

JOHN WILLIAM CAMPBELL, Ph.D.

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EDUCATION:

- 1992:** New Mexico State University, Las Cruces
Ph.D., Animal Science; Major: Reproductive Physiology;
Minor: Nutrition; Research Tool: Biochemistry;
- 1983:** Texas A&M University, College Station
M.S., Animal Science (Reproductive Physiology)
- 1981:** Texas A&M University, College Station
B.S., Animal Science;
Magna Cum Laude

EXPERIENCE:

January 2009 - Present **New Mexico State University**
Department of Animal & Range Sciences
Las Cruces, NM
College Associate Professor

Duties:

- Coordinate the Horse, Livestock and Wool judging teams (Coordinate fund raising, travel arrangements, student recruitment and hiring coaches.)
- Teaching ANSC 100 Lecture and Laboratories
- Teaching ANSC 200 Lecture and Laboratories
- Teaching ANSC 220
- Teaching ANSC 301
- Teaching ANSC 303
- Teaching ANSC 351V
- Teaching ANSC 424
- Chair: Animal and Range Sciences Scholarship Committee
- Member: Campus Farm Operation Committee.
- Contest Superintendent: 4-H and FFA State Livestock Judging Contest.
- Member: Graduate student committees (as requested)
- Student recruitment
- Student Advising/Mentoring

May 2001 – Present Southwest Sport & Spine Center, Inc.
Las Cruces, NM
Owner
Corporate Secretary/Treasurer
Director of Business

Duties:

- In charge of banking, financial checks and balances, taxes, securing operating capital and regulatory compliance.
- Provide input to the financial division
- HIPAA Officer

July 1995 – May 2001: New Mexico State University – Dona Ana Branch
Part Time Instructor
Department of Health and Human Services

Duties:

- Instructor: Human Anatomy and Physiology. Prepared the lectures and labs, writing and grading exams and assigning research topics the students conduct each semester.
- Guest lecturer: Department of Animal Science and Range Sciences
- Member: Master Student's graduate committees for Department of Animal and Range Sciences (as requested)

February 1996 – May 2001 Southwest Bio-Lab, Inc.
Las Cruces, NM
Director of Research

Duties:

- Researcher: Team approach to conducting projects for major pharmaceutical companies.
- Supervised: Projects budget, research design, coordination between other departments and research teams and interpreting data from research projects (e.g., residue, metabolism, pharmacokinetics and target animal safety studies) designed to determine various parameters such as human food safety, bioavailability/bioequivalence and toxicology.
- Conducted over 100 research trials.

February, 1995 - February, 1996: Coulston Foundation
Alamogordo, NM
Director of Reproductive Physiology and Nutrition

Duties:

- Nutritional Supervisor: Oversight of nutritional needs of 1200 non-human primates; Supervision of the Feed Division: profit center selling animal feeds to other research locations.
- Research and consulting: Foundation's participation in National Chimpanzee Breeding and Research Program; Develop and maintain breeding colonies of Rhesus, Macaque and cynomolgus monkeys.

January, 1995 - May, 1995: New Mexico State University
College Assistant Professor (part-time)

Duties:

- Instructor: Animal Science 304, Feeds and Feeding, as well as two laboratory sections.
- Assisted: Animal Science 504, Physiology Techniques.
- Assisted: Department Quadrathlon Contest
- Participant: Ongoing research in the Department.

February 1993 to December 1994: Massey University, New Zealand
Postdoctoral Research Fellow

Duties:

- Postdoctoral Researcher: Primary area of research was in examining the possible use of 7-8 month old female ewes in a multiple ovulation and embryo transfer (MOET) scheme.
- Research conducted:
 - Comparing various superovulation treatments in mature ewes and ewe lambs for efficiency of embryo yield per ewe;
 - Trials to better understand the hormonal and ovarian response in Romney ewe lambs subjected to a superovulation treatment.
 - Examination of the superovulation response in pre-pubertal ewe lambs treated at three different stages of the estrous cycle.
 - Examining the use of trans-cervical artificial insemination in ewes;
 - Examining the effects of red clover phytoestrogens on the reproductive performance of mature ewes; 3)
 - Determining seasonal effects on placental development and fetal growth in sheep.
- Supervisor: Three postgraduate students in the Department of Animal Science.
- Lecturer: Sheep production and reproduction.
- Experiences: First hand with unique pastoral-based production systems of New Zealand. These systems are used in sheep as well as dairy and beef cattle

production. In addition, I have experience with programs used in New Zealand for technology transfer to sheep and fiber producers. These programs are based on low cost production systems that have been brought about by the loss of Federally backed programs in 1985.

September 1990 to February 1993: New Mexico State University (NMSU)
Graduate Research and Teaching Assistant

Duties:

- PhD Candidate: Primary area of research was in examining the effects of mid-gestation administration of prostaglandin F₂α on the ewes' ability to cycle within 30 days post partum.
- Laboratory Experiences: Operation of the NMSU Animal and Range Sciences Endocrinology Laboratory which routinely conducted radioimmunoassays of gonadotropic, metabolic, steroid and thyroid hormones.
- Farm Experiences: Daily operation of West sheep unit containing 100 fine-wool ewes and 150 market lambs used for reproductive and nutritional studies. Routine duties consisted of feeding, health observation, blood collection, vaccination, castration and docking of lambs as well as supervision of ewes during the lambing season.
- Service: Data collection at the NMSU Range Ram Test.
- Graduate Teaching Assistant: Undergraduate Anatomy and Physiology, Sheep Production and a graduate course in Animal Physiology/Surgical Techniques.

April 1984 - August 1990: Purina Mills, Inc.,
Fort Worth Plant

Duties:

- Responsibilities: 16 counties sales area in southeast Texas with responsibility for all Purina feed and health products and programs to over 250 retailers.
- Distribution Center: Established the first area distribution center for Purina products that serviced 35 counties.
- Supervisor: Merchandising specialists with scheduling 20 hours/week into retail stores.
- Training: Conducted meetings for distributor and retail sales personnel, conducted educational meetings and demonstrations for horse, cattle and small animal owners and organized sales goals and objectives for Purina products in these 16 counties.
- Positions: Management Trainee, Territory Manager, District Manager, Merchandising and Retail Specialist.

August 1983 - March 1984: Pearland Feed Center
Pearland Texas

Duties:

- Assistant Sales Manager: ordering and stocking of laboratory feeds sold to research facilities in the greater Houston area.

September 1981 - August 1983: Texas A&M University
Graduate Teaching Assistant
Research Associate

Duties:

- Masters Candidate: Primary area of research was to determine whether testicular measurement and endocrine profiles in young growing male sheep would indicate future breeding values.
- Service: Assisted with fiber and performance data collection for the annual Texas Agricultural Experiment Station's Angora Goat (Billy) and Fine Wool Ram performance tests. Duties included taking wool and mohair samples and evaluating them for yield and fiber diameter.
- Research Associate: Supervised the campus wool laboratory and six student workers, in routine wool and mohair grading and evaluation for research trials.
- Sheep Unit Manager: Supervised the campus sheep unit and two student workers in daily management of 100 crossbred and purebred ewes.
- Graduate Teaching Assistant: Introductory animal science laboratory with responsibilities for lectures, examinations and grading for the assigned lab periods. and undergraduate and graduate level sheep and goat production courses.

ACTIVITIES

Member American Society of Animal Science
Member of North American Colleges and Teachers of Agriculture
Member of NACADA – The Global Community for Academic Advising
Serve as the Livestock Show Secretary for SNMSF
Advise the ANRS Judging Club
Member of Gamma Sigma Delta
Serve as Chair of Scholarship Committee ANRS Department
Advise the Block and Bridle Club NMSU – 8 years
Serve as a Board Member for the Southern New Mexico State Fair
Senior Senator for Non-Tenure Tract Faculty on Faculty Senate
Member of Scholastic Affairs Senate Committee
Faculty Fellow for Student Residence – Garcia Hall
Leader of the Hillbillies 4-H Club
Member of the New Mexico 4-H Youth Development Foundation
Member of Committee that began the Dona Ana 4-H & FFA Expo
Southwest Director for NM Club Barrow Association
Member of Aggie Scholarship Association

Member of Capital Campaign Committee for Fulton Athlete Center
President, South Eastern New Mexico Branch - AALAS
Member of Genetics and Physiology Committee; Massey University, Department of Animal Science.
Member of Ruminant Research Committee; Massey University, Department of Animal Science.
Associated Students of New Mexico State University Senator: Representing Graduate College, Two terms (1991-1992).
New Mexico State University Animal and Range Sciences Graduate Student Association (ARSGSA), Member; Vice-President (1990-1992).
New Mexico State University Graduate Student Appeals Committee, Member (1991-1992).
New Mexico State University Athletic Council, Member (1991-1992).
Life Member, Houston Livestock Show and Rodeo; committee member (1987-present).
Galveston County 4-H Livestock Judging Team Coach (1984-1985).
Texas A&M University Wool Team Coach (1983).
Texas A&M University Wool Team Assistant Coach (1982).
Texas A&M University Wool Judging Team, Member (1981).
Texas A&M University Block & Bridle Club, Member; Chair of regional meeting committee (1978-1981).
Texas A&M University Collegiate 4-H Club, Member (1978-1981).
Texas A&M University Livestock Judging Team, Member (1980): Top 10 individual; Memphis.

HONORS AND AWARDS

Honorary State FFA Degree - 2012
Honorary Member Dona Ana County 4-H - 2003
Ordained Deacon, Baptist Church (1990)
Golden Checker Award: \$100,000 + in Health Care Products, Purina Mills, Inc. (1987, 1988, 1989)
General Sales Advisory Board: Diamond Level, Purina Mills, Inc. (1987)
Friend of 4-H Award, Galveston County, Texas (1985)
Coached District Winning 4-H Livestock Judging Team, Galveston County, Texas.
Advanced team to State contest (1984)
Phi Kappa Phi Honor Society (1981)
Houston Livestock and Rodeo Scholarship (\$8,000: 1977-1981)
Vigil Honor; Order of the Arrow, Boys Scouts of America (1983)
Eagle Scout, Boy Scouts of America (1976)

GRANT PROPOSALS

Project Title: Development and evaluation of transcervical artificial insemination techniques in sheep.
To: Massey University Agricultural Research Foundation.
Investigators: T. G. Harvey, **J. W. Campbell** and M. F. McDonald (\$NZ 6,000; Received).

Project Title: Evaluation of deep cervical artificial insemination in sheep.
To: C. Alma Baker Trust.
Investigators: T. G. Harvey and **J. W. Campbell** (\$NZ 6,000; Received).

Project Title: Corpus luteum activity in ewe hoggets in relation to superovulation treatments.
To: Massey University Research Foundation.
Investigators: M. F. McDonald and **J. W. Campbell** (\$NZ 1,400; Received).

Project Title: Hormonal response in ewe hoggets in relation to superovulation treatments.
To: Massey University Research Foundation.
Investigators: M. F. McDonald and **J. W. Campbell** (\$NZ 2,000; Received).

PUBLICATIONS

Journal Articles

Campbell, J.W., T.G. Harvey, M.F. McDonald and R. I. Sparksman. 1995. Transcervical insemination in sheep; An anatomical and histological evaluation. *Theriogenology* 45:1535-1544.

Campbell, J.W., D.M. Hallford, and M.E. Wise. 1994. Serum progesterone and luteinizing hormone in ewes treated with PGF_{2α} during mid-gestation and gonadotropin releasing hormone after parturition. *Prostaglandins* 47:333-334.

Riley, P.J., R. L. Byford, D.M. Hallford, **J.W. Campbell**, and E. Perez-Eguia. 1994. Physiological responses of beef cattle to gulf coast tick (*Acari Ixodidae*) infestations. *J. Econ. Entomology* 88:320-325.

Riley, Pat J., Ronnie L. Byford, D.M. Hallford, **J.W. Campbell**, and E. Perez-Eguia. 1994. Serum constituent profiles of beef heifers infested with horn flies. (*Diptera muscidae*). *J. Econ. Entomology* 87:1564-1568.

Campbell, J.W., D.M. Hallford, H.S. Yim, C.E. Heird, and E. Perez-Eguia. 1993. Serum constituent and metabolic hormone profiles from birth through the feedlot period in Debouillet lambs. *SID Sheep Res. J.* 9:28-34.

Peer Reviewed Proceeding Papers

McCord, S.A., S.W. Peterson, C. M. C. Jenkinson, **J.W. Campbell** and S.N. McCutcheon. 1996. Seasonal Effects on Fetal Growth in Sheep. *New Zealand Society of Anima. Prod.* 56.

Campbell, J.W., M. F. McDonald, and G.A. Wickham. 1994. Ovarian responses in mature and prepubertal Romney ewes treated with superovulation schemes. *New Zealand Embryo Transfer Workshop* 1:26

Campbell, J.W., J.F. McDonald, and G.A. Wickham. 1994. Hormonal and ovarian responses in Romney ewe hoggets after synchronization treatment. New Zealand Society of Anima. Prod. 54:239-242.

Proceedings Papers

Miller, L.W., D.M. Hallford, F.A. Schneider, R.T. Kridli, D.B. Carpenter, and **J.W. Campbell**. 1996. Reproductive and milk characteristics and serum prolactin in early postpartum ewes treated with progesterone and(or) bromoergocryptine. Proc. West. Sec. Amer. Soc. Anim. Sci. 47:27.

Campbell, J.W. and M.F. McDonald. 1995. Effects of stage of the estrous cycle at initiation of synchronization and superovulation on ovarian characteristics in ewe lambs. Proc. West. Sec. Amer. Soc. Anim. Sci. 46:175-177.

Birch, M.W., D.M. Hallford, B.L. Christensen, F.A. Schneider, and **J.W. Campbell**. 1994. Reproductive performance and serum growth hormone and melatonin in ewes treated with melatonin microspheres and (or) estradiol-17 β . Proc. West. Sec. Amer. Soc. Anim. Sci. 45:278.

Rubio, J.M., D.M. Hallford, D.E. Hawkins, **J.W. Campbell**, L.S. Hung, M.W. Birch, and B.L. Christensen. 1993. Serum glucose, insulin, LH and growth hormone in Debouillet ewes treated with glucose during the estrous cycle. Proc. West. Sec. Amer. Soc. Anim. Sci. 44:303

Hung, L.S., D.M. Hallford, D.E. Hawkins, **J.W. Campbell**, J. M. Rubio, M.W. Birch, B.L. Christensen, and F.A. Schneider. 1993. Serum glucose, insulin, growth hormone, FSH and LH in Debouillet ram lambs treated with glucose. Proc. West. Sec. Amer. Soc. Anim. Sci. 44:320.

Campbell, J.W., D.M. Hallford, J.M. Rubio, and M.W. Birch. 1993. Reproductive performance in postpartum Debouillet ewes treated with prostaglandin F₂ α during mid-gestation and GnRH during the early postpartum period. Proc. West. Sec. Amer. Soc. Anim. Sci. 44:316.

Birch, M.W., D.M. Hallford, **J.W. Campbell**, J.M. Rubio, L.S. Hung, and B.L. Christensen. 1993. Growth response and serum prolactin and insulin in ewe lambs treated with melatonin microspheres and (or) estradiol-17 β . Proc. West. Sec. Amer. Soc. Anim. Sci. 44:310

Campbell, J.W., D.M. Hallford, H.S. Yim, C.E. Heird, and E. Perez-Eguia. 1992. Serum constituent profiles from birth through the feedlot period in Debouillet lambs. Proc. West. Sec. Amer. Soc. Anim. Sci. 43:63.

- Heird, C.E., D.M. Hallford, **J.W. Campbell**, and E. Perez-Eguia, 1992. Reproductive and milk characteristics of ewes treated with melatonin during gestation and the early postpartum period. Proc. West. Sec. Amer. Soc. Anim. Sci. 43:211.
- Perez-Eguia, E., D.M. Hallford, C.E. Heird, M. Turner, and **J.W. Campbell**. 1992. Reproductive and endocrine characteristics of ewe lambs after short- or long-term administration of melatonin. Proc. West. Sec. Amer. Soc. Anim. Sci. 43:220.
- Peterson, M.K., D.M. Hallford, D. Dhuyvetter, D. Gambill, M. Ward, **J. Campbell**, E. Perez-Eguia, J. Rubio, and J.D. Wallace. 1992. The effects of supplemental feather, blood and/or cottonseed meal on metabolic hormones and serum metabolites in yearling ewe fed blue gamma hay. Proc. West. Sec. Amer. Soc. Anim. Sci. 43:560.
- Riley, P., R. Byford, D.M. Hallford, J.W. Campbell, E. Perez-Eguia, and B. Crosby. 1992. Physiological responses of beef heifers exposed to horn fly (*Haematobia irritans*) infestation. Proc. West. Sec. Amer. Soc. Anim. Sci. 43:207.

Abstracts

- Miller, L.W., D.M. Hallford, F.A. Schneider, R.T. Kridli, D.B. Carpenter, and **J.W. Campbell**. 1996. Reproductive and milk characteristics and serum prolactin in early postpartum ewes treated with progesterone and(or) bromoergocryptine. J. Anim. Sci. 74 (Suppl. 1): 304 (Abstr.).
- McCord, S.A., S.W. Peterson, C. M. C. Jenkinson, **J.W. Campbell** and S.N. McCutcheon. 1996. Seasonal Effects on Fetal Growth in Sheep. . New Zealand Society of Anima. Prod. 56.
- Birch, M. W., D. M. Hallford, B. L. Christensen, F. A. Schneider, and **J. W. Campbell**. 1994. Reproductive performance and serum growth hormone and melatonin in ewes treated with melatonin microspheres and(or) estradiol-17 β . J. Anim. Sci. 72 (Suppl. 1):117 (Abstr.).
- Birch, M. W., D. M. Hallford, **J. W. Campbell**, J. M. Rubio, L. S. Hung, and B. L. Christensen. 1993. Growth response and serum prolactin and insulin in ewe lambs treated with melatonin microspheres and(or) estradiol-17 β . J. Anim. Sci. 71 (Suppl. 1):214 (Abstr.).
- Campbell, J. W.**, D. M. Hallford, J. M. Rubio, and M. W. Birch. 1993. Reproductive performance in postpartum Debouillet ewes treated with prostaglandin F_{2 α} during mid-gestation and GnRH during the early postpartum period. J. Anim. Sci. 71 (Suppl. 1):227(Abstr.).

- Hung, L. S., D. M. Hallford, D. E. Hawkins, **J. W. Campbell**, J. M. Rubio, M. W. Birch, B. L. Christensen, and F. A. Schneider. 1993. Serum glucose, insulin, growth hormone, FSH and LH in Debouillet ram lambs treated with glucose. *J. Anim. Sci.* 71 (Suppl. 1):230(Abstr.).
- Rubio, J. M., D. M. Hallford, D. E. Hawkins, **J. W. Campbell**, L. S. Hung, M. W. Birch, and B. L. Christensen. 1993. Serum glucose, insulin, LH and growth hormone in Debouillet ewes treated with glucose during the estrus cycle. *J. Anim. Sci.* 71 (Suppl. 1):225(Abstr.).
- Campbell, J.W.**, D.M. Hallford, H.S. Yim, C.E. Heird, and E. Perez-Eguia. 1992. Serum constituent profiles from birth through the feedlot period in Debouillet lambs. *J. Anim. Sci.* 70 (Suppl. 1):102 (Abstr.).
- Heird, C. E., D. M. Hallford, **J. W. Campbell**, and E. Perez-Eguia. 1992. Reproductive and milk characteristics of ewes treated with melatonin during gestation and the early postpartum period. *J. Anim. Sci.* 70 (Suppl. 1):109 (Abstr.).
- Perez-Eguia, E., D. M. Hallford, C. E. Heird, M. Turner, and **J. W. Campbell**. 1992. Reproductive and endocrine characteristics of ewe lambs after short- or long-term administration of melatonin. *J. Anim. Sci.* 70 (Suppl. 1):109 (Abstr.).
- Petersen, M. K., D. M. Hallford, D. Dhuyvetter, D. Gambill, M. Ward, **J. Campbell**, E. Perez-Eguia, J. Rubio, and J. D. Wallace. 1992. The effects of supplemental feather, blood and/or cottonseed meal on metabolic hormones and serum metabolites in yearling ewes fed blue grama hay. *J. Anim. Sci.* 70 (Suppl. 1):135 (Abstr.).
- Riley, P., R. Byford, D. M. Hallford, **J. W. Campbell**, E. Perez-Eguia, and B. Crosby. 1992. Physiological responses of beef heifers exposed to horn fly (*Haematobia irritans*) infestation. *J. Anim. Sci.* 70 (Suppl. 1):108 (Abstr.).
- Campbell, J.W.**, D.M. Hallford, C.E. Heird, E. Perez-Eguia, M.L. Turner, and M. Wise. 1991. Serum LH and progesterone in Debouillet ewes treated with prostaglandin F_{2α} during mid-gestation. *J. Anim. Sci.* 69 (Suppl 1):398 (Abstr.).

Theses

- Campbell, J. W.** 1992. Postpartum reproduction in Debouillet ewes treated with prostaglandin F_{2α} during mid-gestation and GnRH during the early postpartum period. PhD Dissertation. New Mexico State University, Las Cruces.
- Campbell, J. W.** 1983. Testicular measurements and endocrine profiles in young growing males as a measurement of breeding value in sheep. M. S. Thesis. Texas A&M University, College Station.

Research Briefs

- Birch, M. W., D. M. Hallford, B. L. Christensen, **J. W. Campbell**, J. M. Rubio, and L. S. Hung. 1994. Growth and reproductive performance of ewe lambs treated with melatonin microspheres and(or) estradiol implants. Livestock Research Briefs and Cattle Growers' Short Course. N.M. Agri. Exp. Sta. March 24:31.
- L. S. Hung, D. M. Hallford, D. E. Hawkins, **J. W. Campbell**, J. M. Rubio, M. W. Birch, B. L. Christensen, and F. A. Schneider. 1994. Serum LH, insulin, growth hormone, prolactin, and testosterone in ram lambs treated with glucose. Livestock Research Briefs and Cattle Growers' Short Course. N.M. Agri. Exp. Sta. March 24:28.
- Rubio, J. M., D. M. Hallford, D. E. Hawkins, **J. W. Campbell**, L. S. Hung, M. W. Birch, and B. L. Christensen. 1994. Reproductive, ovarian, and endocrine responses of mature ewes treated with glucose before breeding. Livestock Research Briefs and Cattle Growers' Short Course. N.M. Agri. Exp. Sta. March 24:27.
- Birch, M. W., D. M. Hallford, **J. W. Campbell**, J. M. Rubio, L. S. Hung, and B. L. Christensen. 1993. Reproductive and endocrine characteristics of ewe lambs treated with melatonin microspheres and(or) estradiol implants. Livestock Research Briefs and Cattle Growers' Short Course. N.M. Agri. Exp. Sta. March 25:39.
- Campbell, J. W.**, D. M. Hallford, J. M. Rubio, and M. W. Birch. 1993. Reproductive performance of postpartum Debouillet ewes treated with prostaglandin F_{2α} during mid-gestation and GnRH during the early postpartum period. Livestock Research Briefs and Cattle Growers' Short Course. N.M. Agri. Exp. Sta. March 25:40.
- Christensen, B. L., D. M. Hallford, **J. W. Campbell**, M. W. Birch, J. M. Rubio, L. S. Hung, and F. A. Schneider. 1993. Postpartum reproduction after regression of the corpus luteum of pregnancy and(or) prepartum treatment with GnRH. Livestock Research Briefs and Cattle Growers' Short Course. N.M. Agri. Exp. Sta. March 25:38.
- Hung, L. S., D. M. Hallford, D. E. Hawkins, **J. W. Campbell**, J. M. Rubio, M. W. Birch, and B. L. Christensen. 1993. Endocrine and semen traits of ram lambs treated with glucose. Livestock Research Briefs and Cattle Growers' Short Course. N.M. Agri. Exp. Sta. March 25:40.
- Rubio, J. M., D. M. Hallford, D. E. Hawkins, **J. W. Campbell**, L. S. Hung, M. W. Birch, and B. L. Christensen. 1993. Endocrine and ovarian characteristics of ewes receiving glucose before breeding. Livestock Research Briefs and Cattle Growers' Short Course. N.M. Agri. Exp. Sta. March 25:38.

- Campbell, J. W.**, D. M. Hallford, C. E. Heird, E. Perez-Eguia, and M. L. Turner. 1992. Serum hormone profiles in Debouillet ewes treated with prostaglandin $F_{2\alpha}$ during mid-gestation. Livestock Research Briefs and Cattle Growers' Short Course. N.M. Agri. Exp. Sta. March:41.
- Campbell, J. W.**, D. M. Hallford, E. Perez-Eguia, J. Rubio, and M. Birch. 1992. Postpartum reproduction in Debouillet ewes treated with prostaglandin $F_{2\alpha}$ during mid-gestation and GnRH during the early postpartum period. Livestock Research Briefs and Cattle Growers' Short Course. N.M. Agri. Exp. Sta. March:44.
- Campbell, J. W.**, D. M. Hallford, H. S. Yim, C. E. Heird, and E. Perez-Eguia. 1992. Serum constituent profiles in young Debouillet lambs. Livestock Research Briefs and Cattle Growers' Short Course. N.M. Agri. Exp. Sta. March:45.
- Heird, C. E., D. M. Hallford, E. Perez-Eguia, **J. W. Campbell**, and M. L. Turner. 1992. Postpartum reproductive responses of Debouillet ewes treated with melatonin before and after lambing. Research Briefs and Cattle Growers' Short Course. N.M. Agri. Exp. Sta. March:47.
- Perez-Eguia, E., D. M. Hallford, C. E. Heird, H. S. Yim, M. L. Turner, and **J. W. Campbell**. 1992. Growth, reproduction and endocrine patterns in ewe lambs treated with melatonin. Livestock Research Briefs and Cattle Growers' Short Course. N.M. Agri. Exp. Sta. March:43.
- Perez-Eguia, E., D. M. Hallford, C. E. Heird, M. L. Turner, and **J. W. Campbell**. 1991. Effects of prolonged melatonin treatment on growth and reproductive responses of ewe lambs. Livestock Research Briefs and Cattle Growers' Short Course. N.M. Agri. Exp. Sta. March:34.
- Campbell, J. W.**, D. M. Hallford, C. E. Heird, E. Perez-Eguia, M. L. Turner, and M. Wise. 1991. Postpartum reproduction in Debouillet ewes treated with prostaglandin $F_{2\alpha}$ ($PGF_{2\alpha}$) during mid-gestation. Livestock Research Briefs and Cattle Growers' Short Course. N.M. Agri. Exp. Sta. March:35.
- Ripley, L. H., **J. W. Campbell**, and J. W. Bassett. 1982. Effects of creep feeding on rate of gain in crossbred lambs. Sheep and Goat, Wool and Mohair. Tx. Agri. Exp. Sta. CPR-4026:91.