

JUDITH WILSON

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Mount Berry, GA 30149-5003
706 238-7882
jwilson@berry.edu

EDUCATION

Virginia Polytechnic Institute and State University 1991-1995
Blacksburg, VA 24061
Doctor of Philosophy, 1995
Animal Science Major

Kansas State University 1989-1991
Manhattan, KS 66506
Master of Science, 1991
Animal Science Major

University of New Hampshire 1985-1988
Durham, N. H. 03824
Bachelor of Science, 1988
Animal Science Major

PRESENT POSITION

Department Chair, Animal Science 2019-present
Professor of Animal Science 2015-present
Faculty Liaison, Gunby Equine Center 2013-present
Berry College Mount Berry, GA

PROFESSIONAL EXPERIENCE

Associate Professor of Animal Science 2003-2015
Director, Gunby Equine Center 1999-2013
Berry College Mount Berry, GA

Assistant Professor of Animal Science 1997-2003
Berry College Mount Berry, GA

Senior Research Associate 1995-1997
Virginia Polytechnic Institute and State University Middleburg, VA

Riding Instructor 1990
Kansas Cooperative Extension Service Kansas County
clinics

Curriculum Vitae

TEACHING EXPERIENCE:

Berry College

Anatomy and Physiology (Laboratory) (ANS 326)
*Behavior of Domestic Animals (ANS 429I)
Cardiovascular Exercise Physiology (KIN 352)
Cardiovascular, Pulmonary and Hepatic Physiology (ANS 434)
*Comparative Exercise Physiology (ANS 330)
Directed Study (498) (several in equine science)
*Equine Evaluation (ANS 331)
First Year Experience (BCC 100)
*Forage Production (ANS 323)
Genetics of Livestock Improvement (ANS 324)
(Genetics of Domestic Animals ANS 324)
Horse Systems and Management (ANS 424I)
Horseback Riding (HPE 121)
Internship (496)
Introduction to Agricultural Science (ANS 105)
Livestock Feeding and Ration Formulation (ANS 200)
Neural, Renal and Muscular Physiology (ANS 433)
Orientation to Animal Science (ANS 201)
Principles of Nutrition (laboratory) (ANS 322)
Reproductive Physiology (ANS 327I)
Senior Seminar (ANS 491)
Special Topics (ANS 492)
Swine and Poultry Systems and Management (ANS 425)
Teaching Equitation (ANS 301)
Veterinary Microbiology (ANS 302)

* *courses I have developed*

Virginia Tech

Horse Production (guest lecturer)

Assisted with 4-H youth educational programs on general horse health and exercise physiology

Preparing graduate students for oral examinations

Assist with adult educational extension programs on nutritional and exercise/training management of horses (Virginia Tech MARE Center).

Kansas State University

Horse Science (teaching assistant)

Horse Training and Management (teaching assistant)

Curriculum Vitae

Aptitude and Performance Appraisal of Horses (teaching assistant)

Assisted with adult educational extension programs on general reproductive and nutritional management of horses

PUBLICATIONS

Refereed Journal Articles:

Raub, R.H., **J. Warren** and K. Pool-Anderson. The effects of forced exercise on development of heart, lung and diaphragm muscle in weanling horses. *J. Equine Vet. Sci.* 12:106-108. 1992.

Pool-Anderson, K., R.H. Raub and **J. A. Warren**. Maternal influences on growth and development of full-sibling foals *J. Anim. Sci.* 72:1661. 1994.

Wilson, J., J. Williams, D. Kronfeld, L. Gay and T. Wilson. Isolating equine sarcoplasmic reticulum: its function during high intensity repeated sprints. *Equine Vet. J. Suppl.* 18:252. 1995.

Ferrante, P. L., L. E. Taylor, J. A. Wilson and D. S. Kronfeld. Plasma and erythrocyte ion concentration during exercise in Arabian horses. *Equine Vet. J. Suppl.* 18:306. 1995.

Taylor, L. E., P. L. Ferrante, J. A. Wilson and D. S. Kronfeld. Arterial and mixed venous acid-base status and strong ion difference during repeated sprints. *Equine Vet. J. Suppl.* 18:326. 1995.

Kronfeld, D. S., W. L. Cooper, K. M. Crandell, L. A. Gay, R. M. Hoffman, J. L. Holland, J. A. Wilson, D. Sklan and P. Harris. Supplementation of pasture for growth. *Pferdeheilkd.* 12:317. 1996.

Taylor, L. E., D. S. Kronfeld, P. L. Ferrante, J. A. Wilson and W. Tiegs. Blood gas measurements adjusted for temperature at three sites during incremental exercise in the horse. *J. Appl. Physiol.* 85(3): 1030-1036. 1998.

Kronfeld, D.S., S. E. Custalow, P. L. Ferrante, L. E. Taylor, J. A. Wilson, W. Tiegs. Acid-base responses of fat-adapted horses: relevance to hard work in the heat. *Appl. Anim. Beh. Sci.* 59:61-72. 1998.

Wilson, J. A., D. S. Kronfeld, L. S. Gay, J. H. Williams, T. M. Wilson, and M. I. Lindinger. Sarcoplasmic reticulum responses to repeated sprints are affected by conditioning of horses. *J. Anim. Sci.* 76:3065-3071. 1998.

Hoffman, R. M., J. A. Wilson, D. S. Kronfeld, W. L. Cooper, D. J. Sklan, and P. A. Harris. Hydrolyzable carbohydrates in pasture, hay and horse feeds: direct assay and seasonal variation. *J. Anim. Sci.* 79:500-506. 2001.

Curriculum Vitae

Staniar, W. B., D. S. Kronfeld, J. A. Wilson, L. A. Lawrence, W. L. Cooper and P. A. Harris. Growth of Thoroughbreds fed a low protein supplement fortified with lysine and threonine. *J. Anim. Sci.* 79:2143-2151. 2001.

Wilson, J. A. Using a student research group to support administrative responsibilities of an equine unit. *NACTA Journal.* 47(2):2-4. 2003.

Staniar, W. B., D. S. Kronfeld, R. M. Hoffman, J. A. Wilson and P. A. Harris. Weight predictions from linear measures of growing Thoroughbreds. *Equine Vet. J.* 36(2):149-154. 2004.

Babb, C. W., D. Freile and J. A. Wilson. Hydrogeological and chemical analysis of surface and shallow groundwater from a dairy waste lagoon. *Georgia Journal Sci.* 63(4) 257-271. 2005.

Wilson, J. A., C. W. Babb. and R. Prince. Digestibility of nitrogen and phosphorus in three commercially available equine feeds. *Professional Animal Scientist.* 22(4) 341-345. 2006.

Graham-Thiers, P., J. Wilson, J. Haught and M. Goldberg. Relationship between Dietary, Plasma and Muscle Amino Acids in Maintenance Horses, Pregnant and Lactating Mares. *Professional Animal Scientist* 26: 320-327. 2010

Graham-Thiers, P., J. Wilson, J. Haught and M. Goldberg. Relationship between Dietary, Plasma and Muscle Amino Acids in Maintenance Horses, Exercising Horses and Growing Weanling Horses. *Professional Animal Scientist* 26:313-319. 2010.

Graham-Thiers, P. M., J. A. Wilson, J. Haught and M. Goldberg. Relationship between Dietary, Plasma and Muscle Amino Acids in Horses. *Professional Animal Scientist* 28:351-357. 2012.

J. A. Daniel, R. Groux*, J. A. Wilson, P. D. Krawczel, A. R. Lee, and B. K. Whitlock. 2020. Short communication: Trimming and re-shoeing results in more steps per day and more time spent lying per day. *J. Equine Vet. Sci.* 88:102947; DOI 10.1016/j.jevs.2020.102947.

S. Peters, J. Wilson and J. Boyette. 2020. Differential Expression of IGF1, IGFBP5, MSTN, and MYH1 Across Different Age Classes in American Quarter Horses. *J. Equine Vet. Sci.* 94:103226; DOI 10.1016/j.jevs.2020.103226

Abstracts:

Curriculum Vitae

Warren, J. R. H. Raub and K. Anderson. The effects of exercise and age on PTH in weanling Quarter Horses. Proc. Twelfth Equine Nutr. Physiol. Symp. 141:1991.

Anderson, K. P., R. Raub, R. Leedle and J. Warren. Influence of an imbalanced nutrient:calorie ratio and exercise on the incidence of developmental orthopedic disease in weanling horses. Proc. Twelfth Equine Nutr. Physiol. Symp. 15:1991.

Raub, R. H., J. Warren and K. P. Anderson. The effect of exercise on heart, lung and diaphragm muscle development in weanling horses. Proc. Twelfth Equine Nutr. Physiol. Symp. 165:1991.

Wilson, J.A., J. H. Williams, D. S. Kronfeld, L. S. Gay, T. M. Wilson and P. L. Ferrante. Sarcoplasmic reticulum responses to high intensity exercise and conditioning in horses. Proc. Fourth International Conference on Equine Exercise Physiology. 111:1994.

Kronfeld, D. S., P. L. Ferrante, L. E. Taylor, S. E. Custalow and J. A. Wilson. Blood hydrogen ion and lactate concentrations during strenuous exercise in horses. Proc. Fourth International Conference on Equine Exercise Physiology. 56:1994.

Taylor, L. E., P. L. Ferrante, J. A. Wilson and D. S. Kronfeld. Arterial and central venous acid-base status and strong ion difference during repeated sprints. Proc. Fourth International Conference on Equine Exercise Physiology. 101:1994.

Wilson, J., J. Williams, D. Kronfeld, L. Gay and T. Wilson. Sarcoplasmic reticulum responses to dietary lecithin. Proc. Fourteenth Equine Nutr. Physiol. Symp. 15:1995.

Taylor, L. E., P. L. Ferrante, J. A. Wilson and D. S. Kronfeld. Acid-base status and blood variables during repeated sprint exercise in horses fed lecithin. Proc. Fourteenth Equine Nutr. Physiol. Symp. 94:1995.

Wilson, J. A., D. S. Kronfeld, W. L. Cooper and D. Sklan. Seasonal variation in the nutrient composition of northern Virginia forages. Proc. Fifteenth Equine Nutr. Physiol. Symp. 336:1997.

Staniar, W. B., J. A. Wilson, L. H. Lawrence, W. L. Cooper, D. S. Kronfeld and P. A. Harris. Growth of Thoroughbreds fed different levels of protein and supplemented with lysine and threonine. Proc. Sixteenth Equine Nutr. Physiol. Symp. 88: 1999.

Wilson, J. A. Integration of teaching and research in equine science at a small private college. Proc. Seventeenth Equine Nutr. Physiol. Symp. 225: 2001.

Curriculum Vitae

Hoffman, R. M., J. A. Wilson, L. A. Lawrence, D. S. Kronfeld, W. L. Cooper and P. A. Harris. Supplemental calcium does not influence radiographic bone mineral content of growing foals fed pasture and a fat-and-fiber supplement. Proc. Seventeenth Equine Nutri. Physiol. Symp. 122:2001.

Wilson, J. A., C. W. Babb and R. H. Prince. Digestibility of three commercially available equine pelleted feeds. Proc. Eighteenth Equine Nutri. Physiol. Symp. 95:2003.

Staniar, W. B., D. S. Kronfeld, R. M. Hoffman, J. R. Burk, J. A. Wilson and P. A. Harris. Weight estimation of Thoroughbred foals. Proc. Eighteenth Equine Nutri. Physiol. Symp. 248:2003.

P. Graham-Thiers and J. Wilson. Relationships between diet, plasma and muscle amino acids in horses at maintenance and light exercise. Proc. Nineteenth Equine Sci. Society Symp. 207:2005.

P. Graham-Thiers and J. Wilson. Relationships between diet, plasma and muscle amino acids in mares at maintenance and in the last trimester of pregnancy. Proc. Nineteenth Equine Sci. Society Symp. 160:2005.

P. Graham-Thiers and J. Wilson. Relationships between diet, plasma and muscle amino acids in horses at maintenance and horses in early lactation. Proc. Twentieth Equine Sci. Society Symp. 108:2007.

P. Graham-Thiers and J. Wilson. Relationships between diet, plasma and muscle amino acids in horses at maintenance and horses in weanling growth. Proc. Twentieth Equine Sci. Society Symp. 110:2007.

Wilson, J. A. and P. Graham-Thiers. Muscle and Plasma Amino Acids in Pregnant/Lactating Mares and their Weanling Foals. J. Equine Vet. Sci. 29:370-371. 2009.

Wilson, J. A. P. M. Graham-Thiers, M. Goldberg and L. K. Bowen. Urinary 3-methyl-histidine concentrations in pregnant and lactating mares. J. Equine Vet. Sci. 33:333-334. 2013.

LeRoy, R.E. Z. Cochran, A. G. Foster and J.A. Wilson. Wearable biometric sensors for horses and rider-centered interface. J. Equine Vet. Sci. 35:389. 2015

Kristianna Saelens, Micah Stockwell-Goering, Dominic Qualley, and Judy Wilson. Amino Acid Analysis in Plasma from Yearling Horses Through One Year of Growth. Berry College Symposium on Student Scholarship. 2017

Dissertations:

The effects of exercise and age on PTH concentrations in weanling horses. Judith Ann Warren. Kansas State University. May, 1991

Sarcoplasmic reticulum responses to repeated sprints, conditioning and dietary lecithin in the horse. Judith Ann Wilson. Virginia Polytechnic and State University. April, 1995.

PROFESSIONAL PRESENTATIONS

Research

The effects of exercise and age on PTH concentrations in weanling horses. Twelfth Equine Nutrition and Physiology Symposium. Calgary, Alberta - June 1991.

Sarcoplasmic reticulum responses to high intensity exercise and conditioning in horses. Fourth International Conference on Equine Exercise Physiology. Queensland, Australia - July 1994.

Sarcoplasmic reticulum responses to dietary lecithin. Fourteenth Equine Nutrition and Physiology Symposium. Ontario, California - January 1995.

Sarcoplasmic reticulum responses to conditioning and diet. Equine Exercise Physiology Research Meeting. Columbus, Ohio - November, 1996.

Integration of teaching and research in equine science at a small private college. Seventeenth Equine Nutrition and Physiology Symposium, Lexington, Kentucky - May, 2001.

Digestibility of three commercially available equine pelleted feeds. Eighteenth Equine Nutrition and Physiology Symposium, Lansing, Michigan - June, 2003.

Relationship between diet, plasma and muscle amino acids in mares at maintenance and in the last trimester of pregnancy. Equine Science Society Symposium, Tucson, Arizona – June 2005.

Relationship between diet, plasma and muscle amino acids in horses at maintenance and horses in weanling growth. Equine Science Society Symposium, Hunt Valley, Maryland – June, 2007.

Muscle and plasma amino acids in pregnant/lactating mares and their weanling foals. Equine Science Society, Keystone, Colorado – May, 2009.

Urinary 3-methyl-histidine concentrations in pregnant and lactating mares. Equine Science Society. Ruidoso, New Mexico-May, 2013.

Curriculum Vitae

Extension

Nutritional physiology of the working horse. Equine extension meeting. Rappahannock County, VA. November, 1996.

Nutrition of the pregnant mare. Virginia Thoroughbred Association breeding seminar. Middleburg, VA. December, 1996.

Nutrition of the trail horse. Equine extension meeting. Leesburg, VA. March, 1997.

Nutritional assessment of equine feeds by NIRS. Virginia Thoroughbred Association seminar. Middleburg, VA. March, 1997.

The Science and Art of Horse Nutrition. Equine extension meeting. Cartersville, GA. May 2008.

Equine Endoparasites. Equine Extension Meeting. Cartersville, GA. May 2008.

Definitions and basics of equine genetics. Southern States Basic Equine Feedmaster. Richmond, VA. January, 2014

Horse breeds and conformation. Southern States Basic Equine Feedmaster. Richmond, VA. January, 2014

GRANTS AWARDED

2000 Maintaining water quality through animal waste management. School of Mathematical and Natural Sciences research Grant, Berry College. \$903.47.

2001 Digestibility of nitrogen and phosphorus in three commercially available equine feeds. Faculty Development Grant, Berry College. \$2000.

2001 Maintaining water quality through animal waste management. School of Mathematical and Natural Sciences Research Grant, Berry College. \$777.

2003 Relationship between dietary, plasma and muscle amino acids in horses. Faculty Development Grant, Berry College. \$1330.00.

2004 Relationship between dietary, plasma and muscle amino acids in horses. Virginia Horse industry Board. \$5000.00

2006 Physical and hormonal changes in Quarter Horse broodmares during the

Curriculum Vitae

third trimester of pregnancy. School of Mathematical and Natural Sciences Research Grant, Berry College. \$545.

- 2007 Equine Skeletal Reconstruction. Faculty Development Grant, Berry College, \$1576.78.
- 2014 Amino acid status and muscle gene expression in yearling horses through one year of growth. School of Mathematical and Natural Sciences Research Grant, Berry College. \$1000.00
- 2014 MR ED-Development of monitoring & recording equine device. School of Mathematical and Natural Sciences Research Grant, Berry College. \$550.
- 2015 Genomic Study of muscle development in yearling horses, in collaboration with Dr. Kyle Caires. Faculty Development Grant, Berry College, \$5323.30.
- 2018 Gene Expression of growth-related genes in Quarter Horses, in collaboration with Sunday Peters. Faculty Development Grant, Berry College, \$6000.00.
- 2021 Study of the effect of exercise-induced stress (EIS) on expression of innate and adaptive immune genes in Racing Quarter Horses. Faculty Development Grant, Berry College, \$6000.00.

RECOGNITIONS

Vulcan Teaching Excellence Award, Berry College, 2014

First Year Advocate Faculty Award, Berry College, 2014

Awarded a John Lee Pratt Fellowship in Animal Nutrition, College of Agriculture and Life Sciences, Virginia Tech, to pursue a Ph.D. in Animal Science, 1991-1995.

Scholarship award from the American Society of Animal Science in recognition of scholastic achievement, May 1986 and April, 1988, University of New Hampshire.

Recognition of outstanding academic performance at Honors Convocation May, 1988, University of New Hampshire.

SERVICE

Professional

Curriculum Vitae

American Society of Animal Science, member

Equine Science Society, member

Phi Kappa Phi, member

North American Colleges and Teachers of Agriculture, member

Chair, Production and Management, Equine Science Society

Sigma Xi, secretary and treasurer (2005-2006)

Department Chair, Animal Science, Berry College. January 2005 – August 2010; July 2019 -present

Director (now Faculty Liaison), Gunby Equine Center, Berry College. January, 1999 - present.

Grazing Management Training School - August 1998, August 1999
Director, in cooperation with the Georgia Soil and Water Conservation Commission. Berry College, Mount Berry, GA

Journal of Equine Veterinary Science, reviewer

Translational Animal Science, reviewer

Committee

Ad Hoc Committee on Department Chairs

Ad Hoc Committee on Workload Equity

Berry/Darlington Committee

Budget Advisory Committee (Current)

Capital Campaign

Enrollment Management

Faculty Development Committee (current)

Faculty Hearing Committee

Freshmen Advisory Committee (current)

Faculty and Staff Health and Benefits Committee (current)

Curriculum Vitae

Health and Wellness Committee

Honor Code

Institutional Animal Care and Use Committee, Chair

Institutional Review Board

MNS College Promotion and Tenure Committee

MNS Research Committee, Chair

MNS School Curriculum Committee

Planning Council

Ongoing Faculty Development- Planning Council subcommittee

Promotion and Tenure Committee

Search Committee, Multiple Animal Science faculty positions

Search Committee, Assistant Director, CDC

Search Committee, Cage Center Director

Search Committee, Head Women's Soccer Coach

Search Committee, Kinesiology faculty member

Search Committee, MNS Dean

Search Committee, Provost

Advisor

Berry College Block and Bridle Club

Berry College Intercollegiate Equestrian Team

Berry College Pre-Vet Club (co-advisor)

Berry College Catholic Student Association (current)

Berry College Women's Soccer Faculty Liaison (current)

Curriculum Vitae

Community

Spiritual Life Committee, Saint Mary's School

Saint Mary's Church, Dinner Club Coordinator

Saint Mary's School Advisory Committee

Rome High School, Women's Soccer, parent volunteer

Rome High School, Cross Country, parent volunteer

Rome High School, Baseball, parent volunteer

Workshops

Training the future professorate. Virginia Tech. January 7-8, 1993

Training the future professorate. Virginia Tech. January 12-13, 1995