

Hill, Carol

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**From:** Hammond, Michelle  
**Sent:** Friday, May 15, 2015 3:30 PM  
**To:** Hill, Carol  
**Subject:** FW: RSC Chair Appointment Request for Montana State University  
**Attachments:** Berardinelli\_Relevant\_training\_Experience\_to\_Serve\_as\_Chair\_MSU\_RSC\_2015.pdf; JGBerardinelli VITA RSC Version May 2015.pdf; NRC License Amendment Request - Dr. Jim Berardinelli RSC Chair.docx

Hi Carol,

Can you please set up this Amendment request ??

Thanks.  
Michelle Hammond

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**From:** Childs, Nick [radiation@montana.edu]  
**Sent:** Friday, May 15, 2015 3:19 PM  
**To:** Hammond, Michelle  
**Cc:** Berardinelli, James  
**Subject:** RSC Chair Appointment Request for Montana State University

Michelle,

Please find the attached request to amend our license to have our RSC chair appointment changed to Dr. Jim Berardinelli. We will hold our next RSC meeting on May 28<sup>th</sup> and Dr. Blake Wiedenheft will be absent. Blake travels frequently prompting our request. I have attached an official letter requesting this as well as some supporting documentation of Jim's qualifications. Please let me know if there are any issues with Jim acting as chair during our next meeting.

Have a good weekend.

Nick

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Nicholas Childs, PhD  
Radiation Safety Officer  
Assistant Teaching Professor of Physics  
Montana State University  
EPS Rm 104  
406-994-7317

PUBLIC

☐ Immediate Release  
☒ Normal Release

NON-PUBLIC

☐ A.3 Sensitive-Security Related  
☐ A.7 Sensitive Internal  
☐ Other:

Reviewer: RTT

Date: 6-9-15



May 15, 2015

**To:**

Michelle M. Hammond, M.Sc.  
Health Physicist, NMSB-B  
Region IV – Division of Nuclear Materials Safety  
United States Nuclear Regulatory Commission

**From:**

Nicholas B. Childs, Ph.D.  
Radiation Safety Officer  
Office of Research Compliance  
Montana State University

**Subject:**

Amendment request for Dr. Jim Berardinelli as the Chairperson of the Radiation Safety Committee on our license

Dear Michelle,

We would like to appoint Dr. Jim Berardinelli as the Chairperson of the Radiation Safety Committee on our license. Attached is a CV, a letter addressing his qualifications and an updated organizational chart.

Sincerely,

Dr. Nicholas Childs  
Radiation Safety Officer  
Montana State University  
[nchilds@physics.montana.edu](mailto:nchilds@physics.montana.edu)  
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EPS Building Rm 104

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**Department  
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Animal and Range  
Sciences**

James G. Berardinelli, Ph.D.  
Professor, Reproductive  
Physiology and Endocrinology  
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Dept. of Animal and Range  
Sciences  
Montana State University  
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jgb@montana.edu

May 14, 2015

To Whom This May Concern:

In this letter I address the "Relevant Training/Experience" that I have had over my academic career to qualify me for the position of Chair of the Montana State University Radiation Safety Committee.

**Experience working with radionuclides:**

I have worked with 39 years of experience working with radionuclides; primarily with the in use of radioisotope tracers for assays of metabolites and biochemical signals in biological tissues and fluids. This experience includes: ordering protocols for beta and gamma emitters; safe handling and monitoring procedures and devices for use of radioactive materials; and, proper waste disposal of radioactive materials.

**Safety Training and Usage:**

I have had formal course work at West Virginia University ("Radionuclide Biochemistry with Lab") on the principles of radiation and in particular ionizing radiation. I participated in the required Radiation Safety and Usage Training program at the USDA, Roman L. Hruska, U. S. Meat Animal Research Center, Clay Center Nebraska. Since I was hired at MSU, I have participated in three "Radiation Safety Training" courses (4 hr each) at Montana State University. My most recent MSU training date was May 11, 2015.

**Committee Experience:**

I served on the MSU Radiation Safety Committee from 1983 to 1993. I was appointed as Chair twice in that time, 1986-87 and 1989-1993. I learned how this Committee operated under one full renewal of a NRC licensing renewal, and gained experience that included development of procedures for review of protocols and waste management. Thereafter, I was again appointed to the MSU RSC, by Mr. Justin Cook (Director, ORC) in March of 2014 and asked by Dr. Wiedenheft to serve as Co-chair in October of 2014 with the following recommendation: "Your experience is critical to the success of our compliance efforts and having you as a co-chair will give the committee additional flexibility to respond to the radiation safety needs of our faculty." Also, I have what some might refer to as "institution memory", which may assist new members of the Committee and the new Radiation Safety Officer in better understanding previous issues related to the work of this Committee so that we do not "repeat history".

Lastly, in this regard, I have served as the Chair of numerous Departmental, College, University, and Professional Committees; and, currently, I am the President of the Western Section of the American Society of Animal Science (WSASAS) and President of the Montana Academy of Sciences (MAS). In these roles I am Chair of the Executive Committee and Board of Directors of the WSASAS and MAS.

If anyone has any questions or concerns related to this appointment or my qualifications for this appointment, outline above, please contact me.

Respectfully

A handwritten signature in cursive script, reading "James G. Berardinelli". The signature is written in dark ink and is positioned above the printed name.

James G. Berardinelli, Ph.D.  
Professor



## Curriculum Vita

### CONTACT INFORMATION

James G. Berardinelli, Ph.D.  
 Professor, Reproductive Physiology and Endocrinology  
 307 Animal Bioscience  
 Dept. of Animal and Ranges Sciences  
 Montana State University  
 Bozeman, MT 59717  
 Telephone: (406) 994-5574  
 E-mail: [jgb@montana.edu](mailto:jgb@montana.edu)

### EDUCATION

Ph.D.	1979	West Virginia University	Reproductive Physiology & Endocrinology
M.S.	1976	West Virginia University	Reproductive Physiology & Endocrinology
B.A.(w/Honors)	1973	University of Connecticut	Biology (Zoology)

### PROFESSIONAL EXPERIENCE

Professor*	Reproductive Physiology & Endocrinology	Montana State University	1993 -Present
Associate Professor	Reproductive Physiology & Endocrinology	Montana State University	1988 - 92
Assistant Professor	Reproductive Physiology & Endocrinology	Montana State University	1981 - 87
Post-doctoral Research Fellow	Reproductive Physiology & Endocrinology	Iowa State University / U.S. MARC	1979 - 81
Research Assistant	Reproductive Physiology & Endocrinology	West Virginia University	1974 - 79

\* Appointment: 48% Research, 42% Instruction, 10% Service

### INSTRUCTIONAL EXPERIENCE

ARNR 100 (3 cr)	Introduction to Animal Sciences (Lecture; team) 2006-07
<del>ARNR 321 (4 cr)</del>	<del>Physiology of Reproduction (Lecture/Recitation) 2001-2010</del>
ANSC 321 (4 cr)	Physiology of Reproduction (Lecture/Recitation) 2011-Present
ARNR 400 (1 cr)	Senior Seminar 2000-Present
<del>ARNR 421 (4 cr)</del>	<del>Assisted Reproductive Technologies (Lecture/Laboratory; team) 1982-2010.</del>
ANSC 421 (4 cr)	Assisted Reproductive Technologies (Lecture/Laboratory; team) 2011-Present.
ARNR 420 (3 cr)	Endocrine Physiology (Lecture) 1983- 94
ARNR 425 (3 cr)	Biotechnology in Animal Science (Lecture) 1997-99 (team)
ARNR 430 (3 cr)	Horse Science (Lecture) 1990-97 (team)
ARNR 470 (1-3 cr)	Individual Problems 1982-Present
ARNR 476 (2-12 cr)	Undergraduate Internship 1982-Present
ARNR 489 (1-3 cr)	Undergraduate Research/Creative Activity Instruction 1982-Present

ARNR 490 (1-3 cr)	Undergraduate Research/Creative Activity Instruction 1982-Present
<del>ARNR 523 (3 cr)</del>	<del>Advanced Physiology of Reproduction (Lecture) 1982-2010</del>
ANSC 523 (3 cr)	Advanced Physiology of Reproduction (Lecture) 2010-Present
ARNR 507 (1 cr)	Graduate Seminar (1985-93)
ARNR 570 (1-3 cr)	Individual Problems for Graduate Students 1982-Present
ARNR 580 (2 cr)	Topics in Endocrinology
ARNR 589 (1-3 cr)	Graduate Research/Creative Activity Instruction 1982-Present

Invited Lecturer:

1984	BIOL 435	Neurobiology
1985-90	VTMB 271	Functional Anatomy of Domestic Animals
1986-89	ARNR 201	World Food
1988-2000	ARNR 321	Physiology of Reproduction
1997-2001	VTMB 101	Introduction to Biotechnology
2010-2011	ANSC 322	Animal Breeding and Genetics

Advising:

Undergraduate Students:	Average of 40 per semester
Graduate Students	
Thesis Committee Chairman:	Average of 1.0 per semester
Thesis Committee:	Average of 2.0 per semester

Undergraduate Research Mentor:

ANSC 489/490R, Undergraduate Research and University Undergraduate Research Program of 1 to 3, respectively from 2000 to present.

**RESEARCH EXPERIENCE**

Principal Investigator of Montana Agricultural Experiment Station Project: Pheromonal Activity of Excretory Products of Bulls on Reducing Postpartum Interval to Resumption of Cycling Activity and Breeding Performance in Primiparous Beef Cows; Contributing Member to the Multistate Research Project, W21112: Reproductive Performance in Domestic Ruminants.

**Major Areas of Interest and Objectives include:**

- Postpartum Anestrus/Anovulation: To determine the physiological mechanism(s) whereby the biostimulatory effect of bulls accelerates resumption of cycling activity and improves fertility in postpartum, suckled beef cows and heifers.
- Physiological Changes Associated with Selection for Reproductive Rate: Identify and characterize physiological alterations in reproductive and metabolic mechanisms that are altered by selection for high or low reproductive rate in Rambouillet sheep.
- Metabolism and Reproduction in Domestic and Wild Ruminants: To identify interaction among metabolites and metabolic hormones that are involved with reproductive endocrine function and behavior in ruminants.

## Grants and Contracts

The Genetic and Molecular Basis of Reproductive Efficiency. J. Thomson, PD, and **J. G. Berardinelli** and L. Prezotto; Co-PDs. NIFA, AFRI Competitive Grant. 2015. \$499,877. Pending.

NucleoCounter SP-100 Analyzer: the new 'gold standard' for measurement of sperm cell concentration in raw (neat) ejaculates or in preserved semen. S. Moreaux, J.G. Berardinelli, and H. DelCurto, Co-PDs. Montana State University, Equipment Fee Allocation Committee (EFAC) Grant. 2015. \$16,500. Funded.

The Genetic and Molecular Basis of Reproductive Efficiency. J. Thomson, PD, and **J. G. Berardinelli**. Co-PD. NIFA, AFRI Competitive Grant. 2014. \$498,261. Not Funded.

Eppendorf EPMotion 5075 automated pipetting system with integrated ThermoMixer and gripper to enhance capabilities of Physiology Laboratory and collaborative experimentation. C. Yeoman, S. Walk, T. McDermott, M. Franklin, J. Thomson, and **J. G. Berardinelli**. Co-PDs, Montana Agricultural Experiment Station Equipment Grant. 2014. \$60,000. Funded.

Montana Bighorn Sheep Study. State of Montana Fish, Wildlife, and Parks. R. Garrott and **J. G. Berardinelli**, Co-P.I.'s. 2014-2017. \$94,000. Funded.

The Genetic and Molecular Basis of Fertility. J. Thomson, PD, and **J. G. Berardinelli**. Co-PD. NIFA, AFRI Competitive Grant. 2013. \$498,524.64. Not Funded.

Enhancing Reproduction through a Healthy Vaginal Microbiome. C. J. Yeoman, PD, **J. G. Berardinelli**, Co-PD, P. Hatfield, Co-PD, J. Thomson, Co-PD, and R. Kott, Co-PD. NIFA, AFRI Competitive Grant. 2013. \$ 335,569.00. Not Funded.

Enhancement of Estrous Synchronization and Artificial Insemination (AI) Pregnancy Rates by Exposing Beef Heifers and Cows to Bull Urine during An Estrous Synchronization Protocol that Includes a CIDR, PGF<sub>2α</sub>, and Timed Artificial Insemination. **J. G. Berardinelli**. Bair Ranch Foundation. 2013. \$62,000. Not Funded.

Mass Spectrometry System (GC/MS) for identification and quantification of organic biochemicals and chemicals. C. Lu, K. Wanner, and **J. G. Berardinelli**, Co-PDs, Montana Agricultural Experiment Station Equipment Grant. 2012. \$80,000. Funded.

Fully Integrated Field Metabolic (Respirometry) System. B. Olson, **J. Berardinelli**, G. Duff, S. Moreaux, and M. Fields, Co-PDs. Montana Agricultural Experiment Station Equipment Grant. 2012 \$43,265. Funded.

Enhancing the Instructional Program in Reproductive Physiology Animal and Range Sciences. **J. G. Berardinelli**, P.D. College of Agriculture Instructional Equipment Grant. 2012. \$11,285. Funded.

The effects of psyllium treatment on serum metabolite concentrations and morphologic characteristics in grass grazed horses. S. J. J. Moreaux and **J. G. Berardinelli**, Co-PDs. Bair Ranch Foundation. 2012-2014. \$51,070. Funded.

Enhancing and improving infrastructure of the new Animal Biosciences Building laboratory complex in the Department of Animal and Range Sciences through upgrade and modernization of key pieces of laboratory equipment. **J. G. Berardinelli**, P.D. USDA, NIFA, AFRI, Equipment Grant. 2010-2011. \$219,543. Funded.

Evaluation of Nutritional Status of Greater Yellowstone Elk Herd Management Using Molar Concentrations of Allantoin and Creatinine Ratios in Snow-urine. **J. G. Berardinelli**, K. Hamlin, and R. Garrott. Co-P.D.'s. Montana Fish, Wildlife, and Parks. 2008-2009. \$10,900. Funded.

Evaluation of Nutritional Status of Greater Yellowstone Elk Herd Management. Montana Fish, Wildlife, and Parks. **J. G. Berardinelli** and R. Garrott, Co-P.I.'s. 2007. \$10,128. Funded

A Novel Hypothesis for Pheromonal Mediation of the Biostimulatory Effect of Bulls Involving Adrenal Cortical Activation in Postpartum, Suckled, Beef Cows. **J.G. Berardinelli**, P.I., August, 2006. CSREES, USDA, NRI-CGP. \$216,000. Funded.

Evaluation of Nutritional Status of Greater Yellowstone Elk Herd Management. Montana Fish, Wildlife, and Parks. **J. G. Berardinelli** and R. Garrott, Co-P.I.'s. 2006. \$17,490. Funded

Use of Progestin-based Estrus Synchronization Protocols and the Biostimulatory Effect of Bulls to Improve AI Breeding Performance of Postpartum Suckled Cows. **J.G. Berardinelli**, S. A. Tauck, and T. Geary, Co-P.I.'s. National Association of Animal Breeders Competitive Grant. 2006. \$14, 721. Not Funded.

Evaluation of Nutritional Status of Greater Yellowstone Elk Herd Management. Montana Fish, Wildlife, and Parks. **J. G. Berardinelli** and R. Garrott, Co-P.I.'s. 2005. \$9,300. Funded

Identification of endocrinological changes associated with chronic wasting disease in cervids. U.S. Geological Service National Wildlife Health Center. 2005. R. Bessen and **J. G. Berardinelli**, Oct. 2004. \$189,000. Funded.

Evaluation of Nutritional Status of Greater Yellowstone Elk Herd Management. Montana Fish, Wildlife, and Parks. **J. G. Berardinelli** and R. Garrott, Co-P.I.'s. 2004. \$8,900. Funded

Microassay of Urinary Creatinine and Allantoin for Evaluation of Nutritional Status of Greater Yellowstone Elk Herd Management. Montana Fish, Wildlife, and Parks. **J. G. Berardinelli** and R. Garrott, Co-P.I.'s. 2003. \$10,000. Funded

Energy Status of Free-ranging Beef Cattle: Physiology, Behavior, and Reproduction. USDA CSREES NRICGP. Bret Olson and **J. G. Berardinelli**, Co-P.I.'s. 2003. \$236,754. Not Funded

Microassay of Urinary Creatinine and Allantoin for Evaluation of Nutritional Status of Greater Yellowstone Elk Herd Management. Montana Fish, Wildlife, and Parks. **J. G. Berardinelli** and R. Garrott, Co-P.I.'s. 2002. \$10,000. Funded

Energy Status of Free-ranging Beef Cattle: Physiology, Behavior, and Reproduction. USDA CSREES NRICGP. Bret Olson and **J. G. Berardinelli**, Co-P.I.'s. 2002. \$236,754. Not Funded

Ultrasonic Follicular Wave Analysis of Postpartum Cows Exposed to Bulls. USDA-NRI Equipment Grants Program. **J. G. Berardinelli**, P.I. 2002. \$20,900. Not Funded

Stress Response of Beef Cattle Grazing Winter Range. NRICGP, USDA, CREES Competitive Grant. Bret Olson and **J. G. Berardinelli**, Co-P.I.'s. 2001. \$236,754. Not Funded

Ultrasonic Follicular Wave Analysis of Postpartum Cows Exposed to Bulls. USDA-NRI Equipment Grants Program. **J. G. Berardinelli**, P.I. 2001. \$38,900. Not Funded

Stress Response of Beef Cattle Grazing Winter Range. NRICGP, USDA, CREES Competitive Grant. Bret Olson, **J. G. Berardinelli**, and S. Creel, Co-P.I.'s. 2000. \$236,754. Not Funded

Bull -cow Interaction Attenuates Cow-calf Bond Regulating Anestrus. **J.G. Berardinelli**, PD. NRICGP, USDA, CREES Competitive Grant. 1999. \$95,000. Funded

Instructional Improvement in Animal and Veterinary Science. USDA, CSREES, HECG Program. D. B. Burgess and **J.G. Berardinelli**, Co-PI's. 1996. \$66,888. Funded

Laboratory Instrumentation Improvement in Animal Science. NSF, HER/DUE, ILI-P. D. B. Burgess and **J.G. Berardinelli**, Co-PI's. 1995. \$10,625. Not Funded

Oviductal Protein Secretion during the Puberal Transition in Ewe Lambs. NRICGP, USDA Competitive Grant. **J. G. Berardinelli**. 1994. \$50,000. Funded

Laboratories in Applied Anatomy and Physiology. National Science Foundation, Instrumentation and Laboratory Improvement Grants Program. A. Rashmir-Raven, **J.G. Berardinelli**, S. Gibson, M.R. Raven and H.D. Picton, Co-PI's. 1993. Not Funded

Genetic and Physiological Basis for Changes in Ovulation Rate as a Result of Selection. RSED/OICID/USDA Grant. P.J. Burfening and **J.G. Berardinelli**, Co-PI's. 1992. \$4,400. Funded

Relationship of Intestinal Viscosity Caused by Soluble Plant Fiber to Absorption of Cholesterol and Triolein and Subsequent Reduction of Serum LDL-cholesterol. MONTS. Co-PI's, R.R. Newman, **J.G. Berardinelli** and C.W. Newman. 1991. \$14,600. Not Funded

Laboratories in Applied Anatomy and Physiology. National Science Foundation, Instrumentation and Laboratory Improvement Grants Program. A. Rashmir-Raven, **J.G. Berardinelli**, S. Gibson, L.C. Gagnon, M.R. Raven and H.D. Picton, Co-PI's. 1991. \$59,958. Not Funded

Metabolic Effects of Pyruvate Analogues in the Rat. Research Grant from Ross Laboratories. C.W. Newman and **J.G. Berardinelli**, Co-PI's. 1991. \$19,200. Funded

The Effect of Pyruvate Analogues on the Energetics of the Rat. Research Grant from Ross Laboratories. PI, C.W. Newman. **J.G. Berardinelli**, Cooperator. 1990. \$12,000. Funded

The Effects of Ruminant By-pass Protein and Ruminant By-pass Glucose on Luteinizing Hormone, Progesterone, Estrogen and Insulin Release in Postpartum Beef Cows. NSF MONTS III-EPSCoR. M.Tess, M. Petersen and **J.G. Berardinelli**. 1990. \$72,420. Not funded

Mechanisms for Metabolic Control of Postpartum Interval to estrus in Beef Cows. USDA-CSRS Competitive Grant. M. Tess, M. Petersen and **J.G. Berardinelli**. 1990. \$281,358. Not Funded

Progesterone Patterns, Estrous Cycle Lengths and Artificial Insemination Pregnancy Rates After a Single Injection of PGF<sub>2α</sub> Given During the Early or Mid-Luteal Phase of the Estrous Cycle in Beef Heifers. National Association of Animal Breeders Competitive Grant. **J.G. Berardinelli**. 1990. \$5,110. Not Funded

Production of Antibodies to IGF in Sheep. Amgen Development Inc. Research Grant. W. Frost and **J.G. Berardinelli**. 1988. \$21,280. Funded

Role of Endogenous Opioid System in Mediating Male-induced Stimulation of Reproductive Endocrine Hormone Secretion and Resumption of Ovulatory Cycles in Female Sheep. NSF-MONTS Grant. **J.G. Berardinelli**. 1986. \$9,600. Not Funded

Use of MGA and Lutalyse for Breeding Management. The Upjohn Co. Contract Grant. **J.G. Berardinelli**. 1986. \$3,172. Funded

Effects of Relocation and Season Upon Reproductive Competence in Brahman Compared to Hereford Bulls. American Brahman Breeders Association Competitive Grant. R. Randel (Texas A & M), **J.G. Berardinelli (MSU)** and D. Lunstra (USDA-ARS). 1984. \$18,700. Funded

Fundamental Morphometric and Physiological Changes of the Developing Reproductive Tract Necessary for Conception. Montana State University Faculty Competitive Creativity Grant. **J.G. Berardinelli**. 1984. \$2,000. Funded

Long-term Exposure to Presence of Mature Bulls on the Occurrence of Puberty in Beef Heifers. National Association of Animal Breeders Competitive Grant. **J.G. Berardinelli**. 1983. \$3,800. Funded

Reproductive Physiology of Prepubertal and Postpartum Anestrous States in Large Domestic Female Ruminants. MSU-USAID-EGYPT Grant for Cooperative Research in Domestic Animals. **J.G. Berardinelli**. 1982. \$483,000. Not Funded

Postnatal Sexual Differentiation of the Endocrine Regulation of Luteinizing Hormone Secretion and Sexual Behavior in the Bovine. MSU Faculty Creativity Grant. **J.G. Berardinelli**. 1982. \$9,500. Not Funded

### **Publications in Refereed Journals**

Ramstead, A. G., I. A. Schepetkin, K. Todd, J. Loeffelholz, J. G. Berardinelli, M. T. Quinn, M. A. Jutila. 2015. Aging influences the response of t cells to stimulation by the ellagitannin, oenothien b. International Immunopharmacology. (Accepted; April 1, 2015).

McCosh, R. B., E. M. Berry, M. E. Wehrman, R. R. Redden, D. M. Hallford, and **J. G. Berardinelli**. 2015. Temporal concentrations of cortisol and LH in virgin ewes acutely exposed to rams during the transition into the breeding season. Anim. Reprod. Sci. 154: 25-28. doi:10.1016/j.anireprosci.2015.01.008  
<http://www.sciencedirect.com/science/article/pii/S0378432015000202>

J. D. Swartz, M. Lachman, K. Westveer, T. O'Neill, T. Geary, R. W. Kott, **J. G. Berardinelli**, P. G. Hatfield, J. M. Thomson, and C. J. Yeoman. 2014. Characterization of the vaginal microbiota of ewes and cows reveals a unique microbiota with low levels of lactobacilli and near-neutral PH. Frontiers Vet. Sci. 1:1-10. doi: 10.3389/fvets.2014.00019. <http://journal.frontiersin.org/Journal/10.3389/fvets.2014.00019/full>.

Okj, A.C., **J.G. Berardinelli**, J.A. Clapper, D.H. Pooled, and P.L. Senger. 2014. Enhancing the learning experience of students in reproductive science with multimedia platforms. Clinical Theriogenology 6: 147-153.

- Keithly, J. I., R. W. Kott, J. G. Berardinelli, S. Moreaux, and P. G. Hatfield. 2011. Thermogenesis, blood metabolites and hormones, and growth of lambs born to ewes supplemented with algae-derived docosahexaenoic acid. *J. Anim. Sci.* 89:4305-4313.
- Peterson, J. L., S. J. Moreaux, J.G.P. Bowman, P. G. Hatfield, J. G. Berardinelli, and J. Olsen. 2011. Psyllium lowers blood glucose and insulin in Quarter Horses. *J. Equine Vet. Sci.* 33(5):336
- Tauck, S. A., J. R. Olsen, J. R. C. Wilkinson, K. Davis, R. Wedlake, and J. G. Berardinelli. 2010. Characteristics of temporal patterns of cortisol and luteinizing hormone in primiparous, postpartum, suckled, beef cows exposed acutely to bulls. *Reprod. Biol. and Endocrinol.* 8:89.
- Tauck, S. A., J.R. Olsen, J.R.C. Wilkinson, and J.G. Berardinelli. 2010. Duration of daily bull exposure on resumption of ovulatory activity in postpartum, primiparous, suckled, beef cows. *Anim. Repro. Sci.* 118: 8-13.
- Bailey, J. D., J. G. Berardinelli, T. E. Rocke, and R. A. Bessen. 2008. Prominent pancreatic endocrinopathy and altered control of food intake disrupt energy homeostasis in prion diseases. *J. Endocrinology* 197:251-263.
- Dafoe, J. M., R. W. Kott, B. F. Sowell, J. G. Berardinelli, K. C. Davis, and P. G. Hatfield. 2008. Effects of supplemental safflower and vitamin E during late gestation on lamb growth, serum metabolites, and thermogenesis. *J. Anim. Sci.* 86:3194-3202.
- Tauck, S. A., J. R. Olsen, and J. G. Berardinelli. 2007. Adrenal involvement in the biostimulatory effect of bulls. *Reprod. Biol. Endocrinol.* 5: 33-39.
- Tauck, S. A., J. R. C. Wilkinson, J. R. Olsen, J. N. Janitell, and J. G. Berardinelli. 2007. Comparison of controlled internal drug release device and melengesterol acetate as progestin sources in an estrous synchronization protocol for beef heifers. *Theriogenology* 68:162-167..
- Tauck, S. A., and J. G. Berardinelli. 2007. Putative urinary pheromone of bulls involved with breeding performance of primiparous beef cows in a progestin-based estrous synchronization protocol. *J. Anim. Sci.* 85:1669-1674.
- Berardinelli, J. G., and S. A. Tauck. 2007. Intensity of the biostimulatory effect of bulls on resumption of ovulatory activity in primiparous, suckled, beef cows. *Anim. Reprod. Sci.* 99:24:33..
- Berardinelli, J. G., and S. A. Tauck. 2007. Conception rates to artificial insemination in primiparous, suckled cows exposed to the biostimulatory effect of bulls before and during a gonadotropin-releasing hormone-based estrus synchronization protocol. *J. Anim. Sci.* 85:848-852.
- Tauck, S. A., J. G. Berardinelli, T. W. Geary, and N. J. Johnson. 2006. Resumption of postpartum luteal function of primiparous, suckled beef cows exposed continuously to bull urine. *J. Anim. Sci.* 84: 2708-2713.
- Berardinelli, J. G., P. S. Joshi, and S. A. Tauck. 2005. Postpartum resumption of ovarian cycling activity in first-calf suckled beef cows exposed to familiar or unfamiliar bulls. *Anim. Reprod. Sci.* 90: 201-209.



- Berardinelli, J. G. and P. S. Joshi. 2005. Resumption of postpartum ovarian cycling activity in primiparous restricted suckled beef cows exposed to a bull or excretory products of bulls or cows. *J. Anim. Sci.* 83: 2495-2500.
- White, D., Jr., J.G. Berardinelli, and K. E. Aune. 2005. Seasonal changes in spermatogenesis and serum testosterone concentrations in the male grizzly bear. *Ursus* 16(2):198-207.
- White, D., Jr., J. G. Berardinelli, and K. E. Aune. 2005. Age variation in gross and histological characteristics of the testis and epididymis in male grizzly bears. *Ursus* 16(2): 190-197
- Berardinelli, J. G., and P. S. Joshi. 2005. Introduction of bulls at different days postpartum on resumption of ovarian cycling activity in first-calf beef cows. *J. Anim. Sci.* 83: 2106-2110.
- Stellflug, J.N., and J.G. Berardinelli. 2002. Ram mating behavior is influenced by long-term selection for number of lambs born. *J. Anim. Sci.* 80:2588-2593.
- Lewis, A. W., and J.G. Berardinelli. 2001. Gross anatomical and histomorphometric characteristics of the oviduct and uterus during the pubertal transition in the sheep. *J. Anim. Sci.* 79: 167-175.
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#### **INVITED PAPERS AND PRESENTATIONS**

- Berardinelli, J. G. 2010. "A Model for the Mechanism of the Biostimulatory Effect of Bulls on Reproductive Processes in Postpartum, Suckled, Anovular Cows". Presented to the Animal Science Reproductive Biology Cluster at the University of Missouri. Sept., 29, 2010. (~45 attendees)
- Berardinelli, J. G. 2010. "Reproductive Characteristics of Male Grizzly Bears (*Ursa arctos horribilis*) and Reproductive Rate of Bison (*Bison bison*) at the National Bison Range". Presented to the Animal the Faculty and graduate and undergraduate students of the Department of Animal Science and their Captive Wild Animal Management sub-discipline at the University of Missouri. Sept., 30, 2010. (~140 attendees)
- Berardinelli, J. G. 2010. "Overview of Reproductive Processes for Management Purposes". Lecture presented to undergraduates in the introductory course (AN SCI/F&W 1012) of the Captive Wild Animal Management sub-discipline in the Department of Animal Science at the University of Missouri. Sept., 30, 2010. (109 attendees)
- Berardinelli, J. G. 2010. "Alterations in Energy-related Metabolites and Hormones Associated with Season and Pregnancy in Free-ranging Elk (*Cervus canadensis*)". Presented in the Senior Seminar (AN SCI/F&W 4910) of the Captive Wild Animal Management sub-discipline in the Department of Animal Science at the University of Missouri. Sept., 30, 2010. (109 attendees)



- Berardinelli, J. G. 2009. New insight into the biostimulatory effect of bulls on reproductive processes of postpartum, anovular, suckled, beef cows. *Repro. Physiol. Alum. Reunion Symposium*. West Virginia University, Morgantown, WV. July 2009. Pg. 49: Abstr. 10.
- Berardinelli, J. G. 2008. New insight into the biostimulatory effect of males on reproductive processes of females. Keynote presentation at the Annual Meeting of the Montana Academy of Sciences, Butte, MT. April 11-12.
- Berardinelli, J. G. 2007. Management practices to overcome problems with puberty and anestrus. *Applied Reproductive Strategies in Beef Cattle Symposium*. September 11 and 12, Billings, MT. pp. 149-162.
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### **Papers Presented at Scholarly Meetings/Abstracts**

- Oki, A.C., J.G. Berardinelli, J.A. Clapper, D.H. Pooled, and P.L. Senger. 2014. Enhancing the learning experience of students in reproductive science with multimedia platforms. *Soc. for Theriogenology*. Louisville, KY. August 7-10.
- Swartz, J. D., J. G. Berardinelli, J. M. Thomson, M. Lachman, K. Westveer, M. R. Herrygers. R. W. Kott, P. G. Hatfield, and C. J. Yeoman. 2014. Temporal patterns of metabolites, metabolic hormones, and progesterone concentrations and lambing rates in Rambouillet ewes selected for high and low reproductive rate. *J. Anim. Sci.* 92
- Swartz, J. D., M. Lachman, T. O'Neill, K. Westveer, J. M. Thompson, R. W. Kott, P. G. Hatfield, J. G. Berardinelli, and C. J. Yeoman. 2014. Sheep vaginal microbiota are unique and co-vary with reproductive outcomes. *Gut Microbiology: from Sequence to Function*, Rowett-INRA Conference, University of Aberdeen.
- Swartz, J. D., C. J. Yeoman, J. Berardinelli, and J. Thomson. 2014. Impact of long term selection on reproductive efficiency in line-bred Rambouillet sheep. *Proc. 10<sup>th</sup> World Congress on Genetics Applied to Livestock Production*. Vancouver, B.C., Canada.
- Herrygers, M. R., R. Garrott, C. Butler, and J. G. Berardinelli. 2014. Pregnancy rate and metabolites in bighorn sheep (*Ovis canadensis*) at the end of breeding season and the first trimester of pregnancy. *Montana Acad. Sci. Annual Meeting, 2014 Program and Abstracts*. <http://sciencemt.org/MAS/wp-content/uploads/2014/04/2014-Abstracts-for-Oral-Presentations.pdf>

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## Dissertation and Thesis

Berardinelli, J.G. 1979. Ovarian and hormonal factors involved in the attainment of puberty in female cattle and sheep. Ph.D. Dissertation, West Virginia University.

Berardinelli, J.G. 1976. Induction of puberty in beef heifers. M.S. Thesis, West Virginia University.

## Graduate Student Theses

McCosh, R. M. 2011. Effect of rams on temporal hormone concentrations in Targhee ewes during the transition into the breeding season. M. S. Thesis. Montana State University.  
<http://etd.lib.montana.edu/etd/2011/mccosh/McCoshR0511.pdf>

Borgreen, M. J. 2010. Reproductive performance of bison (*bison bison*) at the National Bison Range M. S. Thesis, Montana State University-Bozeman.

Olsen, J. R.R. 2009. Changes in temporal leptin concentrations and other metabolic factors in primiparous, postpartum, anestrous, suckled, beef cows exposed to bulls. M. S. Thesis, Montana State University-Bozeman.

Wilkinson, J. R. C. 2009. The biostimulatory effect of bulls on postpartum follicular wave development in, postpartum, anestrous, suckled beef cows. M. S. Thesis, Montana State University-Bozeman.

Tauk, S. A. 2008. The biostimulatory effect of bulls on hypothalamic-pituitary-adrenal and ovarian axes and on temporal aspects of resumption of ovarian cycling activity in primiparous, postpartum, suckled, beef cows. Ph.D. Dissertation, Montana State University-Bozeman.

Tauk, S. A. 2005. Factors associated with the biostimulatory effect of bulls on resumption of ovarian cycling activity and breeding performance of first-calf suckled beef cows. M.S. Thesis, Montana State University, Bozeman

Jacobs, A.S. 2002. Oviductal characteristics, protein concentrations, and messenger ribonucleic acid expression in prepubertal ewe lambs, and mature ewes after natural or progestin-synchronized estrus. M.S. Thesis, Montana State University, Bozeman

Joshi, P.S. 2002. Biostimulatory effect of bulls: exposure type and day of exposure on resumption of postpartum ovarian cycling activity in first-calf suckled beef cows. M.S. Thesis, Montana State University, Bozeman.

Weng, Jie. 1998. Effects of Excess Digestible Intake Protein on Blood Urea Nitrogen, Ovarian Steroids, Oviductal Proteins, and Early embryonic Development in Ewes. M.S. Thesis, Montana State University.

Fernandez, D.L. 1993. Effect of exposure to bulls on the postpartum interval to resumption of ovarian cycling activity and estrus, patterns of luteinizing hormone secretion and breeding performance in first-calf suckled beef cows. M.S. Thesis, Montana State University.

Lane, M.A. 1991. Sperm transport and protein content of oviductal flushings in peripuberal ewe lambs. M.S. Thesis, Montana State University.

Cardenas Seijas, H. 1990. Histomorphology and physiology of the testicle in Rambouillet rams from lines selected for low and high reproductive rate. M.S. Thesis, Montana State University.

- Lewis, A.W. 1990. Gross and histomorphologic characteristics of oviducts and uteri and the effects of estrogen during the puberal transition in ewe lambs. M.S. Thesis, Montana State University.
- Curry, K.C. 1990. Effects of feeding regimen and selection on sexual behavior, epididymal sperm reserve and gross testicular characteristics in Rambouillet rams. M.S. Thesis, Montana State University.
- Custer, Jr. E.E. 1988. Postpartum interval to estrus and patterns of luteinizing hormone (LH) concentrations in first-calf suckled beef cows exposed to mature bulls. M.S. Thesis, Montana State University.
- Byerley, D.J. 1987. Fertility of non-puberal estrus, pregnancy rates and progesterone concentrations of beef heifers bred at puberal or third estrus. M.S. Thesis, Montana State University.
- Courtney, L.P. 1984. The temporal relationship of the ovary and ovarian morphology for the onset and duration of behavioral estrus in prostaglandin F<sub>2a</sub>-treated ewes. M.S. Thesis, Montana State University.

#### **NOTE:**

Dr. Berardinelli has served on 28 M.S. in the Dept. of Animal and Range Sciences (17 Major Advisor/11 Committee Member) and 6 Ph.D. Committees outside the Department of Animal and Range Sciences (1 Major Advisor/5 Committee Member) .

#### **Technical Reports**

- 1982 to 2015. Berardinelli, J.G. Montana Agricultural Experiment Station Research Progress Report: Reproductive Performance in Domestic Ruminants. Multistate Research Program Technical Committee Reports; Project W21112.
- Godfrey, R.W., R.D. Randel, C.R. Long, D.D. Lunstra, T.G. Jenkins and J.G. Berardinelli. 1987. Effect of season upon reproductive competence in Brahman and Hereford bulls. Termination Report. American Brahman Breeders Association, Houston, TX.

#### **Article in Popular Press/Outreach**

- McCosh, R., J. G. Berardinelli, M. Wehrman, E. Berry, R. Redden, K.C. Davis, and R. Kott. 2009. Acute effect of rams and on temporal cortisol and LH concentrations in 2-year-old Targhee ewes of varied relative feed indices during the transition between seasonal anestrous and the breeding season. Sheep Program Advisory Committee Reports. pp. 69 - 70.
- Class gives experience on reproductive technology. AgExcellence 2007. The College of Agriculture and Montana Agricultural Experiment Station in Review. Page 16.
- Montana researcher uses bulls to jumpstart estrus in breeding females. Shanon Ruckman, Editor, The Prairie Star, Friday, Oct. 12, 2007. p.37.
- Putative urinary pheromone of bulls involved with breeding performance of primiparous beef cows in a progestin-based estrous synchronization protocol. S. Tauck., J. Berardinelli. American Association of Bovine Practitioners, July 2007 Newsletter. p. 3.

- Comparison of controlled internal drug release device and melengesterol acetate as progestin sources in an estrous synchronization protocol for beef heifers. S. Tauck, J. Wilkinson, J., J. Janitell, J. Berardinelli. American Association of Bovine Practitioners, July 2007 Newsletter. p. 4.
- Long-term Exposure to Bulls Improved AI Pregnancy Rate in First-Calf Cows. Tauck and Berardinelli, Beef Cattle Production. University of Nebraska-Lincoln. Rick Rasby (ed.). <http://beef.unl.edu/stories/200408170.shtml>
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- Long-term Exposure to Bulls Improved A.I. Pregnancy Rate in First-Calf Cows. Tauck and Berardinelli. Gelbvieh World, Dec. 2004.
- Tauck, S. A., and J. G. Berardinelli. 2002. Breeding performance of first-calf suckled beef cows exposed to bulls before, during, and after an estrous synchronization protocol that included CIDR, PGF<sub>2α</sub>, GnRH and timed AI. Montana Beef Newsletter. 9(4): 11.
- Berardinelli, J. G. 1998. "Effect of bulls to reduce the postpartum interval to estrus in first-calf suckled beef cows". The Prairie Star. March 1998, pp. A48-A50.
- Fernandez, D., J.G. Berardinelli, R.E. Short and R. Adair. 1993. "Improving Reproductive Performance". Western Beef Producer. 1st November Issue.
- Fernandez, D., J.G. Berardinelli, R.E. Short and R. Adair. 1993. "Improving Reproductive Performance". The Western Stock Grower. April Issue.
- Fernandez, D., J.G. Berardinelli, R.E. Short and R. Adair. 1992. "Bull Effect" Can Boost Reproductive Performance. Montana Farmer Stockman. 80(2):14-15. Also in Farmer Stockman of ID, UT, OR, WA and AZ (Circulation of 80,000).

## PROFESSIONAL DEVELOPMENT

### Teaching:

Developed four courses in the Department; ARNR 420, 421, 424, 425, and 523, and VTMB 330 to meet expanded need for information on endocrine physiology, pregnancy diagnosis in domestic animals, use of biotechnology in animal science, and reproductive physiology of mammals.

Participant; MSU Teaching and Learning Committee's Teaching Improvement Workshops (1987)

### Research:

- Member:
- American Society of Animal Science
  - Association of Chemical Senses
  - Society for the Study of Reproduction
  - Western Section American Society of Animal Science
  - Montana Academy of Sciences
  - Participant: IBI, Recombinant DNA Workshop (Aug. 1989)
  - Participant: Molecular Endocrinology Work Shop, Sponsored by the Baylor College of Medicine, Houston, TX (Feb. 1991)



- Attended Workshop on Techniques in Reproductive Biology, " Novel Approaches for the Detection and Analysis of Functional Protein-Protein and Protein-DNA Interaction". Sponsored by the Soc. For the Study of Reprod., 1997, Portland, OR.
- Ad hoc reviewer of scientific manuscripts and grant proposals:

1983-92	J. Animal Science (n = 14)
1985	J. Agr. Food Chem (n = 1)
1987,91	Biol. Reprod. (n = 2)
1990	CSRC Competitive Grants (n = 2)
1986,1991	CRRP Grants; Tropical Division (n = 2)

- Attending NSF-Montana Outreach Workshops, "Funding Opportunities and Proposal Writing" Feb. 7, 2001. Sponsored by VP for Res. and Creat. Act., Montana State University

#### Honors and Awards:

- Baccalaureate of Arts (B.A.) Degree granted with honor
- Honorary Member of Gamma Sigma Delta
- First Place Award for Excellence in Research as a Graduate Student (1979), Presented by the West Virginia University Chapter of Sigma Xi
- First Place Award for Excellence of Scientific Achievement in Research Granted to Mr. Matt Lane, under my supervision, by the Western Section of the American Society of Animal Science, Reno, NV
- Chairman: Production and Management Symposium titled "Management Considerations in Heifer Development and Puberty". 83rd Annual Meeting of the American Society of Animal Science, Laramie, WY Aug. 1991
- Honorable Mention Award for Excellence of Scientific Achievement in Research Granted to Mr. David L. Fernandez, under my supervision, by the Western Section of the American Society of Animal Science, Spokane, WA
- Editorial Board of the American Society of Animal Science, Endocrinology and Physiology Section, Oct. 1996-99.
- Editorial Board of the American Society of Animal Science, Historical and Biographical Sketches, Oct. 1999-2002
- Award for Excellence in Academic Service to the Montana State University and Bozeman Chamber of Commerce. Feb. 2003
- Nominated for Montana State University - Bozeman President's Excellence in Teaching Award, March 5, 2003
- Editorial Board of the American Society of Animal Science, Biographical Sketches, 2001-2004.
- Editorial Board of the American Society of Animal Sciences
- Academic Advisor for Ms Jennifer Janitell; Outstanding Senior for 2006 in the College of Agriculture
- Tucker Graduate Student Travel Award; granted to Mr. Shaun Tauck Ph.D. student under my direction (One of two given this year on a competitive basis by the American Society of Animal Science Foundation), June 2006
- Certificate of Appreciation, Successful submission of the FIRST electronic Application through Grants.gov. Awarded by the USDA, CSREES, NRI Competitive Grants Program, May 2006
- Editorial Board of the American Society of Animal Sciences; Growth, Endocrinology, and Physiology, 2006-08.

- Keynote Address speaker, Montana Academy of Sciences, April 2008.
- Nominated for Montana State University – Bozeman, Provost's Award for Undergraduate Research/Creativity, 2008.
- Grant Review Panel Member for USDA, NIFA, AFRI, Animal Reproduction Study Section, 2009.
- Grant Review Panel Member for USDA, NIFA, SBIR, Animal Production and Protection, 2009-10.
- Elected, Board of Directors, Montana Academy of Sciences, 2009-present.
- Recipient of the Merzhon Award presented by the Montana Academy of Sciences for Scientific Excellence, Advancement of Science in Montana, and Service to the Montana Academy of Science, April 2010.
- Grant Review Panel Manager for USDA, NIFA, SBIR, Animal Production and Protection. 2010-2011.
- Nominated for Distinguished Teaching Award, Western Section of the American Society of Animal Science. 2011.
- Grant Review Panel Manager for USDA, NIFA, SBIR, Phase I & II, Animal Production and Protection. 2011-2012.
- Distinguished Teaching Award, Western Section of the American Society of Animal Science. 2012.
- Elected Secretary-Treasurer, Western Section of the American Society of Animal Science. 2012-2013.
- Elected President-elect, Scientific Program Coordinator, Western Section of the American Society of Animal Science. 2013-2014.
- Elected President, Western Section of the American Society of Animal Science. 2014-2015.
- Editorial Board of the Frontiers of Veterinary Sciences. 2014-2016.
- Elected Member, College of Agriculture Representative, Montana State University, Retention, Tenure and Promotion Committee. 2014-2017.
- Grant Review Panel, Chair, Montana Academy of Sciences Student Research Grants Program. 2012-2015.
- Nominated for Montana State University - Bozeman, President's Excellence in Teaching Award, October 6, 2014.
- President, Montana Academy of Sciences, 2015-2017.

#### **Invited Presentations:**

Berardinelli, J. G. 2010. "A Model for the Mechanism of the Biostimulatory Effect of Bulls on Reproductive Processes in Postpartum, Suckled, Anovular Cows". Presented to the Animal Science Reproductive Biology Cluster at the University of Missouri. Sept., 29, 2010. (~45 attendees)

Berardinelli, J. G. 2010. "Reproductive Characteristics of Male Grizzly Bears (*Ursa arctos horribilis*) and Reproductive Rate of Bison (*Bison bison*) at the National Bison Range". Presented to the Animal the Faculty and graduate and undergraduate students of the Department of Animal Science and their Captive Wild Animal Management sub-discipline at the University of Missouri. Sept., 30, 2010. (~140 attendees)

Berardinelli, J. G. 2010. "Overview of Reproductive Processes for Management Purposes". Lecture presented to undergraduates in the introductory course (AN SCI/F&W 1012) of the Captive Wild Animal Management sub-discipline in the Department of Animal Science at the University of Missouri. Sept., 30, 2010. (109 attendees)

Berardinelli, J. G. 2010. "Alterations in Energy-related Metabolites and Hormones Associated with Season and Pregnancy in Free-ranging Elk (*Cervus canadensis*)". Presented in the Senior Seminar (AN SCI/F&W 4910) of the Captive Wild Animal Management sub-discipline in the Department of Animal Science at the University of Missouri. Sept., 30, 2010. (109 attendees)

Berardinelli, J. G. 2010. "Reproductive Performance of Heifers and Cows Exposed to Bulls". Presented to the Stillwater County Range Advisor Committee at Montana State University's Wool Laboratory. Feb. 1st. (14 attendees)

Berardinelli, J. G. 2010. "Biostimulatory Effect of Bulls on Heifers and Cows". Presented at the monthly meeting of the Lewis and Clark County AgriForum Meeting, Helena, MT. March 9 at Jorgenson's Restaurant. (32 attendees)

Invited speaker at the Applied Reproductive Strategies in Beef Cattle Symposium, Billings MT. Sept. 2007. Coordinated by the Beef Reproduction Task Force.

"Update on Pregnancy Testing in Bovine". Presented at the International Beef Symposium, Great Falls, MT. January 1995.

"Effect of Selection for Reproductive Rate in Females upon Testicular Morphology and Physiology of Male Offspring". Presented to the Biology Department Faculty and Staff in their Life Sciences Seminar Series. Spring, 1993.

"Management Considerations to Achieve Optimum Success in the A.I. Breeding Program". J.G. Berardinelli. Sponsored by Tri-State Breeders Coop. Presented at their Montana Beef Update Meeting, Deer Lodge, MT. Mar. 15, 1991.

"Effect of Selection for Reproductive Rate in Female Sheep on Testicular Characteristics of Male Offspring". J.G. Berardinelli. Presented to the Veterinary Molecular Biology Faculty and Staff in their Life Science Seminars Series. Winter, 1991.

"Maturation of the Reproductive Tubal System during the Puberal Transition in Ewe Lambs". J.G. Berardinelli. Presented to the Biology Department Faculty and Staff in their Spring Seminar Series. Spring, 1988.

"Temporal Role of the Testis in Postnatal Sexual Differentiation of Luteinizing Hormone Secretion and Sexual Behavior in Male Bovine". J.G. Berardinelli. Presented to the Veterinary Research Department Faculty at their Life Science Seminar Series. Winter, 1985.

"Effect of Selection for Reproductive Rate in Females upon Testicular Morphology and Physiology of Male Offspring". Presented to the Biology Department Faculty and Staff in their Life Science Seminar Series. Spring, 1993.

## SERVICE ACTIVITIES

Primary responsibility for the development and supervision of the Reproductive Physiology and Endocrinology Laboratory in the Department of Animal and Range Sciences.

Department Committees

1982-89	Dr. Edward L. Moody Memorial Scholarship Committee (Chairman)
1982-2007	Graduate Studies Committee
1982-84	Integrative Reproductive Management Committee
1982-88	Beef Cattle Advisory Committee
1982	Search Committee for Research Associate (Chairman)
1983-84	Long-range Planning Committee for Livestock Center (Chairman)
1983-84	Long-range Planning Committee for Linfield Hall (Dept. Animal and Range Sciences)
1983	Equipment Planning Committee for New Personnel
1984-88	Beef Coordinating Committee
1984-86	Sheep Coordinating Committee
1990-91	Veterinarian Position (VMB Dept.) Search Committee
1993-09	Undergraduate Curriculum Committee
1996-97,	
2006-07	Promotion and Tenure Committee
2001-02	Search Committee, Breeding and Genetics, Chairman
2001	Organizing Committee, Center for Beef Excellence
2006-09	Farm Operation and Management Committee
2008-09	Search Committee, Metabolic Physiologist, Chairman
2011-2012	Search Committee, Breeding and Genetics, Chairman
2013-2014	Search Committee, Non-Tenured Track Faculty Position, Member
2013-2014	Search Committee Metabolic Physiologist, Chairman
2013-present	Mentoring Program, Jennifer Thomson

College Committees

1985-86	College of Agriculture, Montana Agricultural Experiment Station, Associate Director, Search Committee
1995-96	College of Agriculture, Biotechnology Degree Program Curriculum Committee
2010-2014	College of Agriculture, Promotion and Tenure Committee
2014-2015	Search Committee, STEM Recruiter, Chair

University Committees

1/82-9/82	Laboratory Animal Care Facility Planning Committee
1982-1992	Institutional Animal Care and Use Committee
1983-present	Radiation Source Committee (Chairman 1986-87, 1989-93)
1985-86	Chemical Safety Committee
2/83-9/83	Director of Animal Resource Center Search Committee
1986-89	Faculty Council (Alternate)
2014-2015	University Radiation Safety Committee, Co-Chair
2015-present	University Radiation Safety Committee, Chair
2014-2016	University Grievance Heard Board, Faculty Chair
2014-2016	Promotion and Tenure Committee

Regional Committees

1982-present	Multistate Regional Project (W-2112); Technical Committee (Member; Secretary, 1984-
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	85; Chairman, 1985-86)
1985-87	Membership Committee, Western Region, American Society of Animal Science
1987-89	Graduate Student Competition Committee, Western Region, American Society of Animal Science (Chairman, 1988)
1989-91	Resolution Committee, Western Region, American Society of Animal Science
1997-2000	Awards Committee, Western Section, American Society of Animal Science
2003-2005	Graduate Student Competition Committee, Western Region, American Society of Animal Science
2013	WSASAS Awards Committee
2012-2016	WSASAS Advising and Coordinating Committee
2012-present	Grant Review Panel, Chair, Montana Academy of Sciences
2014	WSASAS, Undergraduate Poster Competition Committee, Chair
2012-2017	WSASAS Executive Committee

#### National Committees

1993-96	American Society of Animal Science Physiology and Endocrinology Award Committee
1996-97	Society for the Study of Reproduction By-laws Committee
1997-98	Society for the Study of Reproduction By-laws Committee; Chairman
2005-08	American Society of Animal Science Centennial Committee
2006-07	American Society of Animal Science Physiology Awards Committee
2015-16	American Society of Animal Science National Awards Committee

#### Student Related Activities

1982-83	Save Our Barn Agricultural Club Advisor
1993	AgDays Presentation: Use of Ultrasonography in Pregnancy Testing of Beef Cows.
1997-99	Advisor to Block and Bridle Club

#### Extension Related Activities

##### Functions and Meetings Addressed:

- Sheep Advisory Committee, October, 1982
- Stillwater County Ranchers, December, 1982
- Montana Beef Performance Association (Annual Meeting), November, 1982
- Presentation (Demonstration) of Reproductive Anatomy at 4H, FFA and Youth Beef Forum, spring, 1983.
- Sheep Advisory Committee, November, 1984
- Washington County Agents, August 1987
- Montana Stock Growers Association Liaison Committee Meeting, September, 1988
- Judge; Ag-Challenge. Sponsored by the College of Agriculture-University of Saskatchewan, Saskatoon, Canada, summer, 1989
- Sheep Advisory Committee, October, 1990
- Montana Beef Up-date Meeting, March, 1991
- Winifred Area Livestock Producers; "Postpartum Reproduction in the Beef Cow" MSU Jan. 30, 1992.
- Judge; Extemporaneous Speaking Contest. Sponsored by the American Simmental Association, July, 1992
- Ultrasound demonstration for HOW (Husbands of Wives) for pregnancy determination and aging in the bovine. December, 1993.

### Written Communiqués:

Montana Beef Performance Association Newsletter. 1985. Influence of transportation stress on Hereford bulls and influence of bull presence on postpartum cows.

News Notes (MCES and MAES). 1986. Heifer pregnancy higher for third estrus than first.

Sheep Advisory Committee Reports. 1990. Sperm Transport during the Puberal Transition in ewe lambs. M. Lane, J.G. Berardinelli, H. Cardenas and R. Staigmiller.

Beef Advisory Committee Reports. 1990. Effect of Bulls on Reproductive Activity in Suckled Beef Cows. J.G. Berardinelli and E.E. Custer.

Sheep Advisory Committee Reports. 1992. Testicular characteristics of rams from lines selected for high or low reproductive rates: i. Gross anatomy and histomorphology. H. Cardenas, J.G. Berardinelli, P.J. Burfening and M.A. Lane.

Sheep Advisory Committee Reports. 1992. Testicular Characteristics of Rams from Lines Selected for High or Low Reproductive Rates: II. oLH/hCG Receptors and In Vitro Testosterone Secretion. H. Cardenas, J.B. Berardinelli, P.J. Burfening, M.A. Lane and R.A. Adair.

Sheep Advisory Committee Reports. 1992. Selection for Reproductive Rate in Females and Feeding Regimen on Testicular Traits and Epididymal Sperm Reserves in Rambouillet Rams. K.C. Curry, J.G. Berardinelli, P.J. Burfening and R.A. Adair.

Sheep Advisory Committee Reports. 1992. Sperm transport and distribution during the puberal transition in ewe lambs. M.A. Lane, J.G. Berardinelli, H. Cardenas and R.B. Staigmiller.

MAES Impact Report. 1999. Increasing Reproductive Efficiency of Beef Cattle Herds. J. G. Berardinelli. February.

### Community:

Bozeman Little League, Coach of Minor League team "The Cards" (Summer, 1995)

Bozeman Little League, Coach of AAA Minor League team "The Dodgers" (Summer, 1996)

Gallatin Valley Midget Basketball, Coach of the "Magic" (Winter 1997)

Bozeman Little League, Assistant Coach of Major League team "The A's" (Summer, 1998)

Anderson School 5 and 6<sup>th</sup> Grade Assistant Coach (Winter, 1999)

**SUMMARY****PUBLICATIONS**

62 Peer-reviewed journal articles (additional; 1 accepted; 4 in prep)  
 5 Book chapters  
 83 Proceedings papers/bulletins  
 140 Abstracts and presentations (5 Invited Presentations)

**MENTOR**

28 M.S. Theses (17 Major Advisor/11 Committee Member)  
 6 Ph.D. Dissertation (1 Major Advisor/5 Committee Member)

**TEACHING:**

11 Graduate and Undergraduate Courses  
 4 Undergraduate Team-Taught Courses  
 67 Students as Undergraduate Research Mentor (1 MSU McNair Scholar; Michelle Knerr)

**GRANTS RECEIVED- since 1994:**

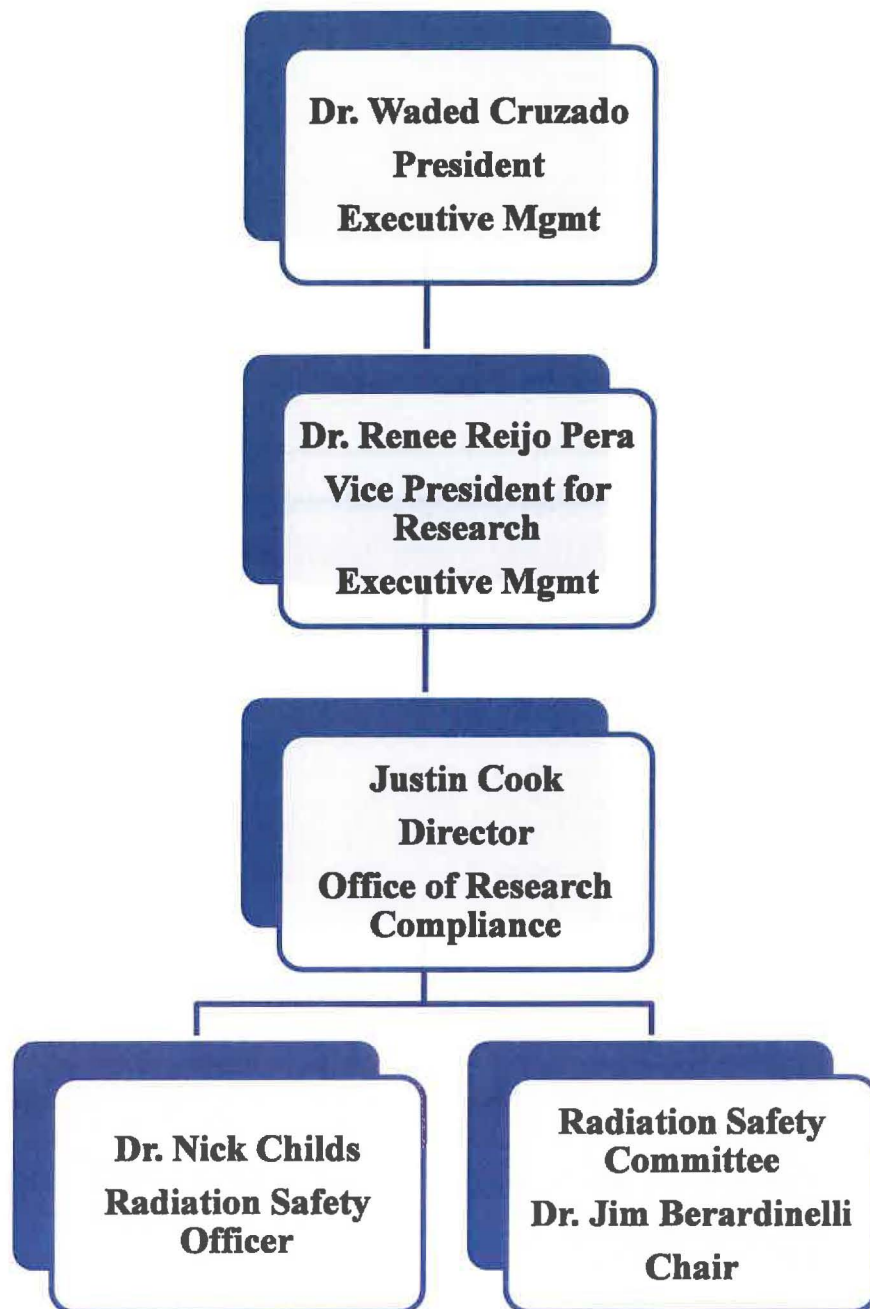
2 Competitive Teaching as Co-PD; ~\$107,000  
 6 Competitive Research/4 as PD and 1 and Co-PD ~ \$1,052,000

**SPECIES:**

Bovine (beef cattle and bison), Ovine (sheep), Swine (pigs), Equine (horses), Cervids (elk, bighorn sheep, mountain goats, white-tailed and mule deer); grizzly bears; rats, and hamsters



# Organizational Chart for the Administration of NRC License #25-00326-06





DATE

05/28/2015

NAME AND ADDRESS OF APPLICANT AND/OR LICENSEE

Dr. Nicholas B. Childs, Radiation Safety Officer  
Montana State University  
Office of Research Compliance  
CFT5 Suite 229  
P.O. Box 173085  
Bozeman, Montana 59717

LICENSE NUMBER

25-00326-06

MAIL CONTROL NUMBER

586904

LICENSING AND/OR TECHNICAL REVIEWER

CH

This is to acknowledge the receipt of your:

☒ LETTER and/or ☒ APPLICATION DATED: 05/15/2015

The initial processing, which included an administrative review, has been performed.

☒ AMENDMENT ☐ TERMINATION ☐ NEW LICENSE ☐ RENEWAL

- ☐ There were no administrative omissions identified during our initial review.
- ☐ This is to acknowledge receipt of your application for renewal of the material(s) license identified above. Your application is deemed timely filed, and accordingly, the license will not expire until final action has been taken by this office.
- ☐ Your application for a new NRC license did not include your taxpayer identification number. Please fill out NRC Form 531, located at the following link:

<http://www.nrc.gov/reading-rm/doc-collections/forms/nrc531.pdf>

Send the completed NRC Form 531, by facsimile, to the following number: (301) 415-5387

A copy of your action has been emailed to our License Fee and Accounts Receivable Branch, in our Headquarters office in Rockville, MD. You will be contacted separately if there is a fee issue involved.

Your application has been assigned the above listed **MAIL CONTROL NUMBER**. When calling to inquire about this action, please refer to this control number. Your application has been forwarded to a technical reviewer. Please note that the technical review, which is normally completed within 180 days for a renewal application (90 days for all other requests), may identify additional omissions or require additional information. If you have any questions concerning the processing of your application, our contact information is listed below:

Region IV  
U. S. Nuclear Regulatory Commission  
DNMS/NMSB - B  
1600 E. Lamar Boulevard  
Arlington, TX 76011-4511  
(817) 200-1103 or (817) 200-1140

✓ 6/1

BETWEEN:

Accounts Receivable/Payable  
and  
Regional Licensing Branches

[ FOR ARPB USE ]

INFORMATION FROM WBL

Program Code: 01100  
Status Code: Pending Amendment  
Fee Category: 3E 3L 3P  
Exp. Date:  
Fee Comments: 170.11(A)(4)  
Decom Fin Assur Req'd: Y

## License Fee Worksheet - License Fee Transmittal

### A. REGION

#### 1. APPLICATION ATTACHED

Applicant/Licensee: MONTANA STATE UNIVERSITY  
Received Date: 05/15/2015  
Docket Number: 3000871  
Mail Control Number: 586904  
License Number: 25-00326-06  
Action Type: Amendment

#### 2. FEE ATTACHED

Amount: \_\_\_\_\_

Check No.: \_\_\_\_\_

#### 3. COMMENTS

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

*Carol L. Heise*  
*5/28/15*

### B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered / / )

1. Fee Category and Amount: \_\_\_\_\_

#### 2. Correct Fee Paid. Application may be processed for:

Amendment: \_\_\_\_\_

Renewal: \_\_\_\_\_

License: \_\_\_\_\_

3. OTHER \_\_\_\_\_

Signed: \_\_\_\_\_

Date: \_\_\_\_\_