

Robert C. Cochran

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Professional Preparation:

Institution	Major	Degree and Year
New Mexico State University	Animal Science	Ph.D., 1985
The Ohio State University	Animal Science	M.S., (Honor's BS/MS program) 1980
The Ohio State University	Animal Science	B.S. (Summa Cum Laude), 1980

Appointments:

Position/Activity	Employer	Dates
Professor, Research Coordinator, and Associate Department Head	Kansas State University, Animal Sciences	3/2002 to present
Professor	Kansas State University, Animal Sciences	7/1996 to 2/2002
Associate Professor	Kansas State University, Animal Sciences	8/1990 to 6/1996
Assistant Professor	Kansas State University, Animal Sciences	8/1985 to 7/1990
Doctoral Candidate and Graduate Research and Teaching Assistant	New Mexico State University and USDA (Ft. Keogh) LARRL, Miles City, Montana	7/1982 to 7/1985
On-Site Research Coordinator, Title XII Project, Peru, South America	The Ohio State University (USAID CRSP subcontract)	5/1980 to 6/1982
Honor's Research Award Recipient	The Ohio State University	6/1979 to 3/1980
Undergraduate Research Aide	The Ohio State University	7/1977 to 6/1978
Administration Specialist	United States Air Force	10/1975 to 6/1977

Select Publications Related to Grant Topic (of 82 referred, 29 proceedings, 126 abstracts, and 104 non-referred):

1. Farmer, C. G., R. C. Cochran, T. G. Nagaraja, E. C. Titgemeyer, D. E. Johnson, and T. A. Wickersham. 2004. Ruminant and host adaptations to changes in frequency of protein supplementation. *J. Anim. Sci.* 82:895-903.
2. Klevesahl, E. A., R. C. Cochran, E. C. Titgemeyer, T. A. Wickersham, C. G. Farmer, J. I. Arroquy, and D. E. Johnson. 2003. Effect of a wide range in the ratio of supplemental rumen degradable protein to starch on utilization of low-quality, grass hay by beef steers. *Anim. Feed Sci. Tech.* 105:5-20.

3. Bandyk, C. A., R. C. Cochran, T. A. Wickersham, E. C. Titgemeyer, C. G. Farmer, and J. J. Higgins. 2001. Effect of ruminal versus postruminal administration of degradable protein on utilization of low-quality forage by beef steers. *J. Anim. Sci.* 79:225-231.
4. Broderick, G. A. and R. C. Cochran. 2000. In vitro and in situ methods for estimating digestibility with reference to protein degradability. In: M. K. Theodorou and J. France (eds.), *Feeding Systems and Feed Evaluation Models*. pp. 53-85. C.A.B. International Press, Wallingford, U.K.
5. Mathis, C. P., R. C. Cochran, J. S. Heldt, B. C. Woods, I. E. O. Abdelgadir, K. C. Olson, E. C. Titgemeyer, and E. S. Vanzant. 2000. Effects of supplemental degradable intake protein on utilization of medium- to low-quality forages. *J. Anim. Sci.* 78:224-232.
6. Heldt, J. S., R. C. Cochran, C. P. Mathis, B. C. Woods, K. C. Olson, E. C. Titgemeyer, T. G. Nagaraja, E. S. Vanzant, and D. E. Johnson. 1999. Effects of level and source of carbohydrate and level of degradable intake protein on intake and digestion of low-quality, tallgrass-prairie hay by beef steers. *J. Anim. Sci.* 77:2846-2854.
7. Heldt, J. S., R. C. Cochran, G. L. Stokka, C. G. Farmer, C. P. Mathis, E. C. Titgemeyer, and T. G. Nagaraja. 1999. Effect of different supplemental sugars and starch fed in combination with degradable intake protein on low-quality forage use in beef steers. *J. Anim. Sci.* 77:2793-2802.
8. Köster, H.H., R.C. Cochran, E.C. Titgemeyer, E.S. Vanzant, I. Abdelgadir, and G. St. Jean. 1996. Effect of increasing degradable intake protein on intake and digestion of low-quality, tallgrass-prairie forage by beef cows. *J. Anim. Sci.* 74:2473.

Expertise/Activities/Accomplishments:

Dr. Cochran's research and educational emphasis relates to the study nutrient utilization (with particular emphasis on protein) in ruminants consuming forage-based diets. He has served as major professor for 16 M.S. students, 12 Ph.D. students, and 4 postdoctoral associates. His research group has contributed significantly to the advancement of the study of grazing livestock nutrition, particularly in the areas of methodology development/validation (internal and external marker techniques, forage protein characterization, etc.), grazing management in the tallgrass prairie, and in our understanding of the impact of supplemental nutrient types (e.g., degradable protein, non-protein nitrogen, starch, sugars, etc.) on native forage utilization. He has collaborated (as either PI or co-PI) on grants totaling over 1 million dollars. These have included grants from USDA-NRI, industry, and private foundations. As nutrition group leader in Animal Science at KSU he oversaw a complete restructuring of the undergraduate and graduate nutrition curriculum. Personally, he is responsible for teaching ASI 680, "Ruminant Nutrition", ASI 683, "Grazing Livestock Nutrition", and ASI 920, "Energy Utilization in Domestic Livestock". In addition to his responsibilities as professor of Animal Science, Dr. Cochran currently serves as the Research Coordinator and Associate Department Head for the Department of Animal Sciences and Industry at Kansas State University.