

Curriculum Vitae
Robert P. Wettemann

Title: Regents Professor

Address: Office:
114 Animal Science
Department of Animal Science
Oklahoma State University
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Education:

BS: University of Connecticut (1966)
Major: Dairy Science

MS: Michigan State University (1968)
Major: Dairy Science-Reproductive Physiology

PhD: Michigan State University (1972)
Major: Dairy Science-Reproductive Physiology

Employment History:

1972 -1975 Assistant Professor, Oklahoma State University
1975 -1980 Associate Professor, Oklahoma State University
1980 -1981 Visiting Professor, University of Florida
1980 -1985 Professor, Oklahoma State University
1985 - Present Regents Professor, Oklahoma State University

Membership in Professional Societies:

American Society of Animal Science
American Dairy Science Association
Society for Reproduction and Fertility
Society for the Study of Reproduction
The Endocrine Society
American Registry of Professional Animal Scientists
American College of Animal Physiology - Charter Diplomate
Council for Agricultural Science and Technology
National Cattlemen's Beef Association

Honor Societies and Awards:

Sigma Xi - 1971
Richard M. Hoyt Graduate Student Award by Amer. Dairy Sci. Assoc. – 1971
Individual NIH Predoctoral Fellowship (Michigan State Univ.) 1968-1972
MASUA Lecturer – 1976
Department of Animal Science Tyler Award – 1979

Visiting Professor, University of Florida - 1980-1981
The James A. Whatley Award of Merit - Division of Agriculture – 1982
Regents Professor 1985-present
Sigma Xi Lecturer, Oklahoma State Univ. – 1992
Phi Kappa Phi – 1992
Elmo Baumann Distinguished Professorship – 1996
Celebrate State Award, Oklahoma State University – 1999
Distinguished Service Award, Southern Sec. American Society of Animal Science – 2001
King Foundation Visiting Scholar, University of Arkansas – 2005
Elected a trustee of the American Society of Animal Science Foundation – 2004-2007
Elected a Director of the American Society of Animal Science – 2005
Animal Physiology and Endocrinology Award, American Soc. of Animal Science – 2005
Distinguished Alumnus, Univ. of Connecticut, Agriculture and Natural Resources – 2005
President-elect American Society of Animal Science – 2007
Fellow American Society of Animal Science – 2007

Teaching Experience:

ANSI 4803 - Animal Growth and Performance – 37 semesters
ANSI 5113 - Basic Reproductive Physiology – 26 semesters
Major advisor to 24 MS and 20 PhD students

Research Interests:

Reproduction and endocrine function of beef cattle
Identification of beef cows that require less energy for maintenance of body weight
Effects of prenatal nutrition of bovine fetuses on postnatal growth and development

Publications: Total = 597, Refereed = 126, Abstracts = 233, Other = 238

Recent Research Published in Refereed Journals

Looper, M.L., J.A. Vizcarra, R.P. Wettemann, J.R. Malayer, T.B. Braden, R.E. Geisert and G.L. Morgan. 2003. Influence of estradiol, progesterone, and nutrition on concentrations of gonadotropins and GnRH receptors, and abundance of mRNA for GnRH receptors and gonadotropin subunits in pituitary glands of beef cows. *J. Anim. Sci.* 81:269-278.

Wettemann, R.P., C.A. Lents, N.H. Cicciooli, F.J. White and I. Rubio. 2003. Nutritional- and suckling-mediated anovulation in beef cows. *J. Anim. Sci.* 81(E. Suppl. 2):E48-E59. Available: <http://asas.org/symposia/03esup2/jas2389.pdf>. Accessed Nov. 29, 2004.

Looper, M.L., C.A. Lents and R.P. Wettemann. 2003. Body condition at parturition and postpartum weight changes do not influence the incidence of short-lived corpora lutea in postpartum beef cows. *J. Anim. Sci.* 81:2390-2394.

Cicciooli, N.H., R.P. Wettemann, L.J. Spicer, C.A. Lents, F.J. White, and D.H. Keisler. 2003. Influence of body condition at calving and postpartum nutrition on endocrine

function and reproductive performance of primiparous beef cows. *J. Anim. Sci.* 81:3107-3120.

Lents, C.A., R.P. Wettemann, F.J. White, I. Rubio, N.H. Ciccioli, L.J. Spicer, D.H. Keisler, and M.E. Payton. 2005. Influence of nutrient intake and of body fat on concentrations of insulin-like growth factor-I, insulin, thyroxine, and leptin in plasma of gestating beef cows. *J. Anim. Sci.* 83:586-596.

Ciccioli, N.H., S.L. Charles-Edwards, C. Floyd, R.P. Wettemann, H.T. Purvis, K.S. Lusby, G.W. Horn, and D.L. Lalman. 2005. Incidence of puberty in heifers fed high or low starch diets for different periods before breeding. *J. Anim. Sci.* 83:2653-2662.

Lents, C.A., R.P. Wettemann, F.J. White, L.N. Floyd, and D.L. Gay. 2006. Effects of method and timing of castration and the use of an estrogenic growth stimulant on weight gain of bull calves. *Prof. Anim. Sci.* 22:126-131.

White, F.J., I. Rubio, C.A. Lents, N.H. Ciccioli, R.P. Wettemann, and L.J. Spicer. 2007. Effect of days after calving on insulin-like growth factor-I, insulin-like growth factor binding proteins, progesterone, androstenedione, estradiol, and aromatase mRNA in dominant follicles of postpartum beef cows. *Anim. Reprod. Sci.* Sep 29; [Epub ahead of print]

Lents C. A, R. P. Wettemann, M.J. Paape, M.L. Looper, and B.S. Buchannan. 2008. Effects of dry cow treatment of beef cows on pathogenic organisms, milk somatic cell counts, and calf growth during the subsequent lactation. *J. Anim. Sci.* 86:747-755.

Current Research Initiatives

A long term goal of our research is to identify biomarkers that can be used to identify animals that are more efficient and require less energy for maintenance of body weight and body energy stores. Potential biomarkers are genotypes, differential expressed genes, or secretion of hormones, proteins, or metabolites that are related to the amount of energy (based on metabolic BW) required by beef cows to maintain weight during gestation. We will determine variation in maintenance energy requirements of mature, nonlactating, beef cows during mid gestation and the relationship of requirements with calves growth and reproductive performance.

Another goal of our research is too determine the effects of prenatal nutritional programming of the bovine fetus on mechanisms that regulate muscle fiber and fat cell growth, and resistance of animals to disease.