

# **JAMIE A. B O Y D**

## **EDUCATION**

May 2006 – August 2009

Doctor of Philosophy– *Dairy Science-Ruminant Nutrition emphasis*  
University of Georgia  
Department of Animal and Dairy Science  
Dissertation Topic - *The effect of supplementing high yielding Holstein cows with botanical extracts, bacterial inoculants, or dietary glycerol during heat stress, and the effect of dietary glycerol in transition cow diets on subsequent performance and efficiency.*

May 2004 - May 2006

Master of Science - *Animal Science*  
University of Georgia  
Department of Animal and Dairy Science  
Thesis - *Effect of supplemental energy source on the performance of lactating dairy cows fed diets based on sorghum and ryegrass silage.*

August 2000 - May 2001

Agricultural Education - *Teaching Certification Program*  
University of Georgia  
Department of Agricultural Leadership, Education, and Communication

August 1996 - May 2000

Bachelor of Science - *Animal Science*  
Martha Berry College

## **EXPERIENCE**

June 2016-present

Sul Ross University  
Position- Assistant Professor Animal Science  
Position- Department Chair of Animal Science (June 2019-current)

January 2016-May 2016

Sul Ross University  
Position-Adjunct Assistant Professor Animal Science

August 2013-May 2016

Berry College, Mount Berry, GA.  
Position-Visiting Assistant Professor Animal Science

August 2009- July 2013

U.S. Dairy Forage Research Center, Madison, WI.

Position- *Dairy Research Scientist (Post-Doctoral)*

Responsibilities – Design and conduct research studies focusing on precision feeding using NIR, effects of feed density on the rumen environment, and measuring techniques iNDF, data analysis, and publication submission

June 2004 – August 2009

University of Georgia

Department of Animal and Dairy Science

Position - *Graduate Research and Teaching Assistant (Ph.D. and M.S.)*

June 2001 - November 2003

Shenandoah Jerseys

Boonsboro, MD

Position – *Assistant Herd Manager*

## COURSES TAUGHT

### **Sul Ross State University:**

**ANSC 1101** Freshman Seminar

**ANSC 1419** Introduction to Animal Science

**ANSC 2306** Companion Animal Management

**ANSC 2301** Introduction to Agriculture

**ANSC 3311** Animal Physiology

**ANSC 3416** Feed Manufacturing and Formulation

**ANSC 4308** Livestock and Wildlife Nutrition

**ANSC 4306** Control of Domestic and Wildlife Diseases

**ANSC 4314/5304** Forage Production and Management

**ANSC 4316/5331** Ruminant Nutrition

**ANSC 5306** Protein and Amino Acid Metabolism

**ANSC 5324** Animal Physiology

**ANSC 5327** Advanced Animal Nutrition

**ANSC 5328** Domestic Meat Production

### **Berry College:**

**ANS 105:** Introduction to Agricultural Sciences

**ANS 200:** Livestock Feeding and Ration Formulation

**ANS 323:** Forage Production

**ANS 328I:** Principles of Nutrition (WI)

**ANS 423:** Dairy Systems and Management

**ANS 491:** Seminar

## RESEARCH INTERESTS

**2020** *The effects of Total Equine™ grain containing Ascophyllum nodosum seaweed extract and chelated minerals on forage intake, cortisol levels, and cecal digestibility in mature Quarter horse mares under performance conditions.*

- What are the effects of including Total Sheep Mineral<sup>®</sup> in the diet of multiparous Katahdin Ewes on the energy levels determined by blood metabolites?*
- 2019** *Effects of including Total Equine<sup>®</sup> in the diet of mature quarter horse mares on forage intake, blood metabolites, and fiber digestibility.*
- Effects of including Total Bull<sup>®</sup> in the Diet of Ruminally Cannulated Jersey Steers on Forage Digestibility In-Vitro.*
- Effects on ADG, DMI, and blood metabolites of weaned Katahdin lambs offered Total Sheep Mineral<sup>®</sup> on a high forage diet under heat stress conditions.*
- Effects of including Total Sheep Mineral<sup>®</sup> in the diet of Katahdin Ewes and Creep-fed Lambs on forage intake, blood metabolites, and weaning weights.*
- The effects of Saccharomyces cerevisiae fermentation on the performance in regards to average daily gain and weaning weights of alfalfa and grain supplemented creep fed Boer cross kids.*
- 2018** *The effects of a Saccharomyces cerevisiae fermentation product on the digestibility of an annual rye grass hay based finishing diet for lambs.*
- The effects of a Saccharomyces cerevisiae fermentation product on the average daily gain, digestibility, and meat quality of an annual rye grass hay based finishing diet for hair lambs in feedlot.*
- Digestawell<sup>®</sup> fiber improves in-vitro digestibility of alfalfa and coastal Bermuda grass hay fed to horses.*
- Evaluation and characterization of native grasses of the Trans-Pecos region of Texas as an adequate forage source for horses at maintenance.*
- Digestibility of Forages in Ruminally Cannulated Jersey Steers Supplemented with Liquid Glycerol on a Wheat Straw Forage Diet.*
- Comparison of Digestibility of Forages in Jersey Steers Supplemented with a Yeast Fermentation Product on a High and Low Quality Forage Diet.*
- 2015** *The effects of supplemental chromium propionate on the performance and blood metabolites of dairy heifers.*
- 2010** *The effects of abrupt changes in forage dry matter on intake and milk yield in late lactation cows.*
- 2010** *The effectiveness of various in-vitro and in-vivo techniques on estimating indigestible neutral detergent fiber.*

- 2010** *The effects of particle density on the ruminal environment and digestibility in lactating dairy cows.*
- 2009** *The effects of abrupt changes in forage dry matter on intake and milk yield in early lactation dairy cows.*
- 2008** *The effects of the addition of two levels of glycerol in the transition cow diet on production and efficiency.*
- 2008** *The effects of increasing concentrations of dietary glycerol on ruminal environment and digestibility in lactating dairy cows.*
- 2008** *Effects of the addition of live bacterial inoculants and glycerol to the diet of lactating dairy cows on apparent efficiency and milk yield during heat stress.*  
Sponsor - Nutrition Physiology Corporation St. Cloud, MN.
- 2007** *The effects of glycerol and botanicals (Thermal Care-D) on the efficiency and production of lactating dairy cows during hot weather.* Sponsor - ADM Research, Decatur, IN.
- 2004** *The effects of sorghum and ryegrass silage with ground corn and hominy of lactating dairy cow performance.* Sponsor - Southeast Milk Check Off

## PUBLICATIONS

### ***Monographs***

Boyd, J. A. 2009. *The effect of supplementing high yielding Holstein cows with botanical extracts, bacterial inoculants, or dietary glycerol during heat stress, and the effect of dietary glycerol in transition cow diets on subsequent performance and efficiency.* Ph.D. Dissertation, University of Georgia, Athens.

Boyd, J. A. 2006. *Effect of supplemental energy source on the performance of lactating dairy cows fed diets based on sorghum and ryegrass silage.* M. S. Thesis, Univ. of Georgia, Athens.

### ***Journal Articles***

Burt, J.C., J. Boyd, and B. S. Perron. 2019. *The effects of a *Saccharomyces cerevisiae* fermentation product on the digestibility of an annual rye grass hay based finishing diet for lambs.* J. Anim. Sci.: (in submission)

Boyd, J. and D.R. Mertens, 2015. *Comparison of alternative methods, sample grinds, and fermentation times for determining indigestible neutral detergent fiber.* J. Dairy Sci. 96: (in preparation)

Boyd, J. and D.R. Mertens, 2015. *Abrupt changes in forage dry matter of one to three days affect intake and milk yield in late lactation dairy cows*. J. Dairy Sci. 96: (in preparation)

Boyd, J. and D.R. Mertens, 2015. *Abrupt changes in forage dry matter of one to three days affect intake and milk yield in early lactation dairy cows*. J. Dairy Sci. 96: (in preparation)

Boyd, J. A., J.K. Bernard and J. W. West, 2013. *Effects of feeding different amounts of dietary glycerol on ruminal environment and digestibility in lactating dairy cows*. J. Dairy Sci. 96:470-476

Boyd, J. A., J. W. West, J. Loften, and D.R. Ware 2011. *Effects of addition of live bacterial inoculants and glycerol to the diet of lactating dairy cows on apparent efficiency and milk yield during heat stress*. J. Dairy Sci. 94:4616-4622

Boyd, J. A., J. W. West and J.K. Bernard 2015. *Effects of the addition of different levels of dietary glycerol on the efficiency and performance of transition cows*. J. Dairy Sci.96: (in preparation)

Boyd, J.A., J.W. West, J.K. Bernard, and S. Block. 2012. *Effects of Thermal Care-D<sup>®</sup> on efficiency and production of lactating dairy cows during hot weather*. PAS 28:338-343.

Boyd, J.A., J.K. Bernard, J.W. West, and A.H. Parks. 2008. *Performance of lactating dairy cows fed diets based on sorghum and ryegrass silage and different energy supplements*. PAS 24:349-354.

### **Abstracts**

Romo, Victoria, J.A. Boyd, J.C. Burt. 2020. *The effects of supplementing a chelated mineral containing *Ascophyllum nodosum* on intake and performance of creep-fed hair lambs*. J. Anim Sci. (E-Suppl): Submitted. (Abstr.)

Presented at 2019 12<sup>th</sup> Annual McNair-Tafoya Symposium

Presented at SACNAS Diversity in Stem Conference, Honolulu, Hawaii

Presented at 2020 Southern Section Animal Science Meeting, Chattanooga, TN

Gutierrez, Noheli, J.A. Boyd. 2020. *Effects of in-vitro digestibility in cannulated steers when supplemented different levels of glycerol*. J. Anim Sci. (E-Suppl): Submitted. (Abstr.)

Presented at 2019 12<sup>th</sup> Annual McNair-Tafoya Symposium

Presented at SACNAS Diversity in Stem Conference, Honolulu, Hawaii

Presented at 2020 Southern Section Animal Science Meeting, Chattanooga, TN

Yantis, Makayla, J. Boyd. 2020. *The effects of *Saccharomyces cerevisiae* fermentation on the performance in regards to average daily gain and weaning weights of alfalfa and grain supplemented creep fed Boer cross kids*. J. Anim Sci. (E-Suppl): Submitted. (Abstr.)

Presented at 2019 12<sup>th</sup> Annual McNair-Tafoya Symposium  
Presented at SACNAS Diversity in Stem Conference, Honolulu, Hawaii  
Presented at 2020 Annual Animal Science Meeting, Madison, WI.

Smith, Kaylee, J. Boyd. *The effects of Total Equine™ grain containing Ascophyllum nodosum seaweed extract and chelated minerals on forage intake, cortisol levels, and cecal digestibility in mature Quarter horse mares under performance conditions.* J. Anim Sci. (E-Suppl): Submitted. (Abstr.)  
Presented at 2020 Annual Animal Science Meeting, Madison, WI.

Jolly, Elizabeth, J. Boyd. 2020. *The effect on ADG, DMI, and blood metabolites of weaned Katahdin lambs offered Total Sheep Mineral® on a high forage diet under heat stress conditions.* J. Anim Sci. (E-Suppl): Submitted. (Abstr.)  
Presented at 2020 Southern Section Animal Science Meeting, Chattanooga, TN

Burt, J.C., J. Boyd, and B. S. Perron. 2019. *The effects of a Saccharomyces cerevisiae fermentation product on the digestibility of an annual rye grass hay based finishing diet for lambs.* J. Anim Sci. (E-Suppl): Submitted. (Abstr.)  
-Presented at 2019 Southern Section Animal Science Meeting, Oklahoma City, OK.

Burt, J.C., J. Boyd, I. Garcia-Galicia, and B. S. Perron. 2019. *The effects of a Saccharomyces cerevisiae fermentation product on the average daily gain, digestibility, and meat quality of an annual rye grass hay based finishing diet for hair lambs in feedlot.* J. Anim Sci. (E-Suppl): Submitted. (Abstr.)  
-Presented at 2019 Southern Section Animal Science Meeting, Oklahoma City, OK.

Perron, B.S., R.K. Splan, J. Boyd, and J.C. Burt. 2019. *Digestawell® fiber improves in-vitro digestibility of alfalfa and coastal Bermuda grass hay fed to horses.* J. Anim Sci. (E-Suppl): Submitted. (Abstr.)  
-Presented at 2019 Southern Section Animal Science Meeting, Oklahoma City, OK.

Perron, B.S., R.K. Splan, J. Boyd, B. Warnock, and J.C. Burt. 2019. *Evaluation and characterization of native grasses of the Trans-Pecos region of Texas as an adequate forage source for horses at maintenance.* SRSU Graduate Symposium.

Soto, Itzel and J. Boyd. 2019. *Digestibility of Forages in Ruminally Cannulated Jersey Steers Supplemented with Liquid Glycerol on a Wheat Straw Forage Diet.* J. Anim Sci. (E-Suppl): Submitted. (Abstr.)  
-Presented at 2019 Southern Section Animal Science Meeting, Oklahoma City, OK.  
-Presented at 2018 11<sup>th</sup> Annual McNair-Tafoya Symposium

Garcia, Anissa and J. Boyd. 2019. *Comparison of Digestibility of Forages in Jersey Steers Supplemented with a Yeast Fermentation Product on a High and Low Quality Forage Diet.* J. Anim Sci. (E-Suppl): Submitted. (Abstr.)  
-Presented at 2019 Southern Section Animal Science Meeting, Oklahoma City, OK.  
-Presented at 2018 11<sup>th</sup> Annual McNair-Tafoya Symposium

Boyd, J. and D.R. Mertens, 2013. *Abrupt changes in forage dry matter of one to three days affect intake and milk yield in late lactation dairy cows*. J. Dairy Sci. 96 (E- Suppl 1):Submitted. (Abstr.)

Boyd, J. and D.R. Mertens, 2011. *Comparison of alternative methods, sample grinds, and fermentation times for determining indigestible neutral detergent fiber*. J. Dairy Sci. 94 (E- Suppl 1):Submitted. (Abstr.)

Boyd, J. and D.R. Mertens, 2011. *Abrupt changes in forage dry matter of one to three days affect intake and milk yield in late lactation dairy cows*. J. Dairy Sci. 94 (E- Suppl 1):Submitted. (Abstr.)

Boyd, J. and D.R. Mertens, 2010. *Abrupt changes in forage dry matter of one to three days affect intake and milk yield in early lactation dairy cows*. J. Dairy Sci. 93 (E- Suppl 1):Submitted. (Abstr.)

Boyd, J., J. Bernard, and J.W. West, 2010. *Effects of supplementing transition cow diets with different levels of dietary glycerol on performance, efficiency, and blood metabolites*. J. Dairy Sci. 93 (E- Suppl 1):Submitted. (Abstr.)

Boyd, J. A., J. W. West 2009. *Effects of increasing concentrations of dietary glycerol on ruminal environment and digestibility in lactating dairy cows*. J. Dairy Sci. 92 (E- Suppl 1):Submitted. (Abstr.)

Boyd, J. A., J. W. West, 2009. *Effects of addition of live bacterial inoculants and glycerol to the diet of lactating dairy cows on apparent efficiency and milk yield during heat stress*. J. Dairy Sci. 92 (E- Suppl 1):Submitted. (Abstr.)

Boyd, J., J. W. West, J. Bernard, and S. Block. 2008. *Effects of ThermalCare-D® on efficiency and production of lactating dairy cows during hot weather*. J. Dairy Sci. 91 (E- Suppl. 1):123. (Abstr.)

Boyd, J. M., and J. K. Bernard. 2005. *Effect of supplemental energy source on the performance of lactating dairy cows fed diets based on sorghum and ryegrass silage*. J. Dairy Sci. 88(Suppl. 1):98 (Abstr.)

## **OTHER ACTIVITIES**

Advisor for Academic Quadrathlon Team

Competed Oklahoma City, OK at Southern Section Animal Science Meeting 2019

Competed Chatanooga, TN at Southern Section Animal Science Meeting 2020

Advisor for Sul Ross State University Pre-Vet and Block and Bridle Club- September 2016- current

## **PROFESSIONAL MEMBERSHIPS**

American Dairy Science Association

American Society of Animal Science

Gamma Sigma Delta