Saskatchewan, Canada.

**Bradley, C. L.;** J. Bergstrom, M. Pairis-Garcia. 2018. Potential Nutritional Considerations to Prevent Sow Mortality. Proceedings of the 2018 Midwest Swine Nutrition Conference, Indianapolis, Indiana, USA.

**Bradley, C. L.,** J. W. Frank, C. V. Maxwell, Z. B. Johnson, J. G. Powell, S. R. Van Amstel, T. L. Ward. 2007. Characterization of claw lesions associated with lameness in the University of Arkansas sow herd. Arkansas Anim. Sci. Dept. Report.

**Bradley, C. L.,** J. W. Frank, C. V. Maxwell, Z. B. Johnson, and T. L. Ward. Frequency and severity of claw lesions over time in the University of Arkansas sow herd. 2008. American Association of Swine Veterinarians Conference Proceedings.

## PUBLICATIONS - CONTINUED

**Bradley, C. L., J. W. Frank, C. V. Maxwell, Z. B. Johnson, M. E. Wilson, and T. L. Ward.** 2009<sup>a</sup>. The effects of parity, time, and claw location on different claw measurements in the University of Arkansas sow herd over an 18-month period of time. Arkansas Anim. Sci. Dept. Report.

**Bradley, C. L., J. W. Frank, C. V. Maxwell, Z. B. Johnson, M. E. Wilson, and T. L. Ward.** 2009<sup>b</sup>. The interaction of claw lesion scoring indexes and walking score on sow performance in the University of Arkansas sow herd over an 18-month period of time. Arkansas Anim. Sci. Dept. Report.

Frank, J.W., **C. L. Bradley**, M. E. Davis, D. C. Brown, Z. B. Johnson, R. Musser, and C. V. Maxwell. 2006. Feeding Mannan Oligosaccharides to Sows During Gestation and Lactation Alters Immune Cells in Milk. Arkansas Anim. Sci. Dept. Report.

**Bradley, C. L.;** C. V. Maxwell, Z. B. Johnson, J. L. Usry, and J. W. Frank. 2010. Effect of replacing fish meal with synthetic amino acids or soy protein concentrate in nursery diets containing distillers dried grains with solubles. Arkansas Anim. Sci. Dept Report.

Frank, J. W.; **C. L. Bradley**, C. V. Maxwell, Z. B. Johnson, and J. L. Usry. 2008. Effect of replacing fish meal with synthetic amino acids on nursery pig performance. Arkansas Anim. Sci. Dept. Report.

Hall, R. E.; and **C. L. Bradley**. 2012. An evaluation of Metabolizable and Net Energy systems for phase 3 nursery reports. CRF Final Report: S11 KF514S.

Hall, R. E.; and **C. L. Bradley**. 2012. Impact of gestation feeding on mammary development evaluated during lactation performance. CRF Final Report: S10 FR507P.

Hall, R. E.; and **C. L. Bradley**. 2012. Salt (sodium, chloride) levels in phase 3 diets. CRF Final Report: S11KF528S.

Hall, R. E.; and **C. L. Bradley**. 2012. The evaluation of replacing dried whey with alternative milk by-products in phase 2 rations.

Hall, R. E.; Y. Martel Kennes, and **C. L. Bradley**. 2011. Influence of Initial Feeding Schedule in Lactation. CRF Final Report: S10 FR501P.

### **Abstracts**

Bass, B. E., **C. L. Bradley**, J. W. Frank, and C. V. Maxwell. 2007. Effect of Weaning Age on Nursery Pig Growth Performance. J. Anim. Sci. 85 (Suppl. 1): 513 (Abstr. W160).

Bass, B. E., **C. L. Bradley**, C. V. Maxwell, Z. B. Johnson, and J. W. Frank. 2008. Effect of feeding an alternative carbohydrate source on nursery pig growth performance. J. Anim. Sci. 86 (Suppl. 2): 607 (Abstr. 787).

## PUBLICATIONS - CONTINUED

Bass, B., J. Frank, **C. Bradley**, Z. Johnson, J. Usry, C. Maxwell. 2011. Influence of dietary L-arginine supplementation to sows during late gestation on sow and litter performance during lactation. Midwest ASAS Meetings 2011.

**Bradley, C. L.**, B. E. Bass, J. G. Powell, E. B. Kegley, Z. B. Johnson, C. V. Maxwell, M. E. Wilson, and T. L. Ward. 2011. The effects of supplementing dietary organic trace minerals to gestating and lactating rations on mineral concentrations of the liver and plasma of reproductive swine. Midwest ASAS Meetings 2011.

**Bradley, C. L.**; J Bergstrom, J. Nemechek, J. Hahn, K. Bottoms, T. C. Tsai, C. V. Maxwell. 2019. The effects of adding a combination of VevoVital, a coated sodium butyrate, and phosphoric acid to nursery diets, either with or without high levels of zinc or copper, on post-weaning performance. The proceedings of the inaugural Zero Zinc Summit.

**Bradley, C. L.**, J. Bergstrom, J. Nemechek, and J. D. Hahn. 2020. The effects of adding two organic acid blends with or without high levels of zinc or copper, on post-weaning pig performance. *J. Anim. Sci.* 98 (3) Nov. 209-210.

**Bradley, C. L.**, M.E. Davis, D.C. Brown, C.V. Maxwell, E. A. Halbrook, Z. B. Johnson, R. Dvorak, and B Lawrence. 2005. Effect on nursery pig growth performance from phosphorylated mannan oligosaccharide supplementation to the sow and to pigs during the nursery phase. *J. Anim. Sci.* 83(Suppl 1): 83 (Abstr. 63).

**Bradley, C. L.**, M.E. Davis, D.C. Brown, C.V. Maxwell, E. A. Halbrook, Z. B. Johnson, R. Dvorak, and B Lawrence. 2005. Effect on nursery pig growth performance from phosphorylated mannan oligosaccharide supplementation to the sow and to pigs during the nursery phase. Alltech: Proceedings of the 21<sup>st</sup> Annual Symposium. Suppl 1: 48 (Abstr.).

**Bradley, C.L.**, M.E. Davis, D.C. Brown, C.V. Maxwell, Z. B. Johnson, R. Dvorak, and B. Lawrence. 2005. Gastrointestinal leukocyte and peripheral blood mononuclear cell populations within piglets nursing sows supplemented with phosphorylated mannan oligosaccharides during gestation and lactation. *J. Anim. Sci.* 83 (Suppl 1): 6 (Abstr. M3).

**Bradley, C.L.**, M.E. Davis, D.C. Brown, C.V. Maxwell, Z. B. Johnson, R. Dvorak, and B. Lawrence. 2005. Gastrointestinal leukocyte and peripheral blood mononuclear cell populations within piglets nursing sows supplemented with phosphorylated mannan oligosaccharides during gestation and lactation. Alltech: Proceedings of the 21<sup>st</sup> Annual Symposium. Suppl 1: 47 (Abstr.).

**Bradley, C. L.**, M. E. Davis, D. C. Brown, C. V. Maxwell, R. Musser, and R. Dvorak. Leukocyte proportions and interferon-g concentration in colostrum and milk of lactating sows supplemented with mannan oligosaccharides during gestation and lactation. *J. Anim. Sci.* 84 (Suppl 2): 74 (Abstr. 107).

## PUBLICATIONS - CONTINUED

**Bradley, C. L.,** J. W. Frank, C. V. Maxwell, Z. B. Johnson, J. G. Powell, S. R. Van Amstel, and T. L. Ward. 2007. Characterization of claw lesions associated with lameness in the University of Arkansas sow herd. *J. Anim. Sci.* 85 (Suppl 1): 26 (Abstr. M70).

**Bradley, C. L.,** J. W. Frank, C. V. Maxwell, Z. B. Johnson, T. L. Ward, and M. E. Wilson. 2009<sup>a</sup>. Influence of complexed minerals during gilt development starting with the growing period on growth performance and claw wall growth. *J. Anim. Sci.* 2009 Midwest Animal Science Meetings Proceedings (Abstr. 219).

**Bradley, C. L.,** J. W. Frank, C. V. Maxwell, Z. B. Johnson, T. L. Ward, and M. E. Wilson. 2009<sup>b</sup>. The influence of complexed minerals fed to developing reproductive gilts through three parities on their reproductive performance. *J. Anim. Sci.* 2009 Midwest Animal Science Meetings Proceedings (Abstr. 220).

**Bradley, C. L.,** J. W. Frank, C. Zier, C. V. Maxwell, R. D. Boyd, and D. McKilligan. 2009<sup>c</sup>. Supplementing sow diets with N-Take during lactation increases feed intake. *J. Anim. Sci.* 2009 Midwest Animal Science Meetings Proceedings (Abstr. 188).

**Bradley, C. L.,** J. W. Frank, C. V. Maxwell, Z. B. Johnson, and T. L. Ward. 2008. Frequency and severity of claw lesions over time in the University of Arkansas sow herd. Proceedings of the 2008 American Association of Swine Veterinarians annual meeting.

**Bradley, C. L.,** C. V. Maxwell, Z. B. Johnson, J. W. Frank, T. L. Ward, and M. E. Wilson. 2008. The effects of parity and body weight on different claw measurements in the University of Arkansas sow herd over an 18-month period of time. 20<sup>th</sup> Congress of the International Pig Veterinary Society.

**Bradley, C. L.,** S. B. Mshengu, J. J. Raath, C. Pennicott, M. van Deventer, L. Nolasco, M. Rowland, and W.J. Steyn. 2023. The effect of dietary copper levels and source on the performance and profitability of finishing pigs. Midwest Animal Science Meetings Proceedings.

**Bradley, C. L.,** J. Raath, C. Pennicott, M. van Deventer, L. Nolasco, M. Rowland, and W. J. Steyn. 2023. Lysine requirement titration for intact males and gilts during the growing finisher period in both summer and winter seasons in a South African commercial production system. Midwest ASAS Meetings Proceedings.

**Bradley, C. L.,** J. Raath, C. Pennicott, M. van Deventer, L. Nolasco, M. Rowland, and W. J. Steyn. 2023. The effect of higher inclusion levels of DDGS with or without Syncra SWI in swine grower-finisher diets on performance and economics.

**Bradley, C. L.,** and D. Rosero. 2021. When too many feed additives is not a sustainable approach to replacing feed antibiotics. *J. Anim. Sci.* May 99(Suppl 1): 102-103.

**Bradley, C. L.,** T. S. Shieh, M. A. Azain, T. C. Tsai, S. Nobisch, and R. Walk. 2021. The efficacy of feeding a bioactive peptide in comparison to narasin in growing pigs in a commercial system on growth performance and efficiency. *J. Anim. Sci.* May; 99(Suppl 1): 197.

## PUBLICATIONS - CONTINUED

- Bradley, C. L.**, C. L. Walk, G. Cordero, and P. Wilcock. 2014. Pharmacological ZnO dose and superdoses of phytase on piglet growth performance and cost of gain from d 0 to 21 post-weaning. Midwest Animal Science Meetings Proceedings.
- Bradley, C.L.**, C. L. Walk, N. D. Walker, and P. Wilcock. 2015. The effect of Superdosing phytase with or without the addition of live yeast in diets void of spray dried plasma in pigs from weaning to 21 days post-weaning. Midwest Animal Science Proceedings (Abstr. 125).
- Criado, A.; C. Piotrowski, P. Wilcock, **C. L. Bradley**, B. Haberl, and B. C. Smith. 2016. To determine if hand held near infrared spectroscopy can be used to measure corn particle size, corn particle distribution and corn moisture. *J. Anim. Sci.* 94: suppl. 2L 77-78.
- De Jong, J. A.; J. M. DeRouchey, M. D. Tokach, R. D. Goodband, J. C. Woodworth, C. K. Jones, C. R. Stark, **C. L. Bradley**, J. A. Loughmiller and J. R. Bergstorm. 2016. Stability of commercial phytase products under increasing thermal conditioning temperatures. *J. Anim. Sci.* 94: suppl. 2: 101-101.
- De Jong, J. A.; J. M. DeRouchey, M. D. Tokach, R. D. Goodband, J. C. Woodworth, C. K. Jones, C. R. Stark, **C. L. Bradley**, J. A. Loughmiller and J. R. Bergstorm. 2016. Stability of commercial phytase products stored under different environmental temperatures. *J. Anim. Sci.* 94: suppl. 2: 114.
- Lu, H.; H. Yan, H. Masey O'Neill, **C. L. Bradley**, M. Bedford, P. Wilcock, C. Nakatsu, O. Adeola and K. Ajuwon. 2016. Effect of timing of post-weaning supplementation of xylanase on growth performance, nutrient digestibility and fecal microbial composition in weanling pigs. National Animal Science Proceedings (Abstr. 927).
- Lu, H.; H. Yan, H. Masey O'Neill, **C. L. Bradley**, M. Bedford, P. Wilcock, C. Nakatus, O. Adeola and K. Ajuwon. 2016. Effect of xylanase and live yeast supplementation on growth performance and gut microflora diversity of growing pigs. National Animal Science Proceedings (Abstr. 928).
- McCormack, U. M.; M. Klausen, L. A. Laprade, S. Christian, C. O. Frederiksen, M. C. Walsh, T. Tsai, C. V. Maxwell, and **C. L. Bradley**. 2020. The effect of a microbial Muramidase on peptidoglycan content in the gut of swine using in-vitro and in-vivo measures. *J. Anim. Sci.* 98 (3) 79-80.
- Stewart, K. R.; **C. L. Bradley**, P. Wilcock, F. Domingues, M. Kleve-Feld, J. Hundley. 2016. Superdosing phytase fed to mature boars improves semen concentrations and reproductive efficiency. Midwest Animal Science Proceedings (Abstr. 231).
- Tsai, T.C.; H. H. Stein, L. Blavi, J. Knapp, K. Bottoms, H. Maxwell, **C. L. Bradley**, C. V. Maxwell. 2019. Effect of sodium butyrate (SB) on growth performance and complete blood cell count in nursery pigs: Two facility study. Midwest Animal Science Proceedings.
- Wilcock, P.; C. L. Walk, **C. L. Bradley**, and T. Santos. 2014. The effect of betaine on piglet starter performance. Midwest Animal Science Proceedings (Abstr. 357).

## PUBLICATIONS - CONTINUED

Wilcock, P.; **C. L. Bradley**, J. J. Chewning, and C. L. Walk. 2014. The effect of superdosing phytase on inositol and phytate concentration in the gastrointestinal tract and its effect on pig performance. National Animal Science Proceedings (Abstr. 761).

Wilcock, P.; **C. L. Bradley**, H. V. Masey O'Neill, and G. Gourley. 2015. The effect of xylanase in grower-finisher pigs fed low or high fat diets. Midwest Animal Science Proceedings (Abstr. 130).

### *Scientific Journal Publications*

Bass, B. E.; **C. L. Bradley**, Z. B. Johnson, C. E. Zier-Rush, R. D. Boyd, J. L. Usry, C. V. Maxwell and J. W. Frank. 2017. Influence of dietary L-arginine supplementation of sows during late pregnancy on piglet birthweight and sow and litter performance during lactation. *J. Anim. Sci.* 95: 1: 248-256.

Lu, H.; H. Yan, H. M. Masey O'Neill, **C. Bradley**, M.R. Bedford, P. Wilcock, C. H. Nakatsu, O. Adeola, and K. M. Ajuwon. 2020. Effect of timing of postweaning xylanase supplementation on growth performance, nutrient digestibility, and fecal microbial composition in weanling pigs. *Canadian Journal of Animal Science.* 100(1): 27-36. <https://doi.org/10.1139/cjas-2019-0021>

Lu, H.; Y. Yan, H. M. Masey O'Neill, **C. L. Bradley**, M. R. Bedford, P. Wilcock, C. H. Nakatsu, O. Adeola, and K. M. Ajuwon. 2021. Effect of xylanase and live yeast supplementation on growth performance, nutrient digestibility, and gut microbiome diversity of pigs. *Can. J. Anim. Sci.* 101: 459-472.

Remole, H. M.; J. K. Htoo, S. M. Mendoza, **C. L. Bradley**, R. N. Dilger, A. C. Dilger, and B. N. Harsh. 2024. Effects of supplemental methionine sources in finishing pig diets on growth performance, carcass characteristics, cutting yields, and meat quality. *Transl. Anim. Sci.* 8: txae088. doi: [10.1093/tas/txae088](https://doi.org/10.1093/tas/txae088).

Stewart, K. R.; **C. L. Bradley**, P. Wilcock, F. Domingues, M. Kleve-Feld, J. Hundley and F. A. Cabezon. 2018. Superdosing phytase fed to mature boars improves semen concentration and reproductive efficiency. *Prof. Anim. Sci.* 34: 95-102.

Wei, X.; K. A. Bottoms, H. H. Stein, L. Blavi, **C. L. Bradley**, J. Bergsrtom, J. Knapp, R. Story, C. Maxwell, T. Tsai, and J. Zhao. 2021. Dietary organic acids modulate gut microbiota and improve growth performance of nursery pigs. *Microorganisms.* 9(1), 110; <https://doi.org/10.3390/microorganisms9010110>.